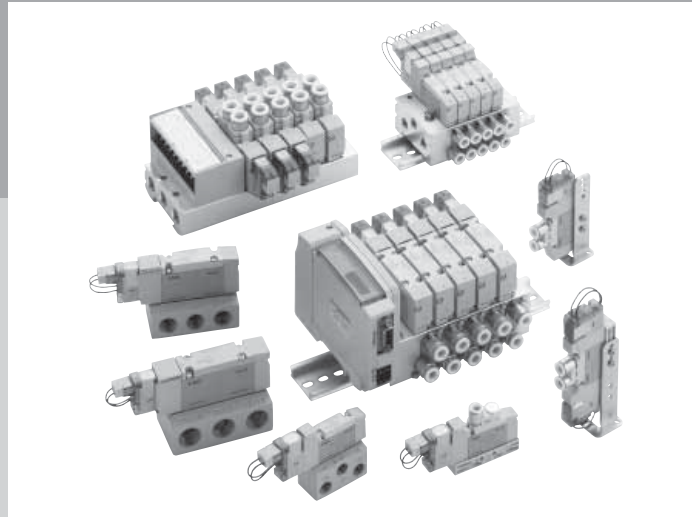


4GA1 to 3 & 4GB1 to 3

3, 5 port pilot operated valve

Metal base



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* Refer to page 215 block manifold.

* Refer to page 309 for the master valve.

4GA/B M4GA/B MN4GA/B	Series appearance	Model no.	Position No. of solenoid JIS symbol	Valve performance		Voltage (v)	Valve Position				
				Flow rate characteristics (dm ³ /(s/bar)) (Note 1)	Applicable Cylinder diameter (φ)		2-position				
4GA/B Master valve	Discrete	Body piping	3 port	● 3 port valves 2-position single N.C. type	0.66 to 0.70	20 to 40	AC100	●	●		
4GD/E					Base piping	5 port					
M4GD/E	Individual wiring manifold	Body piping	Direct mount type DIN rail mount type (-D)	2-position double	0.66 to 1.0	20 to 40	AC100	●	●	●	●
					Base piping	5 port					
MN4GD/E	Reduced wiring manifold	Body piping	Mount type Direct	3-position all ports closed	2.5 to 3.3	63 to 100	DC24	●	●	●	●
					DIN rail mount type	3 port					
Safety precautions		Body piping	DIN rail mount type	3-position A/B/R connection	1.6 to 2.4	40 to 80	DC5	●	●	●	●
					Base piping	Mount type Direct					
Manifold Specifications		Base piping	DIN rail mount type	N.C./N.O. type	0.66 to 1.0	20 to 40	DC24	●	●	●	●
					DIN rail mount type	Mount type Direct					
	3GA110R-E* 4GA120R-E*	3GA1 3GA2 3GA3	3 port	● 3 port valves 2-position single N.C. type	0.66 to 0.70	20 to 40	AC100	●	●		
	4GB310R-E*	4GA1 4GA2 4GA3	5 port	● 5 port valves 2-position single	2.2 to 2.7	40 to 80					
					3.2 to 4.0	63 to 100	DC24	●	●	●	●
					1.0	20 to 40	DC3				
					2.1	40 to 80	DC5				
					1.1 to 1.3	20 to 40	(Note 2)				
					2.2 to 2.5	40 to 80					
					3.2 to 4.2	63 to 100					
					0.66 to 1.0	20 to 40	AC100	●	●	●	●
					1.7 to 2.5	40 to 80	AC200	●	●	●	●
					2.5 to 3.3	63 to 100	DC24	●	●	●	●
					0.67 to 1.0	20 to 40	DC12				
					1.6 to 2.4	40 to 80	DC3				
					2.6 to 3.3	63 to 100	DC5				
					0.66 to 1.0	20 to 40	(Note 2)				
					1.7 to 2.5	40 to 80					
					2.5 to 3.3	63 to 100					
					0.66 to 1.0	20 to 40	DC24	●	●	●	●
					1.7 to 2.5	40 to 80	DC12	●	●	●	●
					2.5 to 3.3	63 to 100	DC12	●	●	●	●
					0.66 to 1.0	20 to 40	DC24	●	●	●	●
					1.7 to 2.5	40 to 80	DC12	●	●	●	●
					2.5 to 3.3	63 to 100	DC24	●	●	●	●
					0.66 to 1.0	20 to 40	DC24	●	●	●	●
					1.7 to 2.5	40 to 80	DC12	●	●	●	●
					2.5 to 3.3	63 to 100	DC24	●	●	●	●
					0.66 to 1.0	20 to 40	DC24	●	●	●	●
					1.7 to 2.5	40 to 80	DC12	●	●	●	●
					2.5 to 3.3	63 to 100	DC24	●	●	●	●
					0.67 to 1.0	20 to 40	DC24				
					1.6 to 2.4	40 to 80	DC12				
					2.6 to 3.3	63 to 100	DC12				
					0.67 to 1.0	20 to 40	DC24				
					1.6 to 2.4	40 to 80	DC12				
					2.6 to 3.3	63 to 100	DC12				
					0.67 to 1.0	20 to 40	DC24				
					1.6 to 2.4	40 to 80	DC12				
					2.6 to 3.3	63 to 100	DC12				

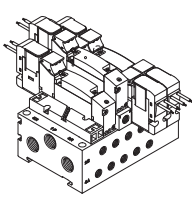
4GA1 to 3 & 4GB1 to 3 Series

	Electrical connections				Manual operating device	Other options
	Discrete valve/individual wiring manifold		Reduced wiring manifold			
4GA/B	Blank Grommet lead wire (W)	E3 E type connector with socket/terminal (L S)	T10 T11 Common terminal block type (left side) M3 thread specifications/push tightening specifications	T51 T52 T53 Flat cable power supply without terminal (left side)	Blank Non-locking/locking common type	H With check valve
M4GA/B	● Lead wire length 300mm 				(standard) 	 Provided as standard for pilot exhaust.
MN4GA/B	E0 E type connector (W)	A2N A type connector downward without socket	T10R T11R Common terminal block type (right side) M3 thread specifications/push tightening specifications	T51R T52R T53R Flat cable power supply without terminal (right side)	 (1) For non-locking, push to turn ON, release to turn OFF (2) For locking, push and turn 90° clockwise to hold the ON state. Turn counterclockwise to unlock and turn OFF	P Mounting plate
MN4GA/B	● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm 					K External pilot
4GA/B Master valve	E0N E type connector without socket	● For 100 VAC, dimension (a) is 3.5 mm longer than 12/24 VDC. 	T30 D sub-connector type (left side)	T6¹ Serial transmission type		A Ozone/cutting oil proof
4GD/E						M Non-locking
M4GD/E	E1 E type connector with socket/terminal	B BN DIN terminal box (BN: Without terminal box)	T30R D-sub connector type (right side)	T8² Serial transmission type (Thin type)	 Protective cover Manual button	F A/B port filter integrated
MN4GD/E						
Technical data	E2 E type connector (W L S)	E0^J EJ type connector (W)	T50 Flat cable power supply with terminal (left side)	(W): With lead wire (L): With indicator light (S): With surge suppressor		F Pilot check valve (separate type)
Safety precautions	● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm 					
Manifold Specifications	E2N E type connector without socket (L S)	E2^J EJ connector (W L S)	T50R Flat cable with power supply terminal (right side)			Cylinder B port Cylinder A port

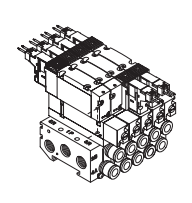
Electrical connections circuit diagram

Other options

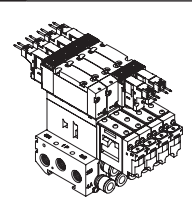
Z1 Air supply spacer
Z3 Exhaust spacer



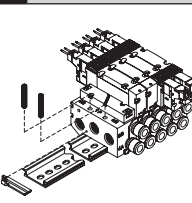
Z2 In stop valve spacer



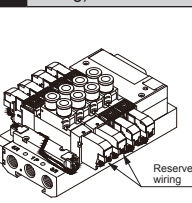
Z6 Spacer type Pilot check valve

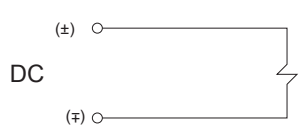
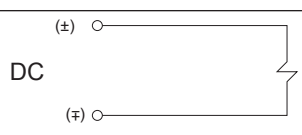
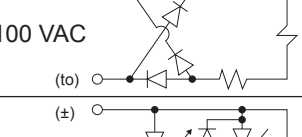
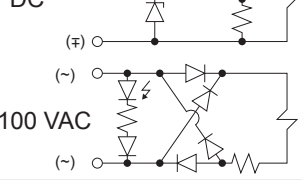
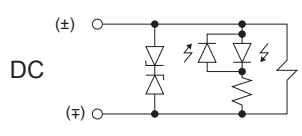
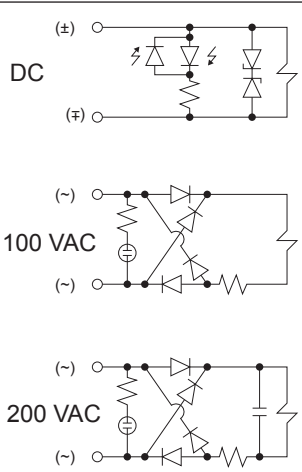
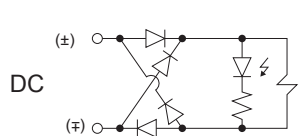
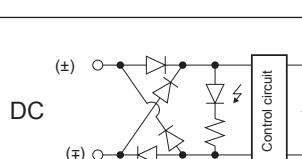


D DIN rail mount

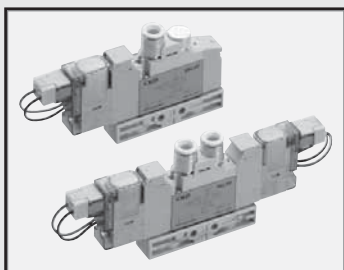


W1 Double wiring
(With single reduced wiring)



Electrical connections		Without lead wire	With lead wire	With light	With surge suppressor	Without socket	Circuit diagram
Blank	Grommet lead wire		●				DC 
E0	E type connector		●				DC 
E0*J	EJ type connector		●				
E0N	E type connector					●	100 VAC 
E1	E type connector	●					
E2	E type connector		●	●	●		DC 100 VAC 
E2*J	EJ type connector		●	●	●		
E2N	E type connector			●	●	●	
E3	E type connector	●		●	●		DC 
A2N	A type connector			●	●	●	
B	DIN terminal box	●		●	●		DC 100 VAC 200 VAC 
BN	DIN terminal box (Without terminal box)	●			●		
Option S	E2	E type connector		●	●	●	DC 
	E2*J	EJ type connector		●	●	●	
	E2N	E type connector			●	●	
Option E	E2	E type connector		●	●	●	DC 
	E2*J	EJ type connector		●	●	●	
	E2N	E type connector			●	●	

4GA/B
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications



Discrete valve body porting

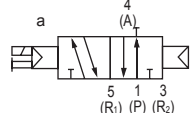
3GA1, 2, 3 & 4GA1, 2, 3 Series

● Applicable cylinder bore size: $\phi 20$ to $\phi 100$

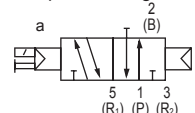


JIS symbol

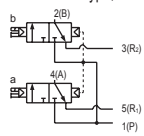
- 3 port valve
2-position single N.C. type



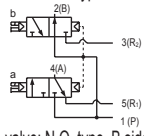
- 2-position single N.O. type



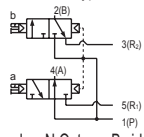
- Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



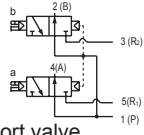
- (A side valve: N.C. type, B side valve: N.O. type)



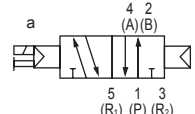
- (A side valve: N.O. type, B side valve: N.C. type)



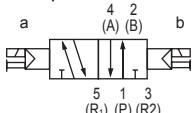
- (A side valve: N.O. type, B side valve: N.O. type)



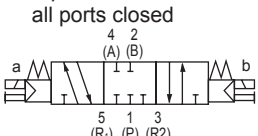
- 5 port valve
2-position single



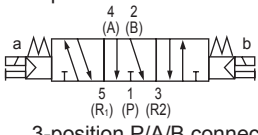
- 2-position double



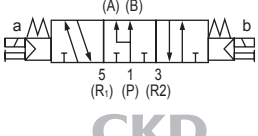
- 3-position all ports closed



- 3-position A/B/R connection



- 3-position P/A/B connection



Common specifications

Descriptions	
Valve type and operation method	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 operating device	Non-locking/locking common type (standard)
Pilot exhaust method	Main valve/pilot valve common exhaust type
Lubrication Note 1	Not required
Degree of protection Note 2	Dust proof
Vibration resistance m/s ²	50 or less
Shock resistance m/s ²	300 or less
Atmosphere	Containing corrosive gas is not permissible

Note 1 Use the turbine oil Class 1 ISO VG32 if lubricated. Excessive or intermittent lubrication results in unstable operation.

Note 2 Avoid water drops or oil, etc. during use. IP65 (jet-proof type) applies for DIN terminal box specifications. Note that the specified adaptive cord outer diameter and tightening torque must be used for IP65 rating to apply.

Individual specifications

Port size		3GA1, 4GA1	3GA2, 4GA2	3GA3, 4GA3
Rc thread, M5	A/B port	Barbed fitting $\phi 1.8$ push-in fitting $\phi 1.8, \phi 4, \phi 6$ M5	Push-in fitting $\phi 4, \phi 6, \phi 8$ Rc1/8	Push-in fitting $\phi 6, \phi 8, \phi 10$ Rc1/4
	P/R1/R2 port	M5	Rc1/8	Rc1/4
NPT thread, M5	A/B port	Push-in fitting $\phi 1/8$ inch, $\phi 5/32$ inch	Push-in fitting $\phi 1/4$ inch, $\phi 5/16$ inch 1/8NPT	Push-in fitting $\phi 5/16$ inch, $\phi 3/8$ inch 1/4NPT (Note 5)
	P/R1/R2 port	M5	1/8NPT	1/4NPT (Note 5)
G thread	A/B port	-	Push-in fitting $\phi 4, \phi 6, \phi 8$ G1/8	-
	P/R1/R2 port	-	G1/8	-

Note 4: This is a available consult factory order.

Descriptions	3GA1		3GA2		3GA3		4GA1		4GA2		4GA3			
	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF		
Response time ms	Dual 3 port valve integrated type		9	12	12	29	-	-	-	-	-	-	-	
	2-position	Single	12	12	19	19	25	28	12	12	19	19	25	28
		Double	-	-	-	-	-	-	9	-	18	-	24	-
3-position	ABR connection	-	-	-	-	-	-	8	15	17	30	23	45	

Values including a light surge suppressor. The response time is the value at 0.5 MPa supply pressure, 20°C, with no lubrication. It varies depending on the pressure and the lubricant quality.

Descriptions		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3		
Weight g	2-position	Single	Grommet lead wire	48 (41)	104 (74)	142 (100)	48 (41)	109 (79)	151 (109)
			E type connector	50 (43)	106 (76)	144 (102)	50 (43)	111 (81)	153 (111)
			DIN terminal box	-	141 (111)	177 (135)	-	146 (116)	186 (144)
	3-position	All ports closed	Grommet lead wire	-	-	-	67 (60)	139 (109)	183 (141)
			E type connector	-	-	-	71 (64)	143 (113)	187 (145)
			DIN terminal box	-	-	-	-	181 (151)	223 (181)

• Values in () do not include a piping adaptor. Values for E type connector include the socket assembly (with 300 mm lead wire). For EJ type connector, add 16 g/connector to E type connector weight.

• The weight of dual 3 port valve integrated type is the same as that of 2-position double.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

3GA1, 2, 3 & 4GA1, 2, 3 Series

Discrete valve; body piping

Flow characteristics

Model no.	Valve Position	P→A/B		A/B→R1/R2		
		C [dm ³ /(s·bar)]	b	C [dm ³ /(s·bar)]	b	
3GA1 4GA1	Dual 3 port valve integrated type	0.98	0.45	0.71	0.34	
	2-position	1.2	0.47	0.72	0.37	
	3-position	All ports closed	1.1	0.39	0.70	0.34
		ABR connection	1.1	0.33	0.72	0.34
	PAB connection	1.3	0.61	0.72	0.36	
3GA2 4GA2	Dual 3 port valve integrated type	1.8	0.29	2.3	0.32	
	2-position	2.4	0.33	2.8	0.30	
	3-position	All ports closed	2.2	0.28	2.5	0.28
		ABR connection	2.3	0.26	2.8	0.27
	PAB connection	2.5	0.38	2.4	0.30	
3GA3 4GA3	2-position	3.4	0.29	4.0	0.24	
	3-position	All ports closed	3.1	0.27	3.4	0.28
		ABR connection	3.1	0.33	4.1	0.20
		PAB connection	3.5	0.43	3.4	0.32

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

Ozone specifications / Cutting oil proof type specifications

Select the option "A" of (E) in how to order on page 8.

Clean room specifications (Catalog No. CB-033S)

- Particle generation preventing structure for use in clean rooms

** - Voltage - P7*

Specification for secondary battery (Catalog No. CC-947)

- In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section

** - Voltage - P4

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GA1, 2, 3 & 4GA1, 2, 3 Series

Discrete valve; body piping

How to order

4GA1 1 0 R - C6 - E2 - 1

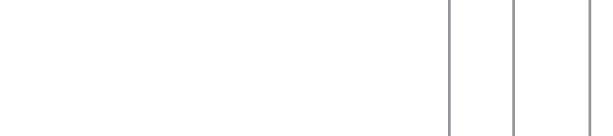
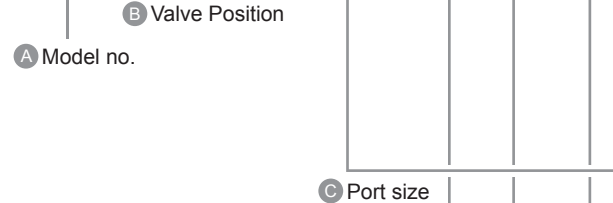
3GA1 1 0 R - C6 - E2 - 1

Discrete valve for mounting base

4GA1 1 9 R - C6 - E2 H - 3

Discrete 3 port valve for mounting base

3GA1 1 9 R - C6 - E2 H - 3



Note on model no. selection

- Note 1 For 3GA normally closed type, the piping connection 2 (B) and 3 (R2) ports are plugged. For 3GA normally open type, avoid plugging 5 (R1) port. Not doing so could cause malfunctions.
- Note 2 Dimensions are the same as the respective 2-position double.
- Note 3 "4G3" is available consult factory order product.
- Note 4 3-position all ports closed and PAB connection are not provided with check valve. Refer to page 628 for details on check valve.
- Note 5 Only the E2* type, E2* J type connector and 12/24 VDC are supported. In addition, the surgeless "S" and low heat energy-saving circuit "E" cannot be selected at the same time.
- Note 6 This is surgeless specifications.
- Note 7 The P port has a filter built inside as a standard.
- Note 8 Only the DIN terminal box are supported.

A Model No.					
3GA1	3GA2	3GA3	4GA1	4GA2	4GA3

Symbol	Descriptions	3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Valve Position							
1	2-position single				●	●	●
2	2-position double				●	●	●
3	3-position all ports closed				●	●	●
4	3-position ABR connection				●	●	●
5	3-position PAB connection				●	●	●
1	2-position single normally closed	Note1	●	●			
11	2-position single normally open	Note1	●	●			
66	Dual 3 port valve integrated type	Note 2	●	●			
	A side valve: Normally closed						
	B side valve: Normally closed						
67	Dual 3 port valve integrated type	Note 2	●	●			
	A side valve: Normally closed						
	B side valve: Normally open						
76	Dual 3 port valve integrated type	Note 2	●	●			
	A side valve: Normally open						
	B side valve: Normally closed						
77	Dual 3 port valve integrated type	Note 2	●	●			
	A side valve: Normally open						
	B side valve: Normally open						

C Port size							
Port	4(A)/2(B)port	P/R1/R2 port (1) = M5 (2) = Rc1/8 (3) = Rc1/4					
CF	φ1.8 barbed fitting (applicable tube UP-9102.**)	(1)			(1)		
C18	φ1.8 push-in fitting (applicable tube UP-9402.**)	(1)			(1)		
C4	φ4 push-in fitting	(1)	(2)		(1)	(2)	
C6	φ6 push-in fitting	(1)	(2)	(3)	(1)	(2)	(3)
C8	φ8 push-in fitting		(2)	(3)	(2)	(3)	
C10	φ10 push-in fitting			(3)			(3)
M5	M5	(1)			(1)		
06	Rc1/8		(2)			(2)	
08	Rc1/4			(3)			(3)
Port	4(A)/2(B)port	P/R1/R2 port (1) = M5 (5) = 1/8NPT (6) = Rc1/4NPT					
C3N	φ1/8 inch push-in fitting	(1)			(1)		
C4N	φ5/32 inch push-in fitting	(1)			(1)		
C6N	φ1/4 inch push-in fitting		(5)			(5)	
C8N	φ5/16 inch push-in fitting (Note3)		(5)	(6)		(5)	(6)
C10N	φ3/8 inch push-in fitting (Note 3)			(6)			(6)
06N	1/8NPT		(5)			(5)	
08N	1/4NPT (Note 3)			(6)			(6)
Port	4(A)/2(B)port	P/R1/R2 port (8) = G1/8					
C4G	φ4 push-in fitting		(8)			(8)	
C6G	φ6 push-in fitting		(8)			(8)	
C8G	φ8 push-in fitting		(8)			(8)	
06G	G1/8		(8)			(8)	

D Electrical connections
Refer to the electrical connection list on next page.

E Option							
Blank	Non-locking/locking common manual override	●	●	●	●	●	●
M	Non-locking manual override	●	●	●	●	●	●
H	With check valve (Note 4)	●	●	●	●	●	●
P	Mounting plate	●	●	●	●	●	●
A	Ozone/Cutting oil proof	●	●	●	●	●	●
S	Surgeless (Note 5)	●	●	●	●	●	●
E	Low heat and energy saving circuit (Note 5), (Note 6)	●	●	●	●	●	●
F	A/B port filter integrated (Note 7)	●	●	●	●	●	●

F Voltage							
1	100 VAC(rectifier integrated)	●	●	●	●	●	●
2	200 VAC (rectifier integrated) (Note 8)	●	●	●	●	●	●
3	24 VDC	●	●	●	●	●	●
4	12 VDC	●	●	●	●	●	●
7	3 VDC	○	○	○	○	○	○
8	5 VDC	○	○	○	○	○	○

■ is not available.
○ Contact CKD for price and availability.

3GA1, 2, 3 & 4GA1, 2, 3 Series

Discrete valve; body piping

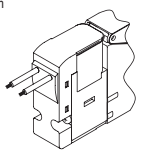
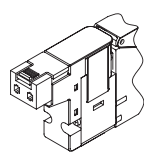
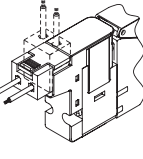
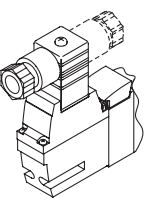
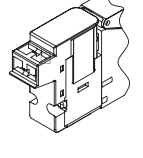
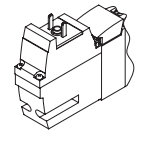
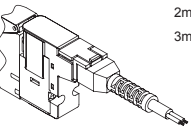
[Electrical connections]

		A Model No.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
D Electrical connections							
Blank	Grommet lead wire (300 mm) (Note 9)	●	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/light (Note 10)		●	●		●	●
BN	DIN terminal box (Pg7) (without terminal box) with surge suppressor (Note 10)		●	●		●	●
E type connector (upward/lateral direction common)							
E0	Lead wire (300 mm) (Note 11)	●	●	●	●	●	●
E00	Lead wire (500 mm) (Note 11)	●	●	●	●	●	●
E01	Lead wire (1000 mm) (Note 11)	●	●	●	●	●	●
E02	Lead wire (2000 mm) (Note 11)	●	●	●	●	●	●
E03	Lead wire (3000 mm) (Note 11)	●	●	●	●	●	●
E0N	Without lead wire (without socket)	●	●	●	●	●	●
E1	Without lead wire (with socket/terminal) (Note 11)	●	●	●	●	●	●
E2	Lead wire (300 mm) with surge suppressor/light	●	●	●	●	●	●
E20	Lead wire (500 mm) with surge suppressor/light	●	●	●	●	●	●
E21	Lead wire (1000 mm) with surge suppressor/light	●	●	●	●	●	●
E22	Lead wire (2000 mm) with surge suppressor/light	●	●	●	●	●	●
E23	Lead wire (3000 mm) with surge suppressor/light	●	●	●	●	●	●
E2N	Without lead wire (without socket) with surge suppressor/light	●	●	●	●	●	●
E3	Without lead wire (with socket/terminal) with surge suppressor/light	●	●	●	●	●	●
EJ type connector (socket with cover, upward/lateral direction common)							
E01J	Lead wire (1000 mm) (Note 11)	●	●	●	●	●	●
E02J	Lead wire (2000 mm) (Note 11)	●	●	●	●	●	●
E03J	Lead wire (3000 mm) (Note 11)	●	●	●	●	●	●
E21J	Lead wire (1000 mm) with surge suppressor/light	●	●	●	●	●	●
E22J	Lead wire (2000 mm) with surge suppressor/light	●	●	●	●	●	●
E23J	Lead wire (3000 mm) with surge suppressor/light	●	●	●	●	●	●

Note 9 Grommet lead wire specifications are only for DC voltage.

Note 10 Supports AC voltage and 12/24 VDC. The light is also attached to the terminal box.

Note 11 AC voltage comes with a rectifier circuit.

Electrical connections		
Blank	Grommet lead wire ● Lead wire length 300mm 	E1 E3 E type connector with socket/terminal 
E0 E2	E type connector ● Lead wire length 300mm, 500mm, 1000mm, 2000mm, 3000mm 	B DIN terminal box 
E0N E2N	E type connector without socket 	BN DIN terminal box without terminal box 
E0J E2J	EJ type connector ● Lead wire length 1m, 2m, 3m 	

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GA1 Series

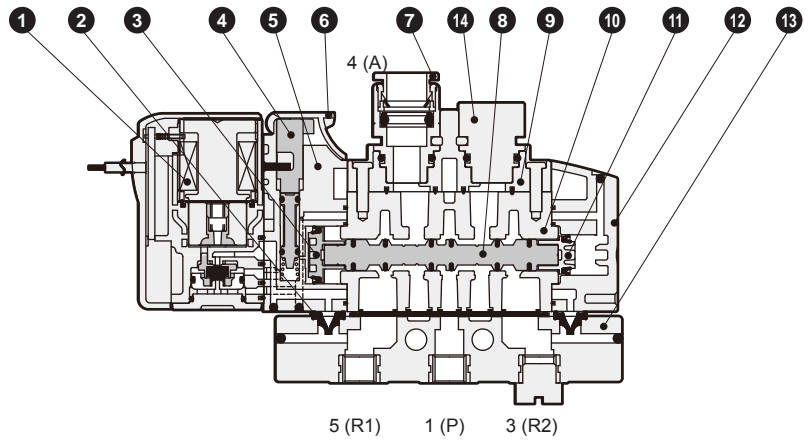
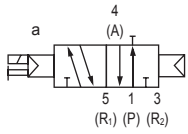
Discrete valve; body piping

Internal structure and parts list

4GAB
MAGAB
MN4GAB
4GAB Master valve
4GD/E
MAGD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

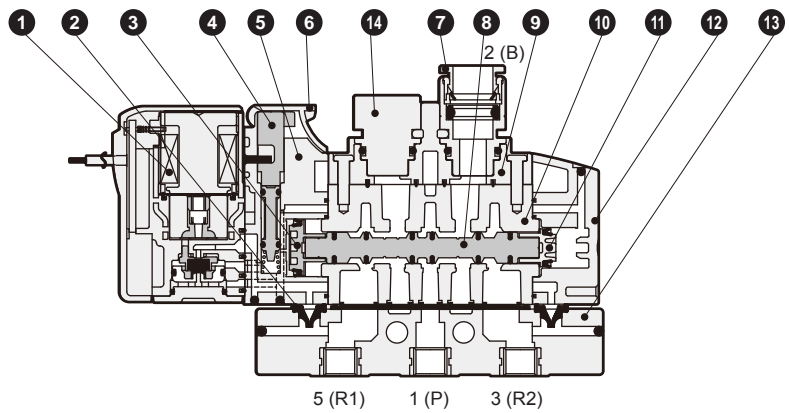
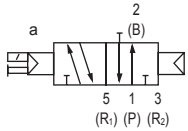
3GA110R

- 2-position single: Normally closed
- Grommet lead wire (blank)



3GA1110R

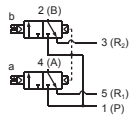
- 2-position single: Normally open
- Grommet lead wire (blank)



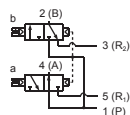
3GA1⁶⁶₆₇⁷⁶0R

- Dual 3 port valve integrated type
- Grommet lead wire(blank)

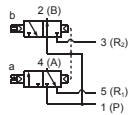
A side valve: Normally closed,
B side valve: Normally closed



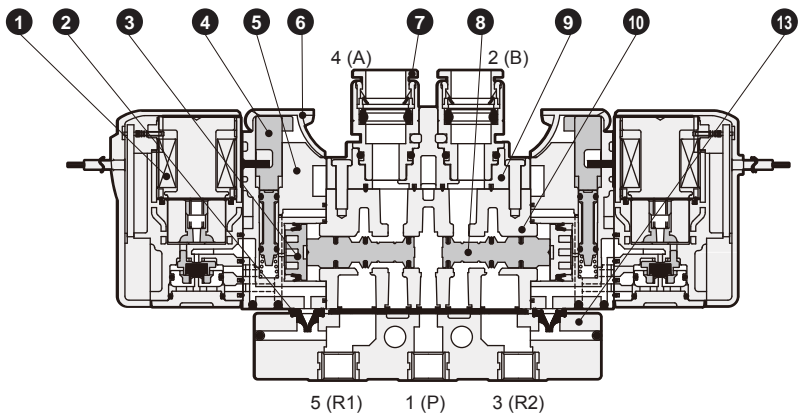
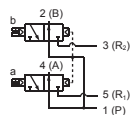
A side valve: Normally open,
B side valve: Normally closed



A side valve: Normally closed,
B side valve: Normally open



A side valve: Normally open,
B side valve: Normally open



Main parts list

No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR
3	Piston D assembly	-
4	Manual operating device	Plastic
5	Piston room	Plastic
6	Manual protection cover	Plastic
7	Cartridge type push-in fitting or barbed fitting	-
8	Spool assembly	-
9	Fitting adaptor	Plastic
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Plastic
13	Piping adaptor	Plastic
14	Plug cartridge	Aluminum

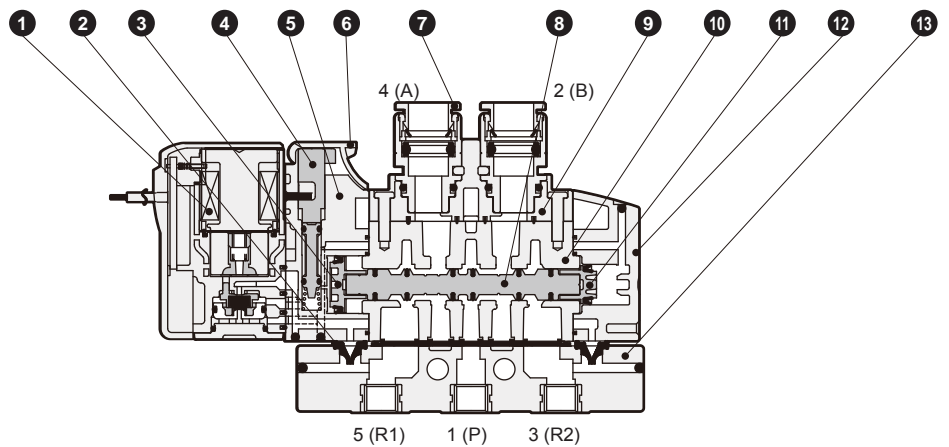
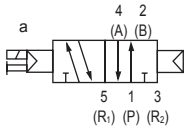
Parts list

No.	Parts name	Model no.														
1	Coil assembly	4GR - <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Electrical connections</td> <td>- * - COIL - Voltage</td> </tr> <tr> <td colspan="2">Blank: Standard</td> </tr> <tr> <td colspan="2">A: Ozone specifications</td> </tr> <tr> <td colspan="2">Blank: Grommet lead wire</td> </tr> </table>	Electrical connections	- * - COIL - Voltage	Blank: Standard		A: Ozone specifications		Blank: Grommet lead wire							
Electrical connections	- * - COIL - Voltage															
Blank: Standard																
A: Ozone specifications																
Blank: Grommet lead wire																
7	Cartridge type push-in fitting and related parts	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>φ1.8 barbed type</td> <td>4G1R-JOINT-CF</td> </tr> <tr> <td>φ1.8 straight type</td> <td>4G1R-JOINT-C18</td> </tr> <tr> <td>φ4 straight type</td> <td>4G1R-JOINT-C4</td> </tr> <tr> <td>φ6 straight</td> <td>4G1R-JOINT-C6</td> </tr> <tr> <td>Plug cartridge</td> <td>4G1R-JOINT-CPG</td> </tr> <tr> <td>φ1/8 inch straight type</td> <td>4G1R-JOINT-C3N</td> </tr> <tr> <td>φ5/32 inch straight type</td> <td>4G1R-JOINT-C4N</td> </tr> </table>	φ1.8 barbed type	4G1R-JOINT-CF	φ1.8 straight type	4G1R-JOINT-C18	φ4 straight type	4G1R-JOINT-C4	φ6 straight	4G1R-JOINT-C6	Plug cartridge	4G1R-JOINT-CPG	φ1/8 inch straight type	4G1R-JOINT-C3N	φ5/32 inch straight type	4G1R-JOINT-C4N
φ1.8 barbed type	4G1R-JOINT-CF															
φ1.8 straight type	4G1R-JOINT-C18															
φ4 straight type	4G1R-JOINT-C4															
φ6 straight	4G1R-JOINT-C6															
Plug cartridge	4G1R-JOINT-CPG															
φ1/8 inch straight type	4G1R-JOINT-C3N															
φ5/32 inch straight type	4G1R-JOINT-C4N															

Internal structure and parts list

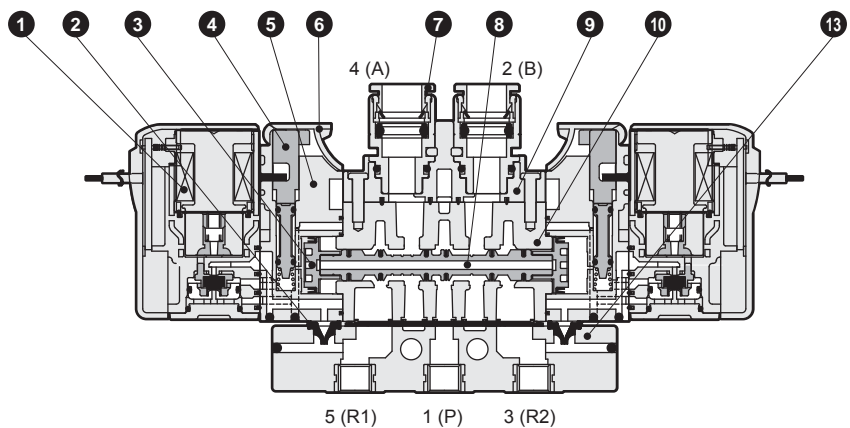
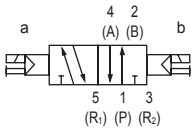
4GA110R

- 2-position single
- Grommet lead wire (blank)



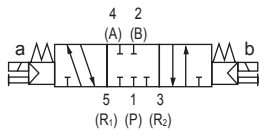
4GA120R

- 2-position double
- Grommet lead wire (blank)

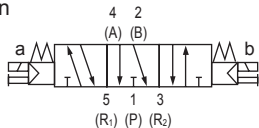


4GA1³/₅0R

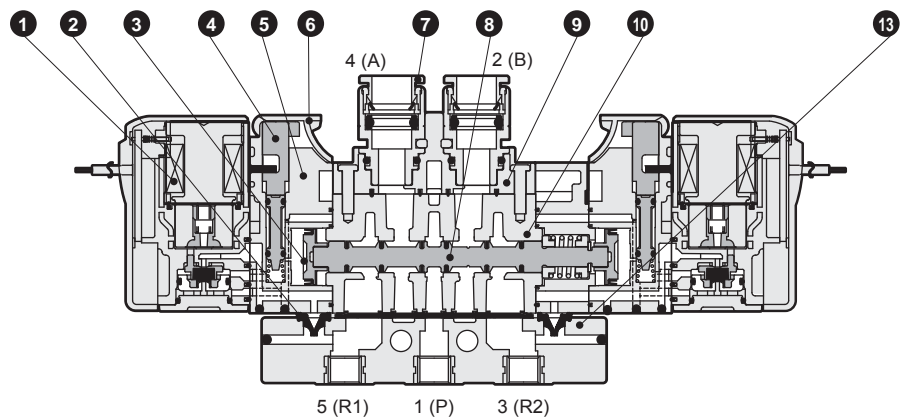
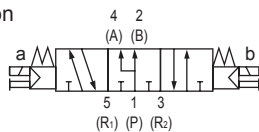
- 3-position
- Grommet lead wire (blank)
- All ports closed



A/B/R connection



P/A/B Connection



Main parts list

No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston D assembly	-
4	Manual operating device	Plastic
5	Piston room	Plastic
6	Manual protection cover	Plastic
7	Cartridge type push-in fitting or barbed fitting	-
8	Spool assembly	-
9	Fitting adaptor	Plastic
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Plastic
13	Piping adapter	Plastic
14	Plug cartridge	Aluminum

Parts list

No.	Parts name	Model no.	
1	Coil assembly	4GR - <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Electrical connections</td></tr></table> - * - COIL - Voltage	Electrical connections
Electrical connections			
7	Cartridge type push-in fitting and related parts	Blank: Standard	
		Blank: Grommet lead wire	
		φ1.8 barbed type	4G1R-JOINT-CF
		φ1.8 straight type	4G1R-JOINT-C18
		φ4 straight type	4G1R-JOINT-C4
		φ6 straight type	4G1R-JOINT-C6
		Plug cartridge	4G1R-JOINT-CPG
	φ1/8 inch straight type	4G1R-JOINT-C3N	
	φ5/32 inch straight type	4G1R-JOINT-C4N	

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

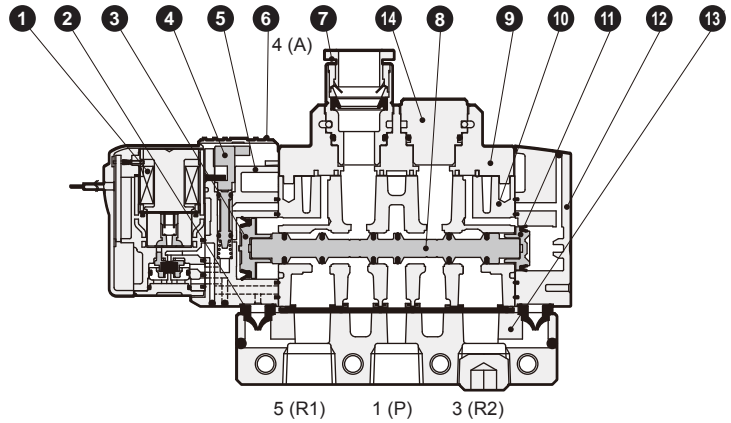
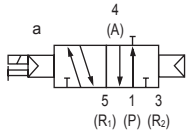
3GA2/3 Series

Discrete valve; body piping

Internal structure and parts list

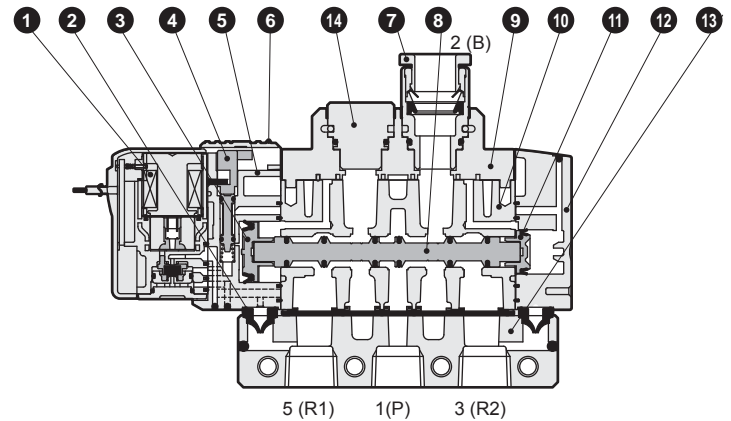
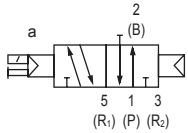
3GA210R/3GA310R

- 2-position single: Normally closed
- Grommet lead wire (blank)



3GA2110R/3GA3110R

- 2-position single: Normally closed
- Grommet lead wire (blank)

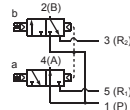
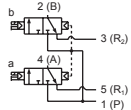


3GA2⁶⁶₆₇⁷⁶₇₇0R

- Dual 3 port valve integrated type
- Grommet lead wire (blank)

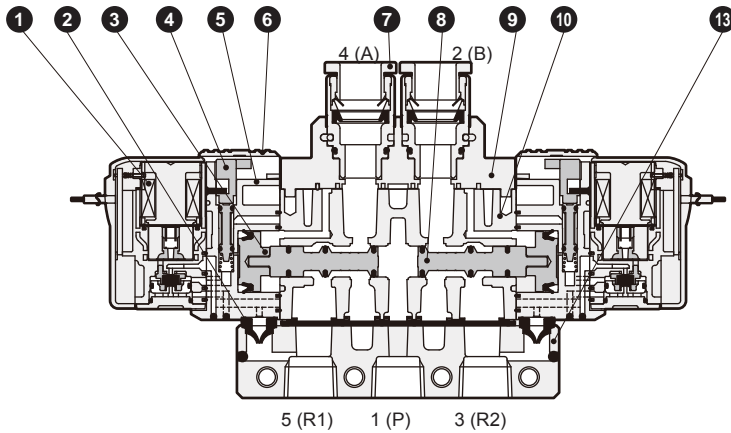
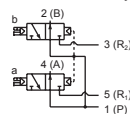
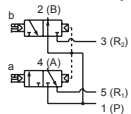
A side valve: Normally closed,
B side valve: Normally closed

A side valve: Normally open,
B side valve: Normally closed



A side valve: Normally closed,
B side valve: Normally open

A side valve: Normally open,
B side valve: Normally open



Main parts list

No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR
3	Piston assembly	-
4	Manual operating device	Plastic
5	Piston room	Plastic
6	Manual protection cover	Plastic
7	Cartridge type push-in fitting	-
8	Spool assembly	-
9	Fitting adaptor	Plastic
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Plastic
13	Piping adapter	Aluminum alloy die-casting
14	Plug cartridge	Aluminum

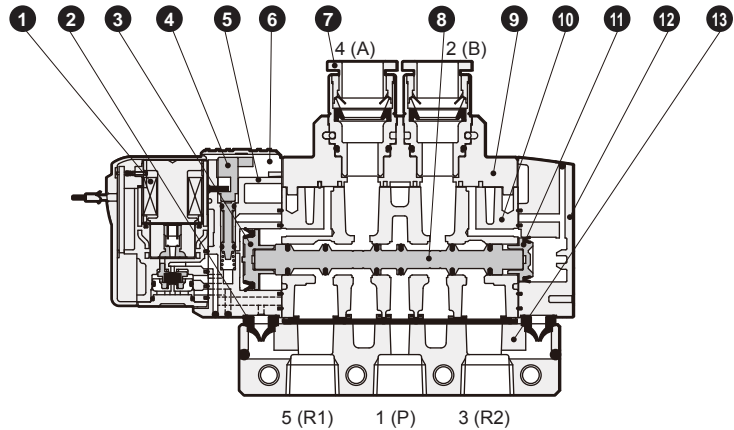
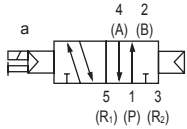
Parts list

No.	Parts name	Model no.		
1	Coil assembly	4GR - <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td>Electrical connections</td></tr></table> - * - COIL - Voltage	Electrical connections	
Electrical connections				
7	Cartridge type push-in fitting and related parts	Blank: Standard		
		A: Ozone specifications		
		Blank: Grommet lead wire		
		3G2	φ4 straight type	4G2R-JOINT-C4
			φ6 straight type	4G2R-JOINT-C6
			φ8 straight type	4G2R-JOINT-C8
			Plug cartridge	4G2R-JOINT-CPG
			φ1/4 inch straight type	4G2R-JOINT-C6N
		3G3	φ5/16 inch straight type	4G2R-JOINT-C8N
			φ6 straight type	4G3R-JOINT-C6
φ8 straight type	4G3R-JOINT-C8			
φ10 straight type	4G3R-JOINT-C10			
Plug cartridge	4G3R-JOINT-CPG			
3G3	φ5/16 inch straight type	4G3R-JOINT-C8N		
	φ3/8 inch straight type	4G3R-JOINT-C10N		

Internal structure and parts list

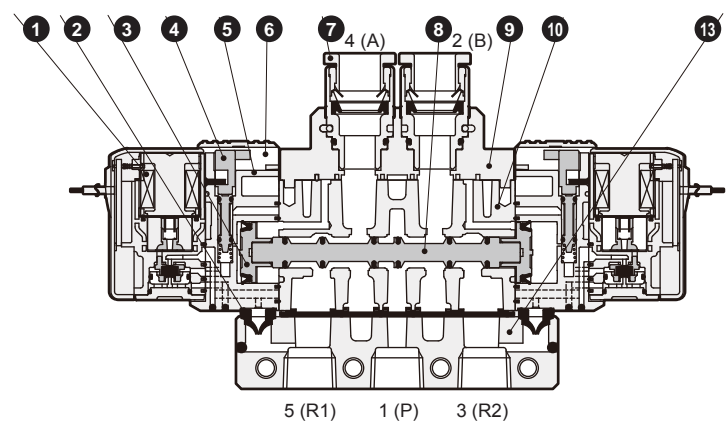
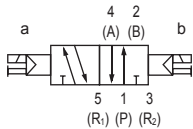
4GA210R & 4GA310R

- 2-position single
- Grommet lead wire (blank)



4GA220R & 4GA320R

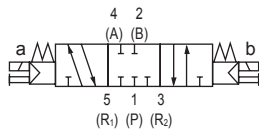
- 2-position double
- Grommet lead wire (blank)



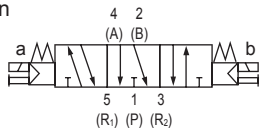
4GA2³/₅0R & 4GA3³/₅0R

- 3-position
- Grommet lead wire (blank)

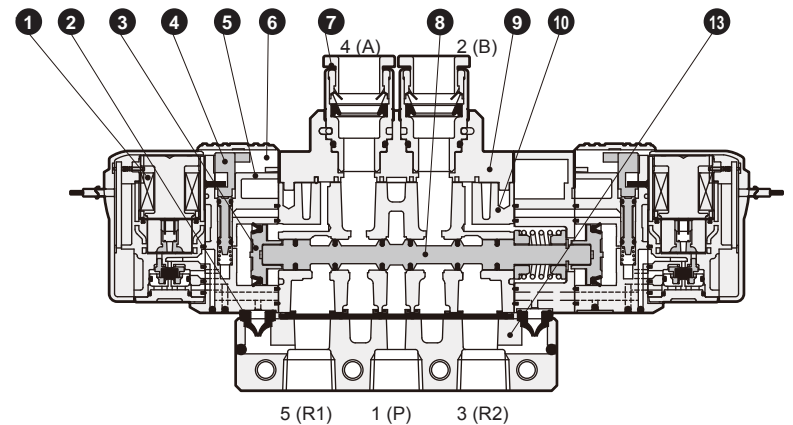
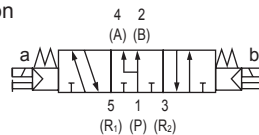
All ports closed



A/B/R connection



P/A/B Connection



Main parts list

No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR
3	Piston D assembly	-
4	Manual operating device	Plastic
5	Piston room	Plastic
6	Manual protection cover	Plastic
7	Cartridge type push-in fitting	-
8	Spool assembly	-
9	Fitting adaptor	Plastic
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Plastic
13	Piping adapter	Aluminum alloy die-casting

Parts list

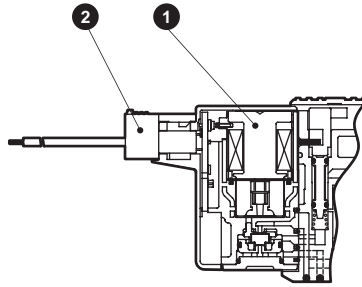
No.	Parts name	Model no.	
1	Coil assembly	4GR - Electrical connections - * - COIL - [Voltage]	
		Blank: Standard A: Ozone specifications Blank: Grommet lead wire	
7	Cartridge type push-in fitting and related parts	4G2	
		φ4 straight type	4G2R-JOINT-C4
		φ6 straight type	4G2R-JOINT-C6
		φ8 straight type	4G2R-JOINT-C8
		Plug cartridge	4G2R-JOINT-CPG
		φ1/4 inch straight type	4G2R-JOINT-C6N
		φ5/16 inch straight type	4G2R-JOINT-C8N
		4G3	
		φ6 straight type	4G3R-JOINT-C6
		φ8 straight type	4G3R-JOINT-C8
		φ10 straight type	4G3R-JOINT-C10
		Plug cartridge	4G3R-JOINT-CPG
φ5/16 inch straight type	4G3R-JOINT-C8N		
φ3/8 inch straight type	4G3R-JOINT-C10N		

3GA1, 2, 3 & 4GA1, 2, 3 Series

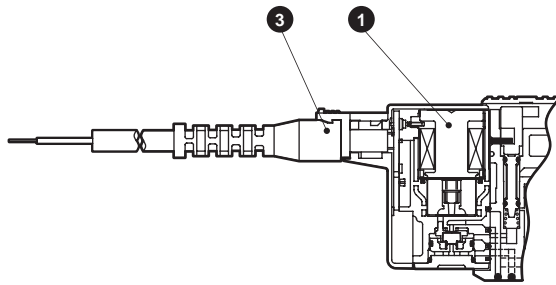
Discrete valve; body piping

Internal structure and parts list (electrical connections section)

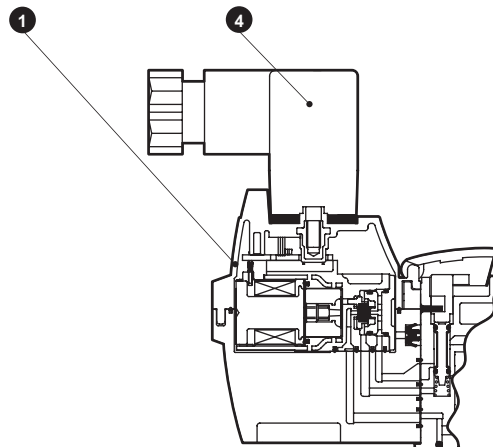
● E type connector type E**



● EJ type connector type E**J



● DIN terminal box type B



Main parts list

No.	Parts name	Material
1	Coil assembly	
2	E type connector socket assembly	-
3	Socket assembly with cover	-
4	DIN terminal box assembly	-

Parts list

No.	Parts name	Model no.							
1	Coil assembly	4GR - <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Electrical connections</td> <td>-</td> <td>*</td> <td>-</td> <td>COIL</td> <td>-</td> <td>[Voltage]</td> </tr> </table> Blank: Standard A: Ozone specifications E* : E type connector type E*J: Socket with cover type B* : DIN terminal box type B includes the DIN terminal box BN does not included DIN terminal box.	Electrical connections	-	*	-	COIL	-	[Voltage]
Electrical connections	-	*	-	COIL	-	[Voltage]			
2	E type connector socket assembly	4GR-SOCKET-ASSY-E**-[Voltage]							
3	Socket assembly with cover	4GR-SOCKET-ASSY-E**J							
4	DIN terminal box assembly	4GR-TERMINAL-BOX-[Voltage]							

4GA/B
 M4GA/B
 MN4GA/B
 4GA/B Master valve
 4GD/E
 M4GD/E
 MN4GD/E
 Technical data
 Safety precautions
 Manifold Specifications

MEMO

4GA/B	M4GA/B	MN4GA/B	4GA/B Master valve	4GD/E	M4GD/E	MN4GD/E	Technical data	Safety precautions	Manifold Specifications
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3GA1 Series

Discrete valve; body piping

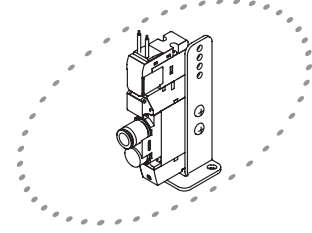
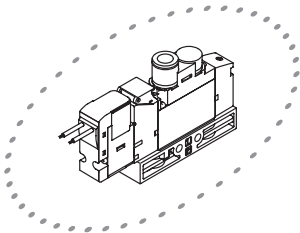
Dimensions



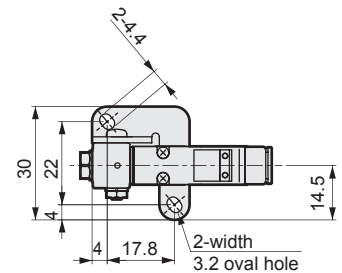
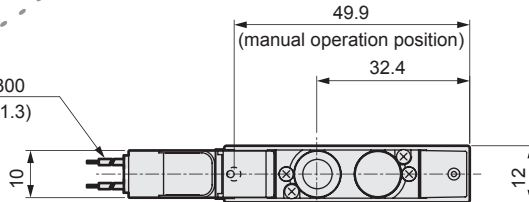
3GA110R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

- 2-position single normally closed
Gommet lead wire (blank)

- Mounting plate type (P)

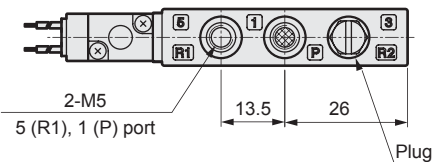
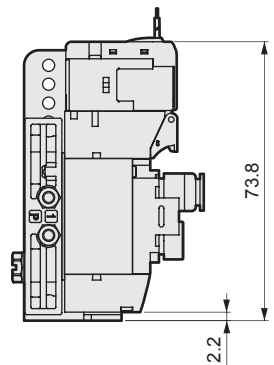
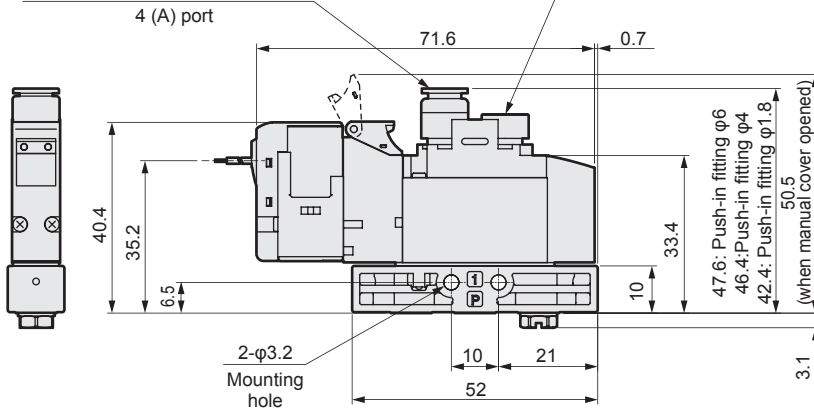


Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



Push-in fitting ϕ 1.8, ϕ 4, ϕ 6 (selection)
4 (A) port

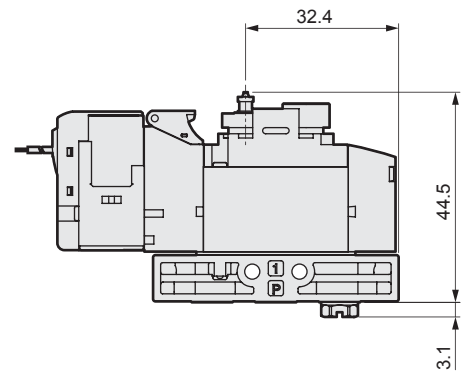
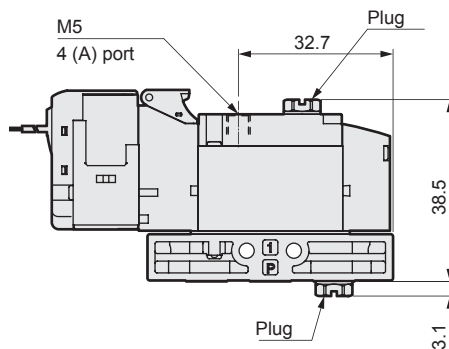
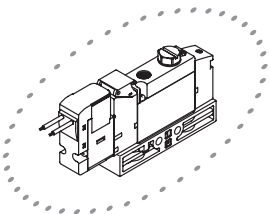
Plug



Electrical connections	A	B
Grommet lead wire	2.2	73.8
E, EJ type connector (upward direction), DC voltage		82
E, EJ type connector (upward direction), AC voltage		85.5

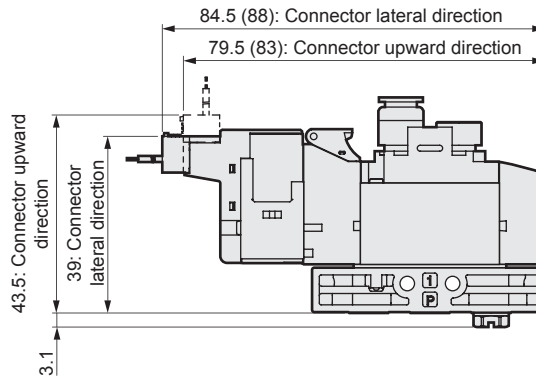
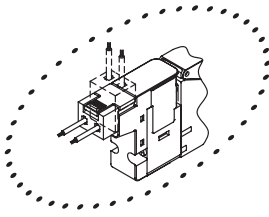
- M5 female thread type (M5)

- ϕ 1.8 barbed fitting type (CF)



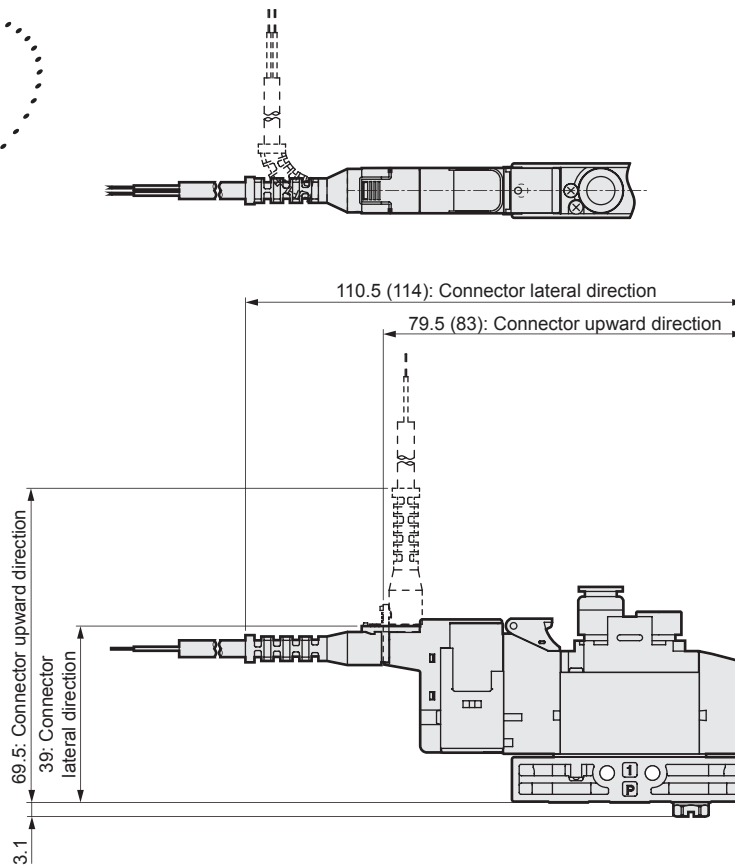
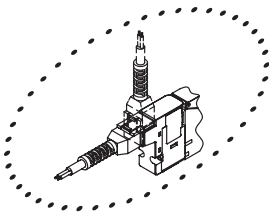
Dimensions

● E connector type (E)



Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GA1 Series

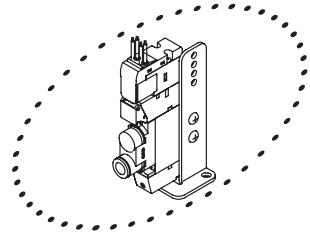
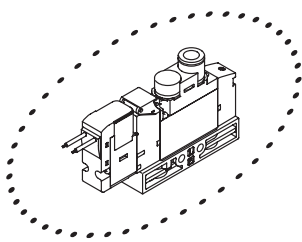
Discrete valve; body piping

Dimensions 

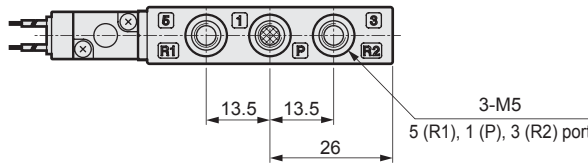
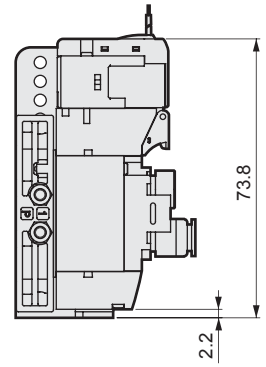
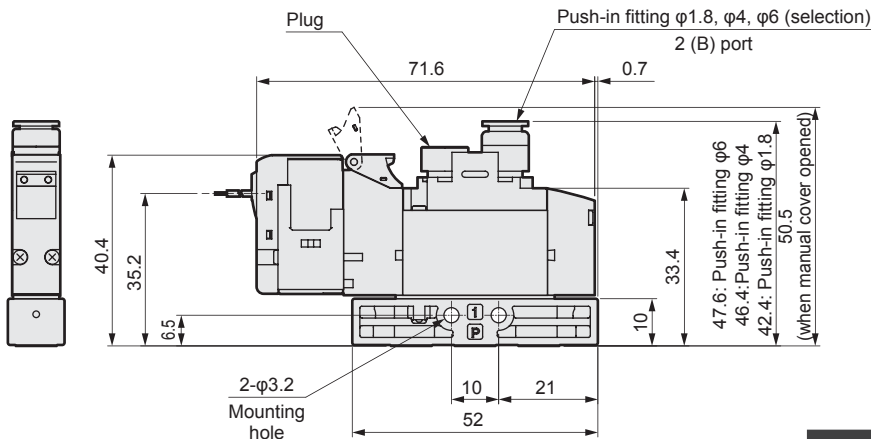
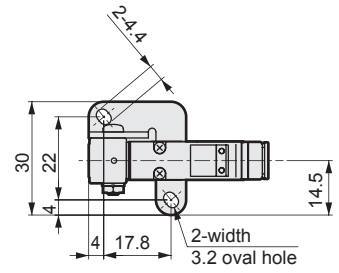
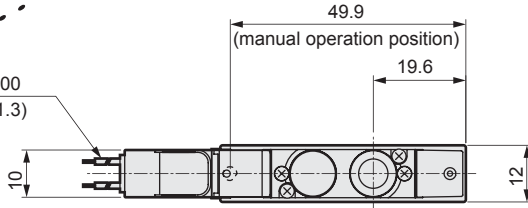
3GA1110R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

- 2-position single normally open
Grommet lead wire (blank)

- Mounting plate type (P)



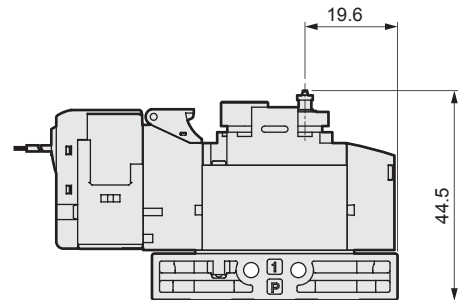
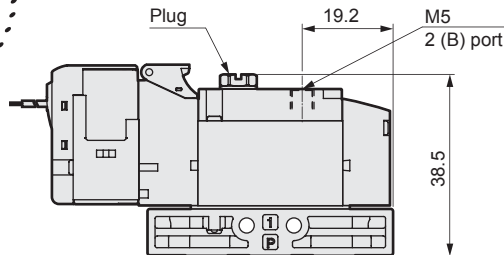
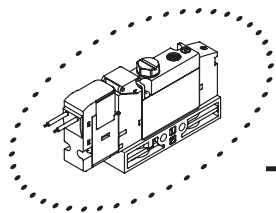
Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



Electrical connections	A	B
Grommet lead wire	2.2	73.8
E, EJ type connector (upward direction), DC voltage		82
E, EJ type connector (upward direction), AC voltage		85.5

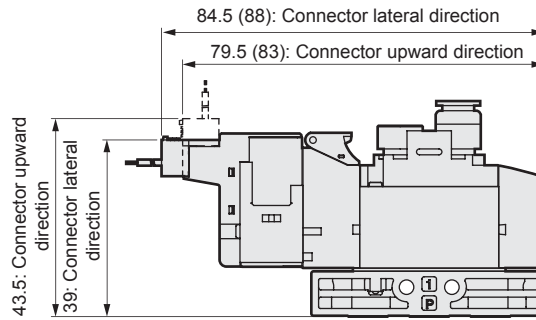
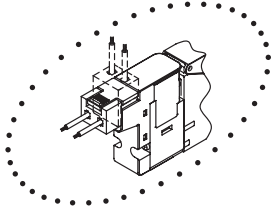
- M5 female thread type (M5)

- ϕ 1.8 barbed fitting type (CF)



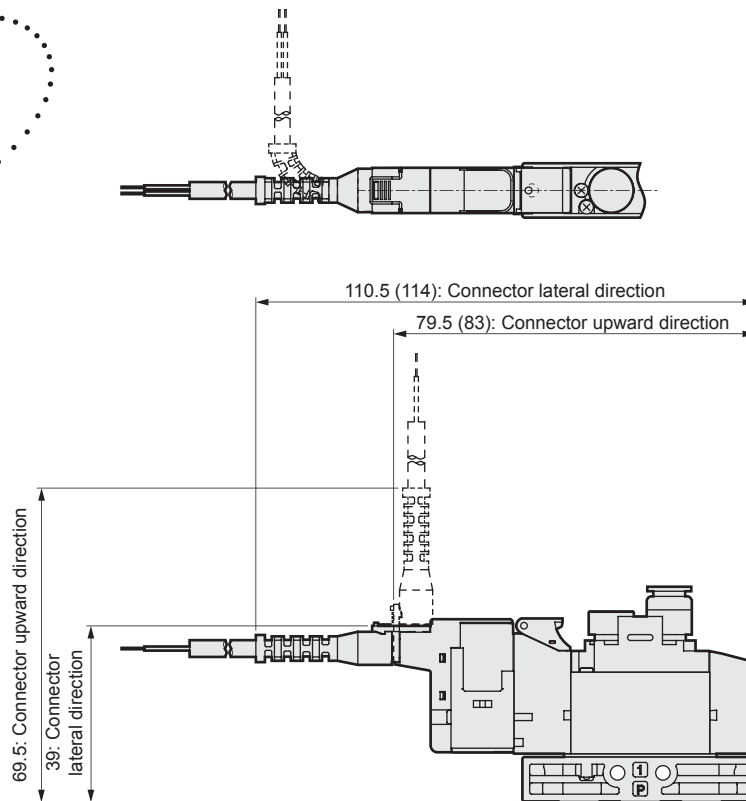
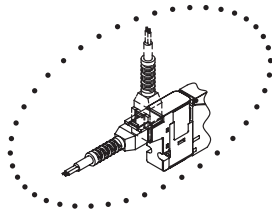
Dimensions

● E type connector type (E)



Note: Values in () apply for 100 VAC.

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GA2 Series

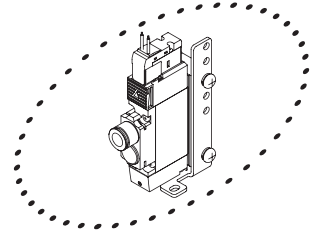
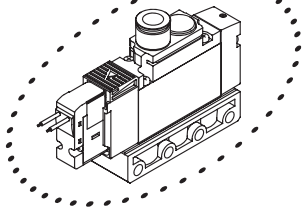
Discrete valve; body piping

Dimensions 

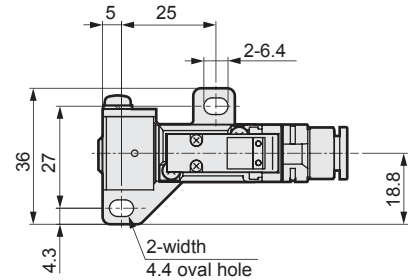
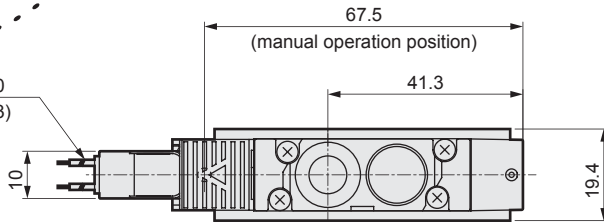
3GA210R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

● 2-position single normally closed grommet lead wire (blank)

● Mounting plate type (P)

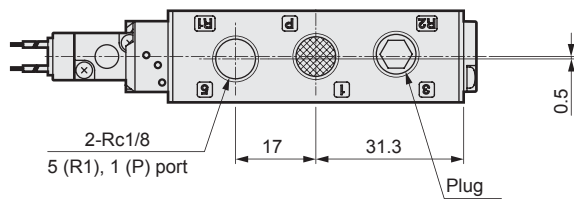
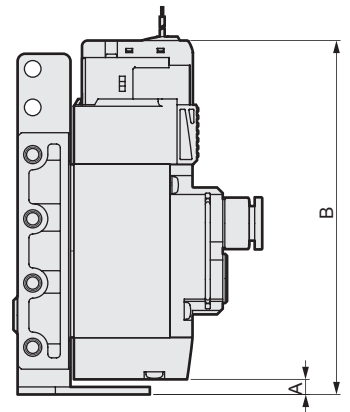
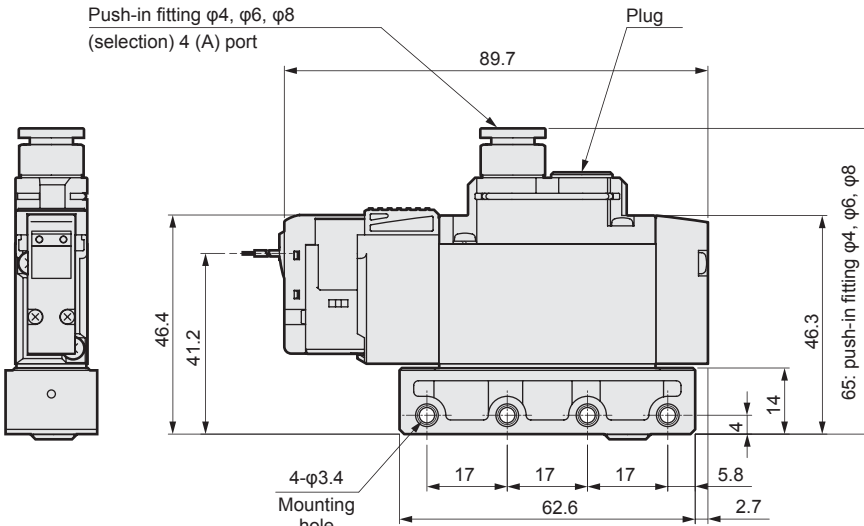


Lead wire length 300 (AWG#26, O.D. ϕ 1.3)



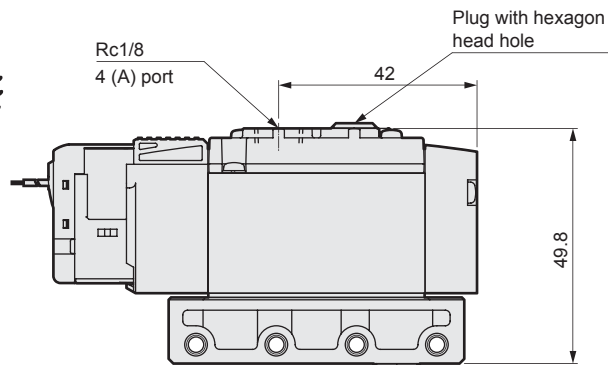
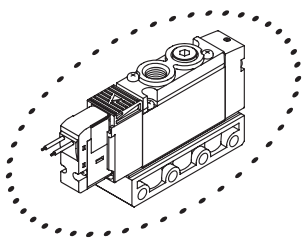
Push-in fitting ϕ 4, ϕ 6, ϕ 8 (selection) 4 (A) port

Plug



Electrical connections	A	B
Grommet lead wire	4	93.7
E, EJ type connector (upward direction), DC voltage		102
E, EJ type connector (upward direction), AC voltage		105.5
DIN terminal box (inner direction)		112.7

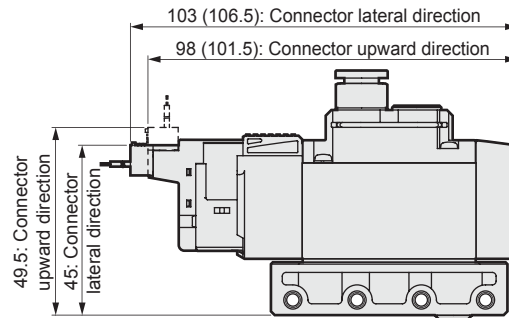
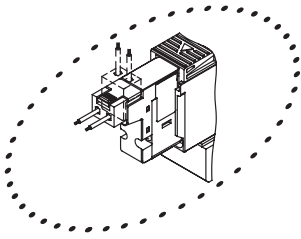
● Rc1/8 Female thread type(06)



4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

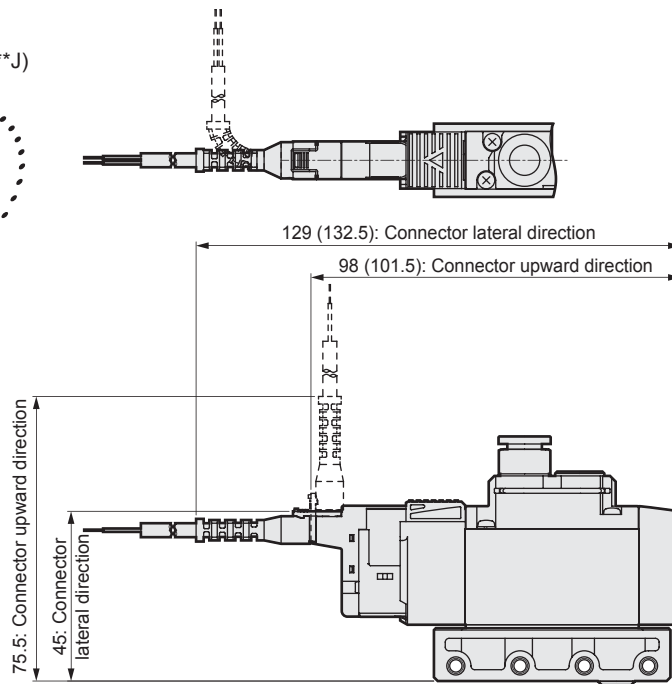
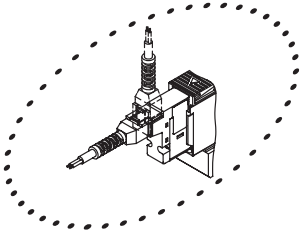
Dimensions

● E connector type (E)



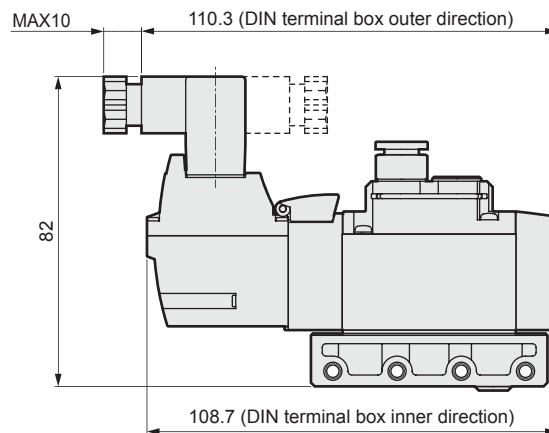
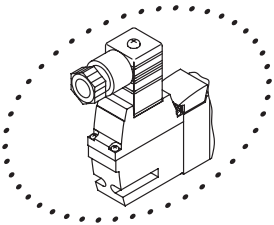
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GA2 Series

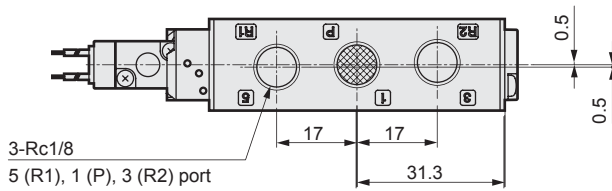
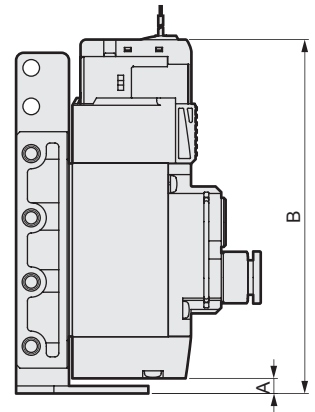
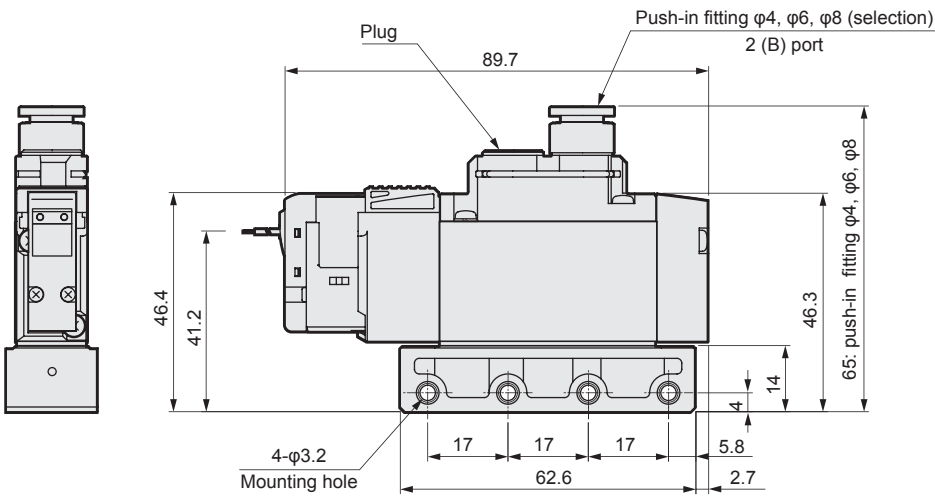
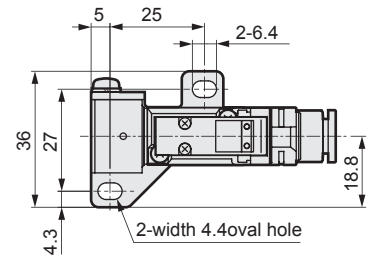
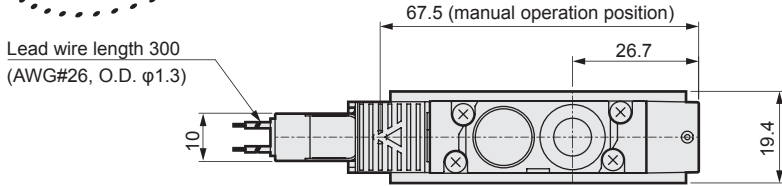
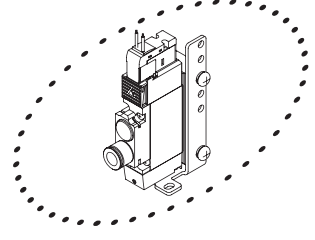
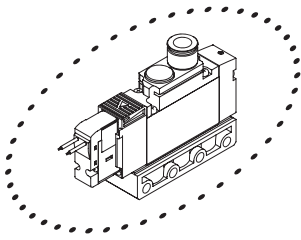
Discrete valve; body piping

Dimensions 

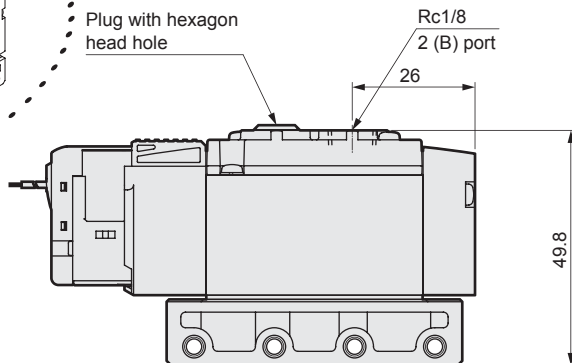
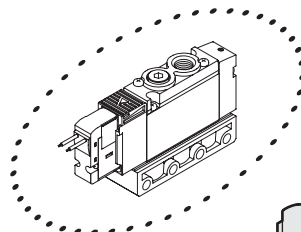
3GA2110R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

- 2-position single normally open
Grommet lead wire (blank)

- Mounting plate type (P)



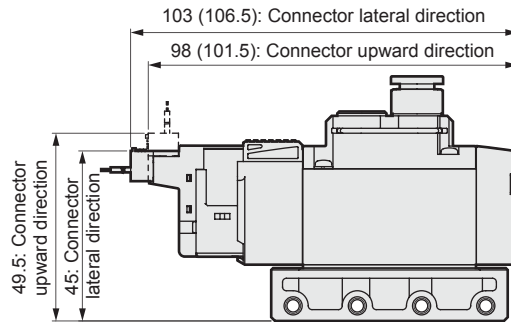
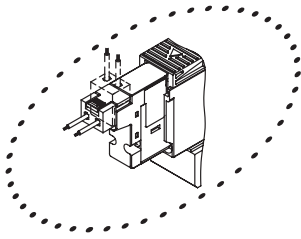
- Rc1/8 female thread type (06)



Electrical connections	A	B
Grommet lead wire	4	93.7
E, EJ type connector (upward direction), DC voltage		102
E, EJ type connector (upward direction), AC voltage		105.5
DIN terminal box (inner direction)		112.7

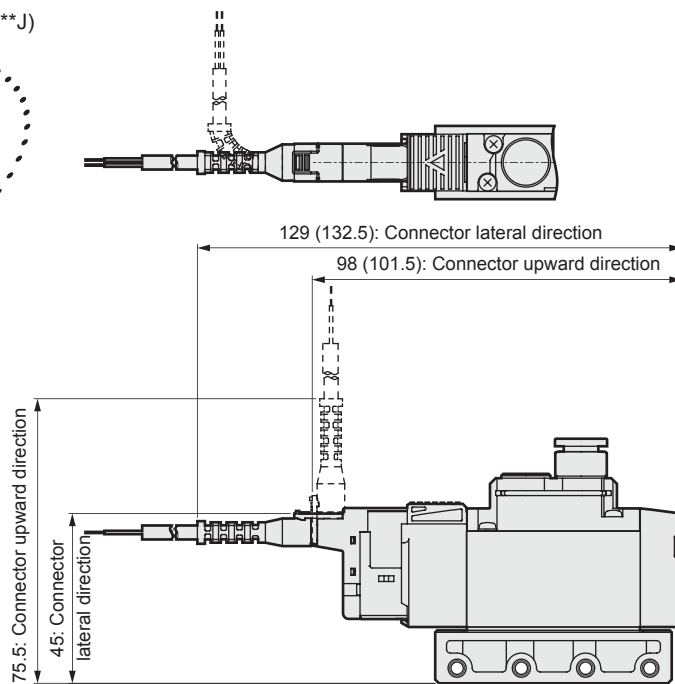
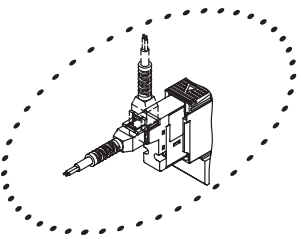
Dimensions

● E connector type (E)



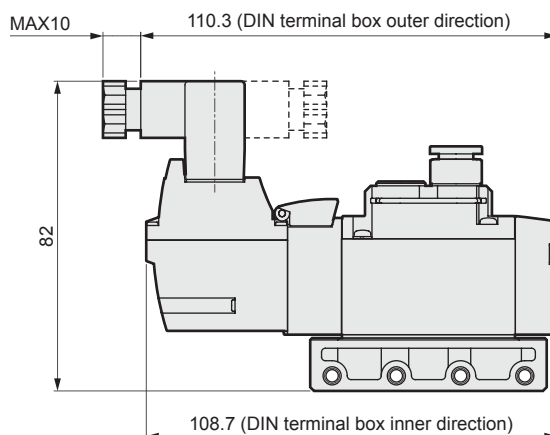
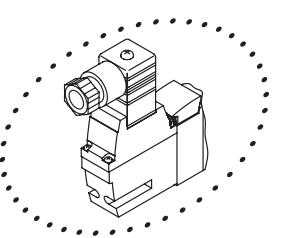
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB	M4GAB	MN4GAB	4GAB Master valve	4GD/E	M4GD/E	MN4GD/E	Technical data	Safety precautions	Manifold Specifications
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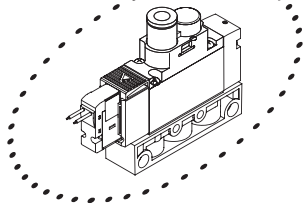
3GA3 Series

Discrete valve; body piping

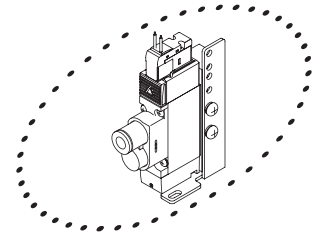
Dimensions 

3GA310R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

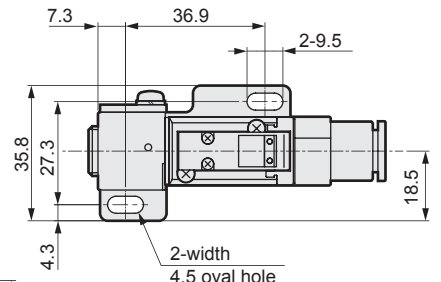
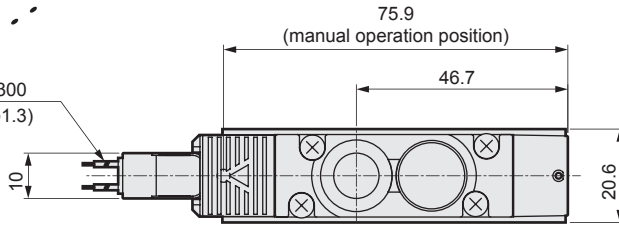
- 2-position single normally closed grommet lead wire (blank)



- Mounting plate type (P)

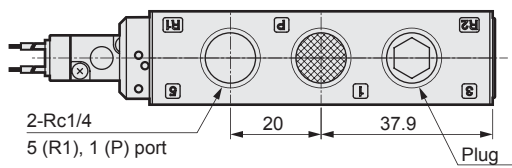
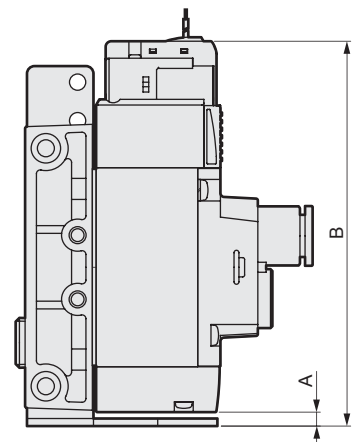
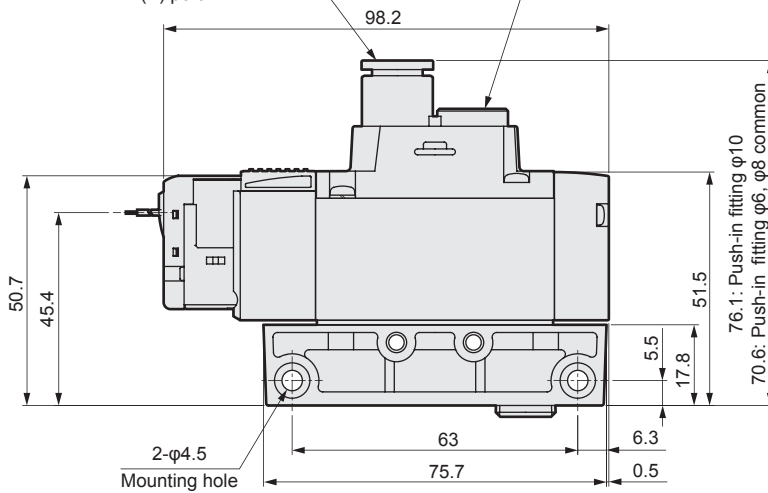
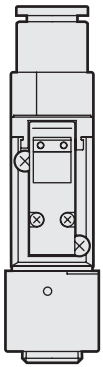


Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



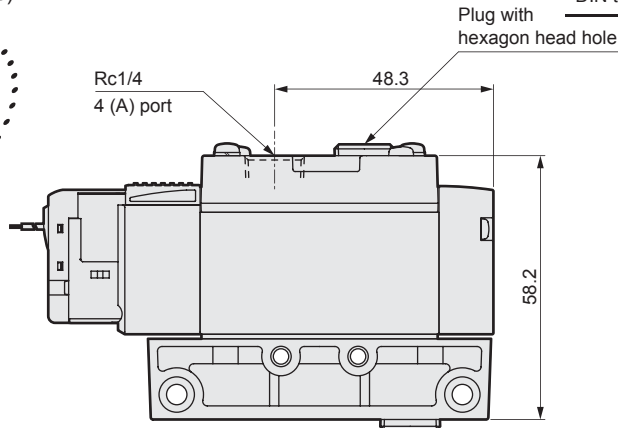
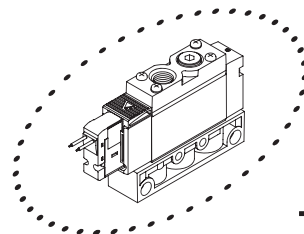
Push-in fitting ϕ 6, ϕ 8, ϕ 10 (selection)
4 (A) port

Plug



Electrical connections	A	B
Grommet lead wire	3.7	101.8
E, EJ type connector (upward direction), DC voltage		110
E, EJ type connector (upward direction), AC voltage		113.5
DIN terminal box (inner direction)		120.9

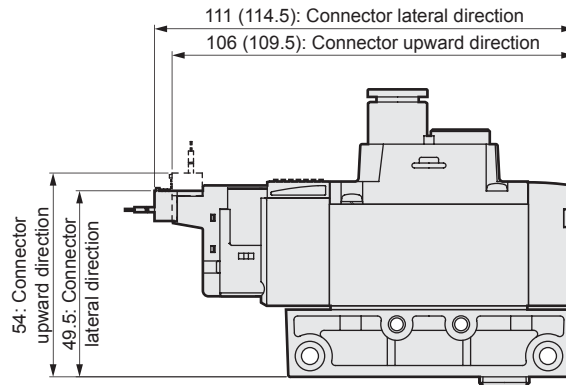
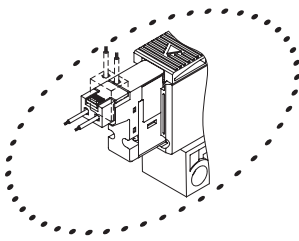
- Rc1/4 female thread type (08)



4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

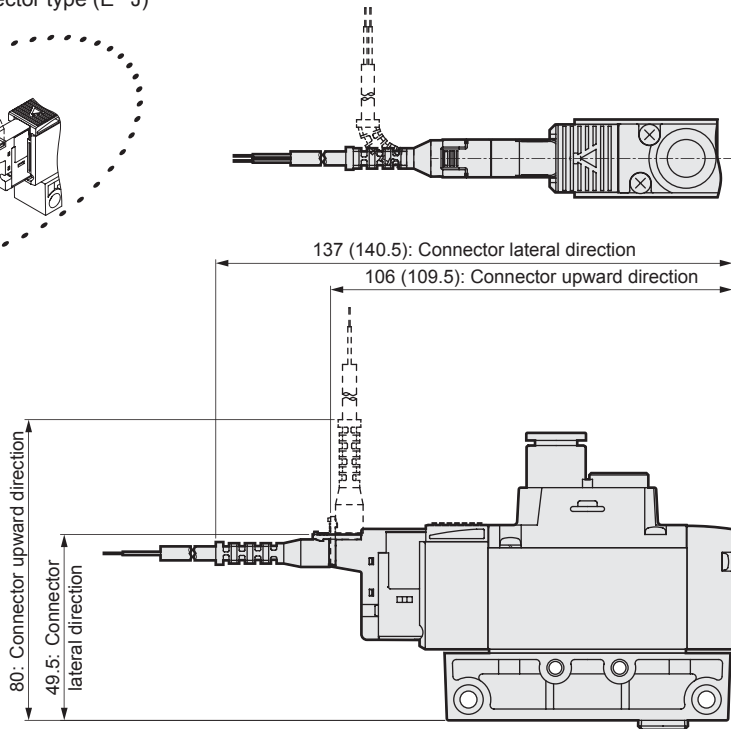
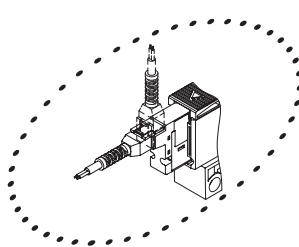
Dimensions

● E type connector type (E)



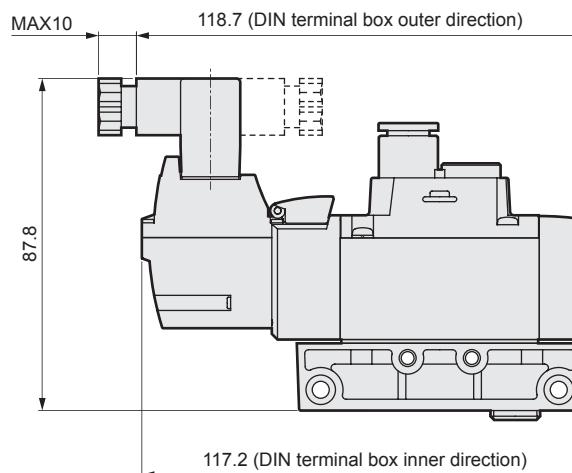
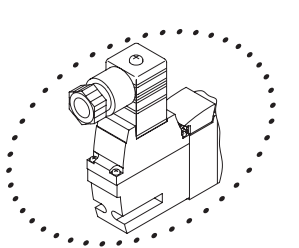
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB	M4GAB	MN4GAB	4GAB Master valve	4GD/E	M4GD/E	MN4GD/E	Technical data	Safety precautions	Manifold Specifications
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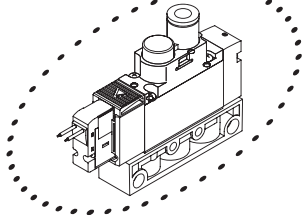
3GA3 Series

Discrete valve; body piping

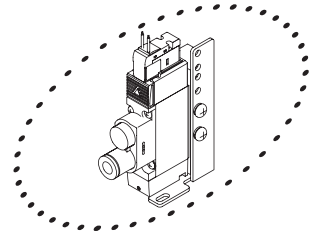
Dimensions 

3GA3110R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

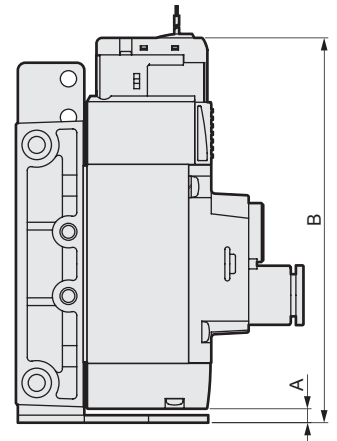
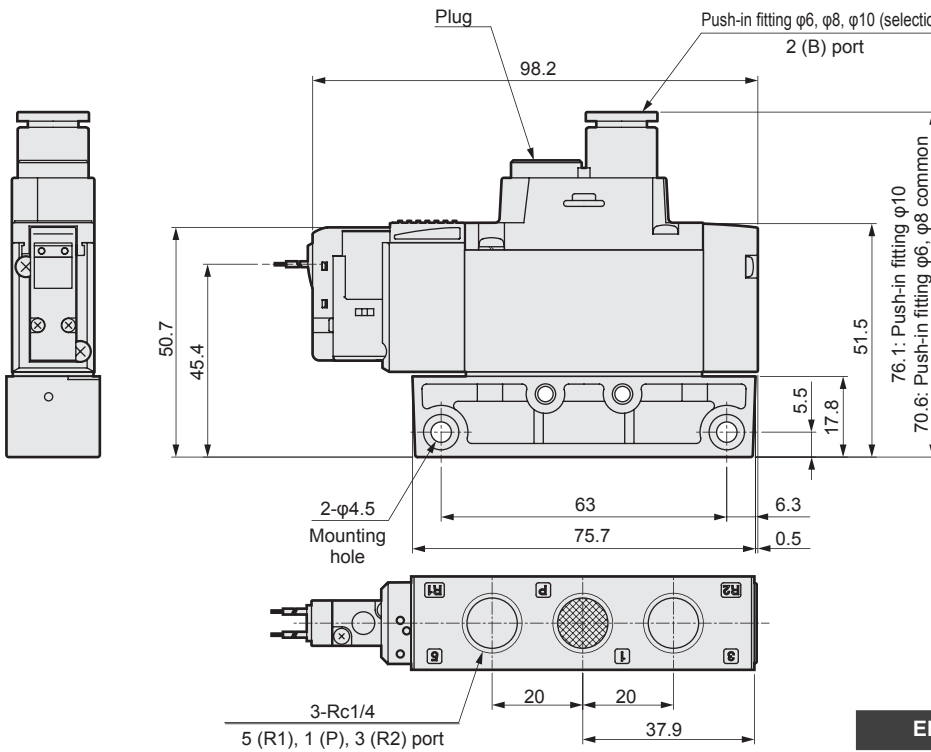
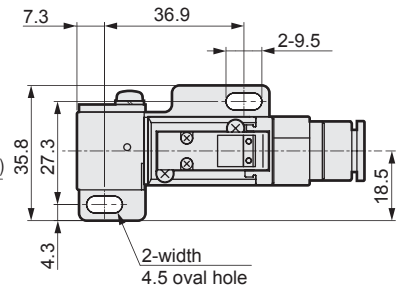
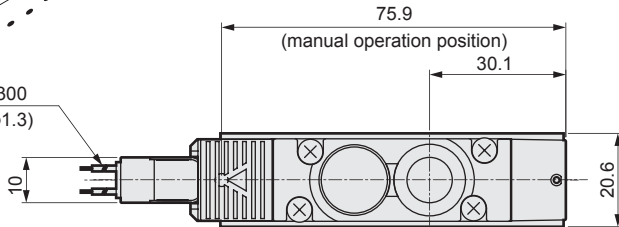
● 2-position single normally open grommet lead wire (blank)



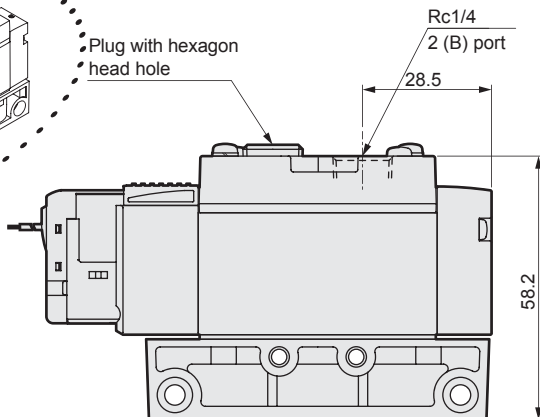
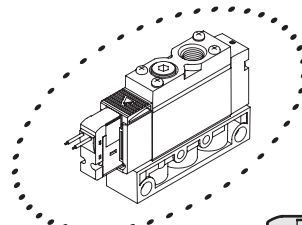
● Mounting plate type (P)



Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



● Rc1/4 Female thread type (08)

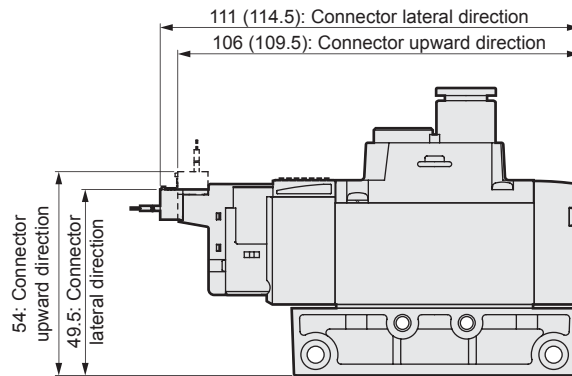
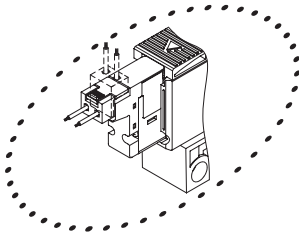


Electrical connections	A	B
Grommet lead wire	3.7	101.8
E, EJ type connector (upward direction), DC voltage		110
E, EJ type connector (upward direction), AC voltage		113.5
DIN terminal box (inner direction)		120.9

4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

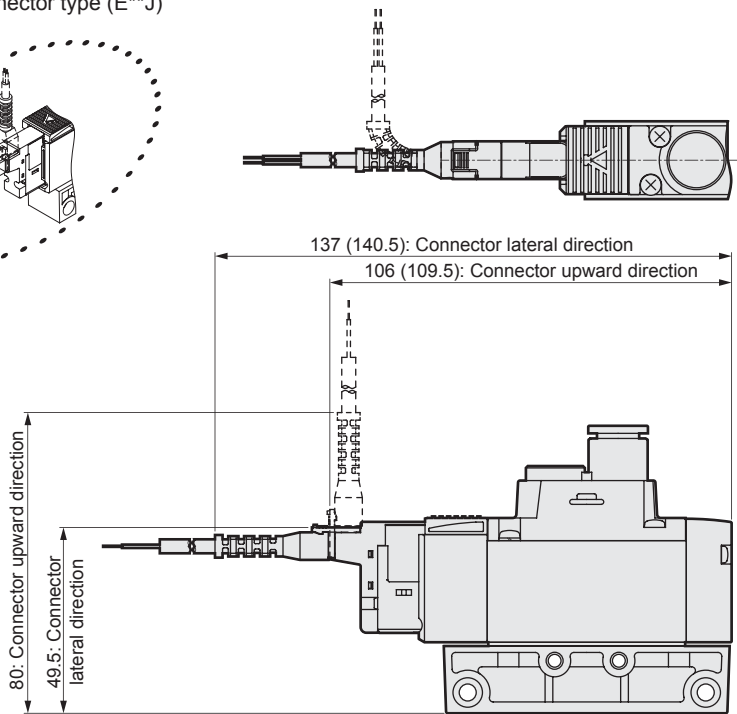
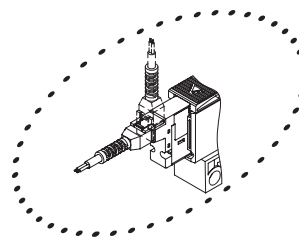
Dimensions

● E type connector type (E)



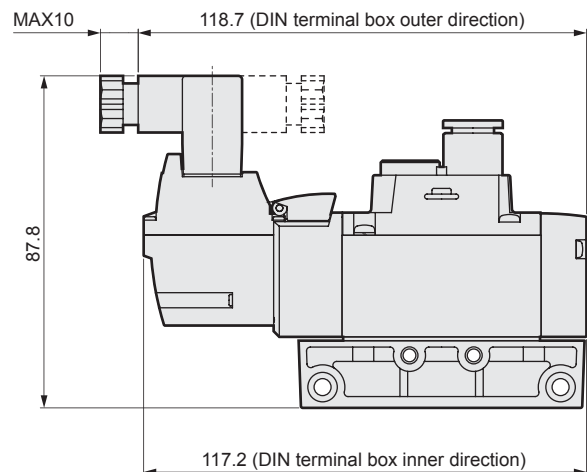
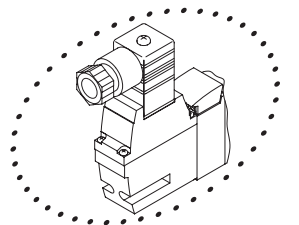
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type s(B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GA1 Series

Discrete valve; body piping

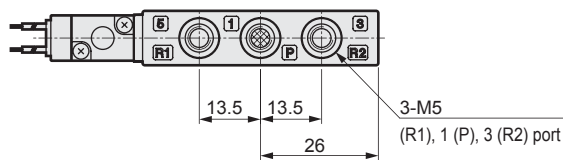
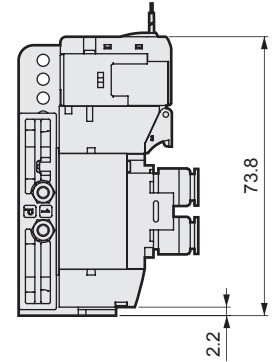
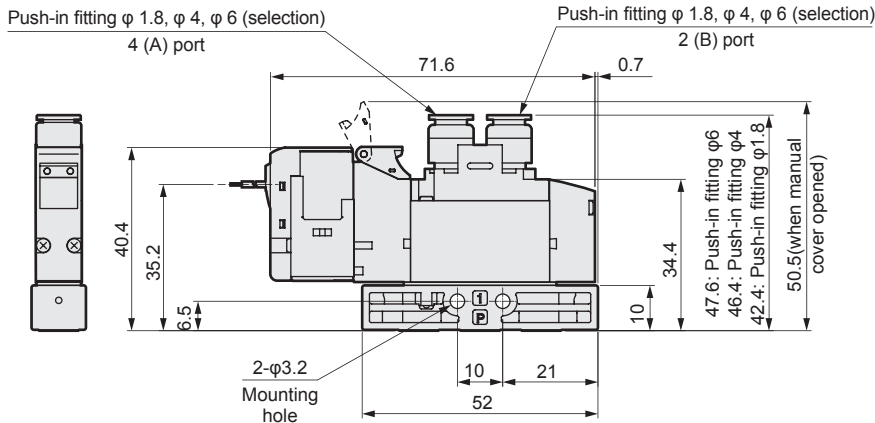
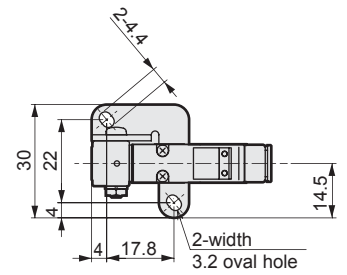
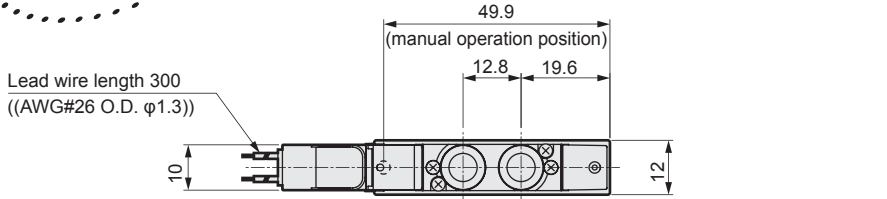
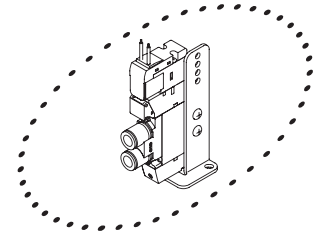
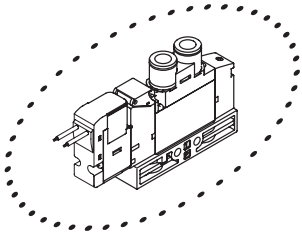
Dimensions 00



4GA110R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

● 2-position single grommet lead wire (blank)

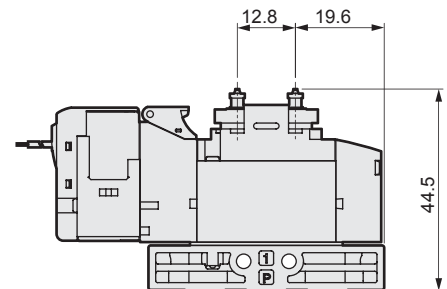
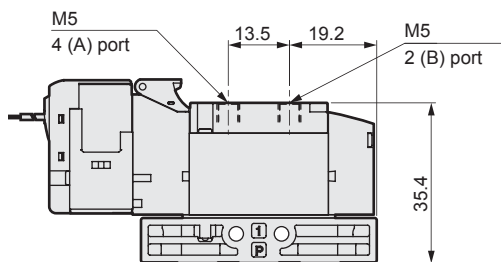
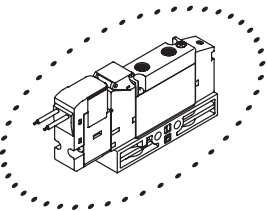
● Mounting plate type (P)



Electrical connections	A	B
Grommet lead wire		73.8
E, EJ type connector (upward direction), DC voltage	2.2	82
E, EJ type connector (upward direction), AC voltage		85.5

● M5 Female thread type (M5)

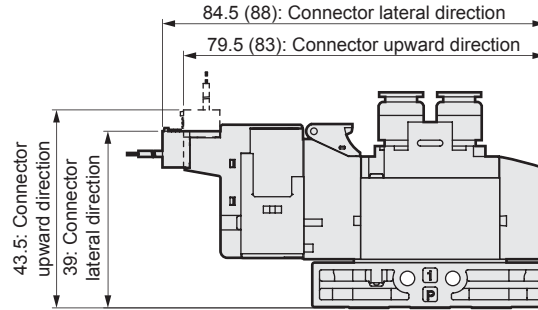
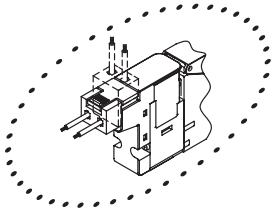
● φ1.8 Barbed fitting type (CF)



4GA/B, M4GA/B, MN4GA/B, 4GA/B Master valve, 4GD/E, M4GD/E, MN4GD/E, Technical data, Safety precautions, Manifold Specifications

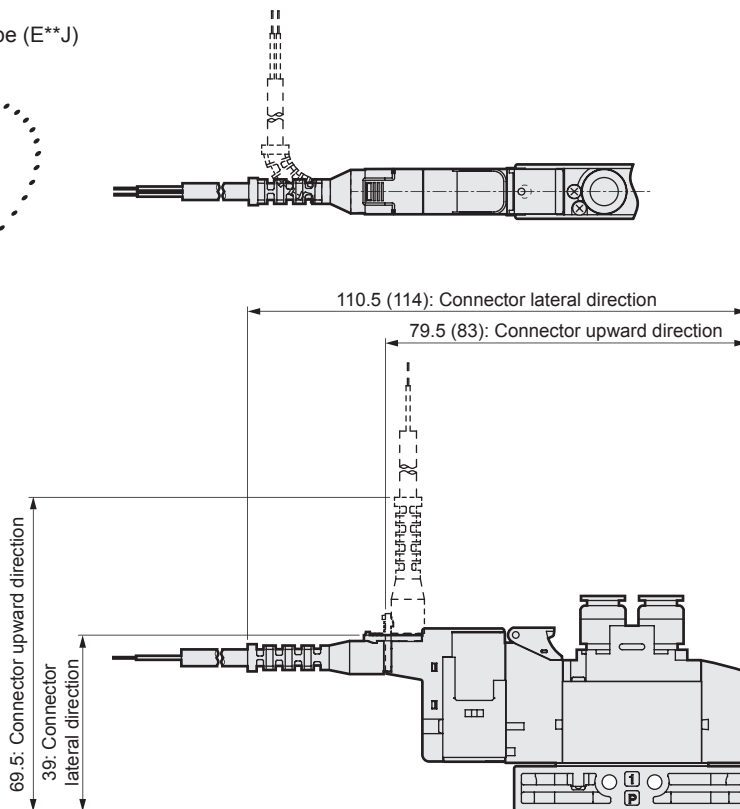
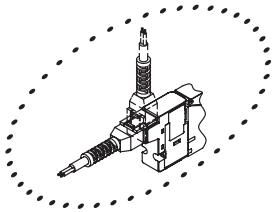
Dimensions

● E type connector type (E)



Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GA1 Series

Discrete valve; body piping

Dimensions 

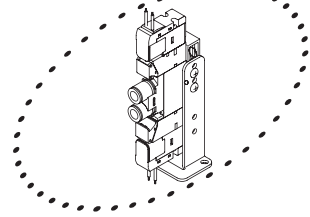
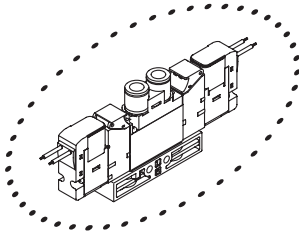
4GA120R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

- 2-position double grommet lead wire (blank)

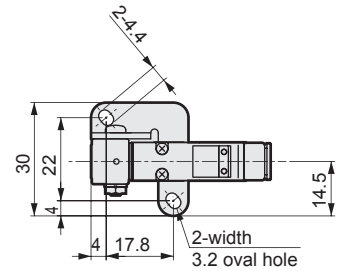
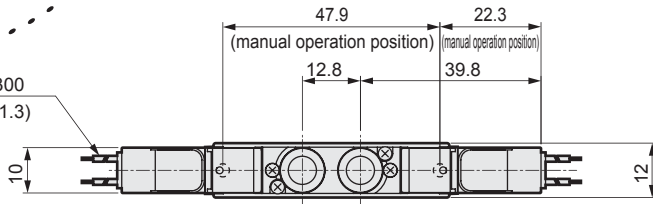
3GA1660R, 3GA1670R, 3GA1760R, 3GA1770R

- Dual 3 port valve integrated type grommet lead wire (blank)

- Mounting plate type (P)

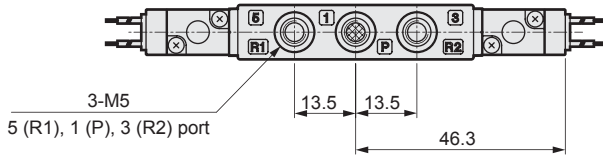
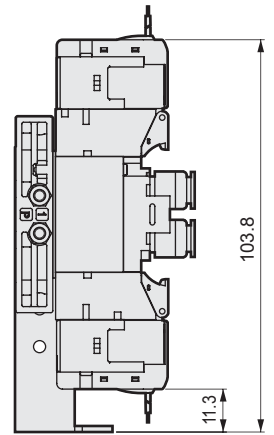
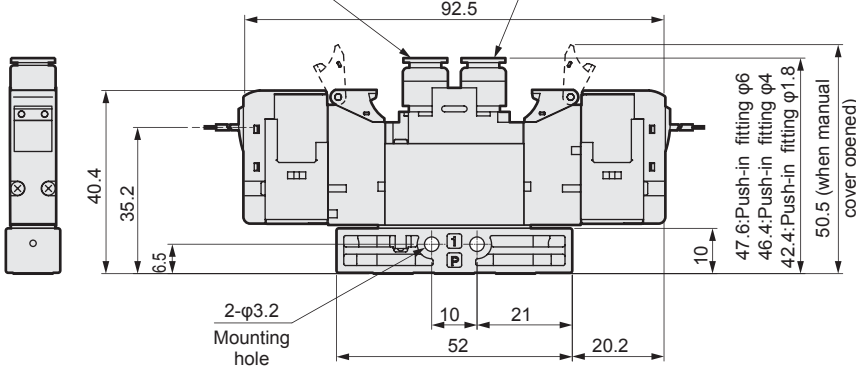


Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



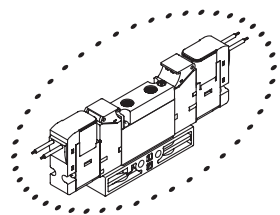
Push-in fitting ϕ 1.8, ϕ 4, ϕ 6 (selection)
4 (A) port

Push-in fitting ϕ 1.8, ϕ 4, ϕ 6 (selection)
2 (B) port

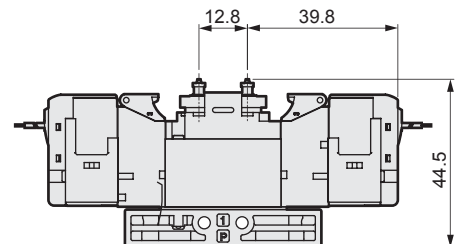
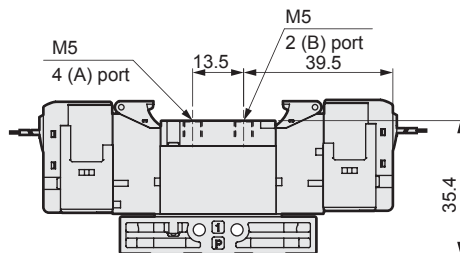


Electrical connections	A	B
Grommet lead wire	11.3	103.8
E, EJ type connector (upward direction), DC voltage	3	112
E, EJ type connector (upward direction), AC voltage	5	124

- M5 Female thread type (M5)

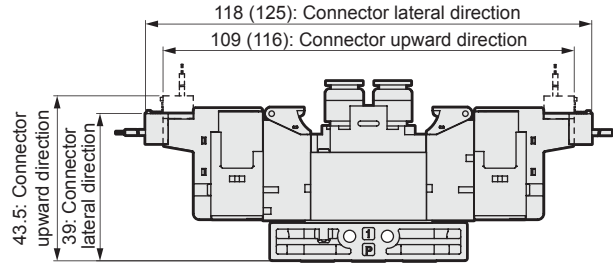
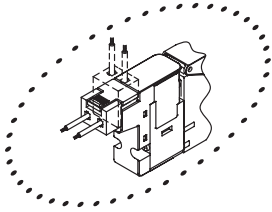


- ϕ 1.8 barbed fitting type (CF)



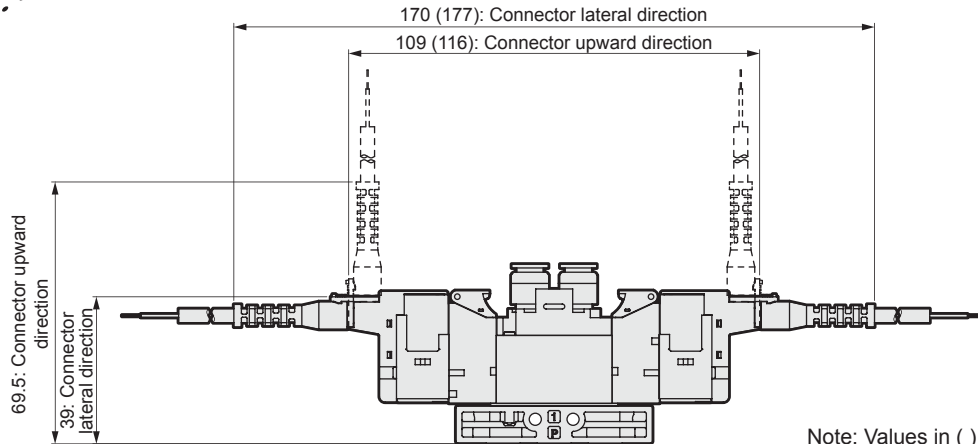
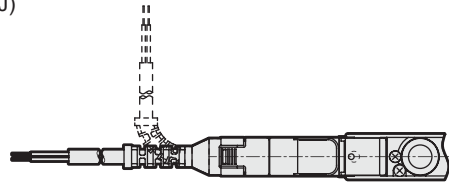
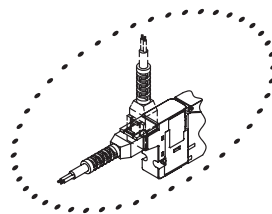
Dimensions

● E type connector type (E)



Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GA1 Series

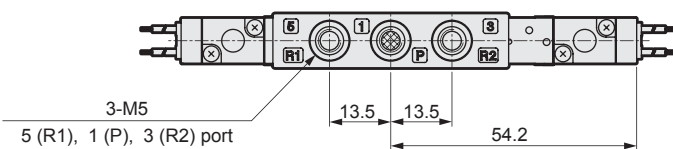
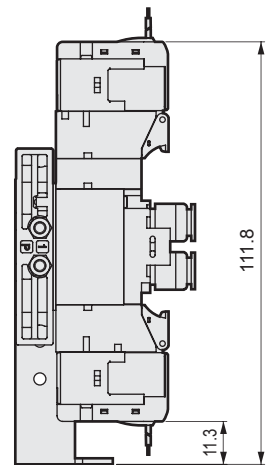
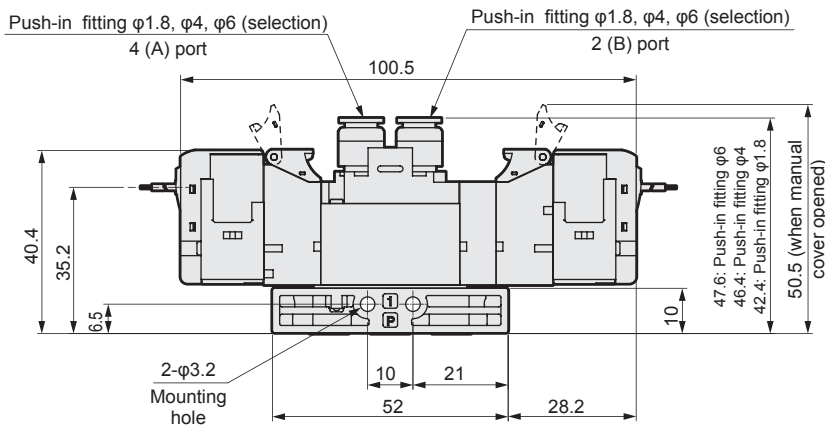
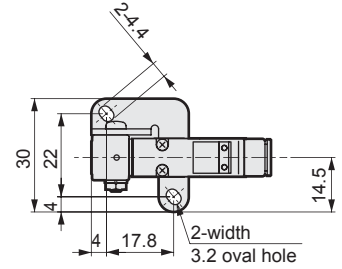
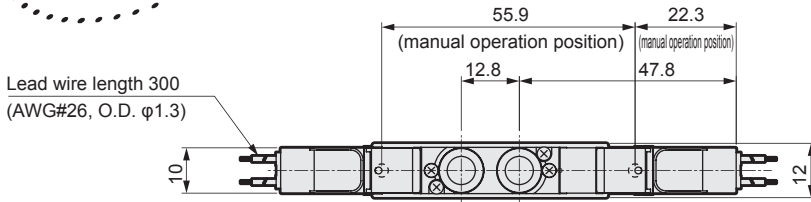
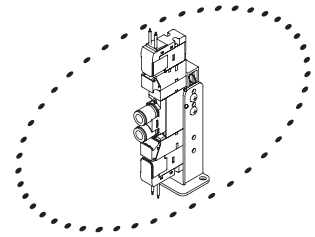
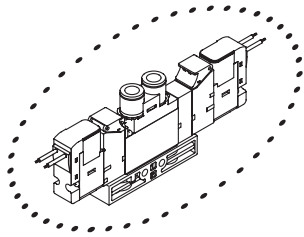
Discrete valve; body piping

Dimensions 

4GA1 $\frac{3}{4}$ 0R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

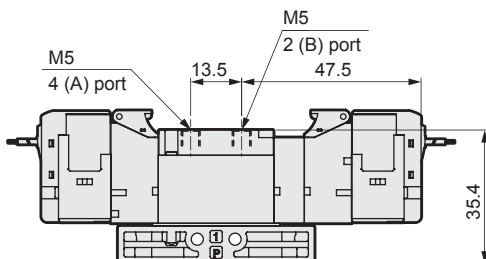
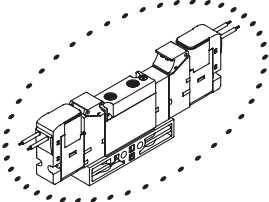
- 3 position grommet lead wire (blank)

- Mounting plate type (P)

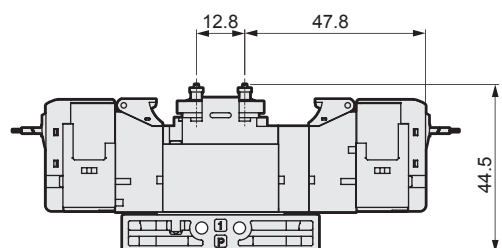


Electrical connections	A	B
Grommet lead wire	11.3	111.8
E, EJ type connector (upward direction), DC voltage	3	120
E, EJ type connector (upward direction), AC voltage	5	132

- M5 female thread type (M5)

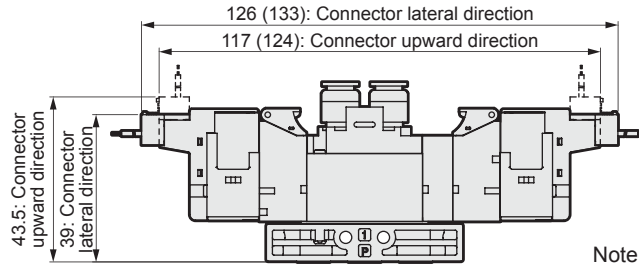
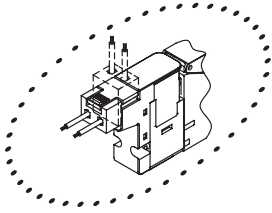


- ϕ 1.8 barbed fitting type (CF)



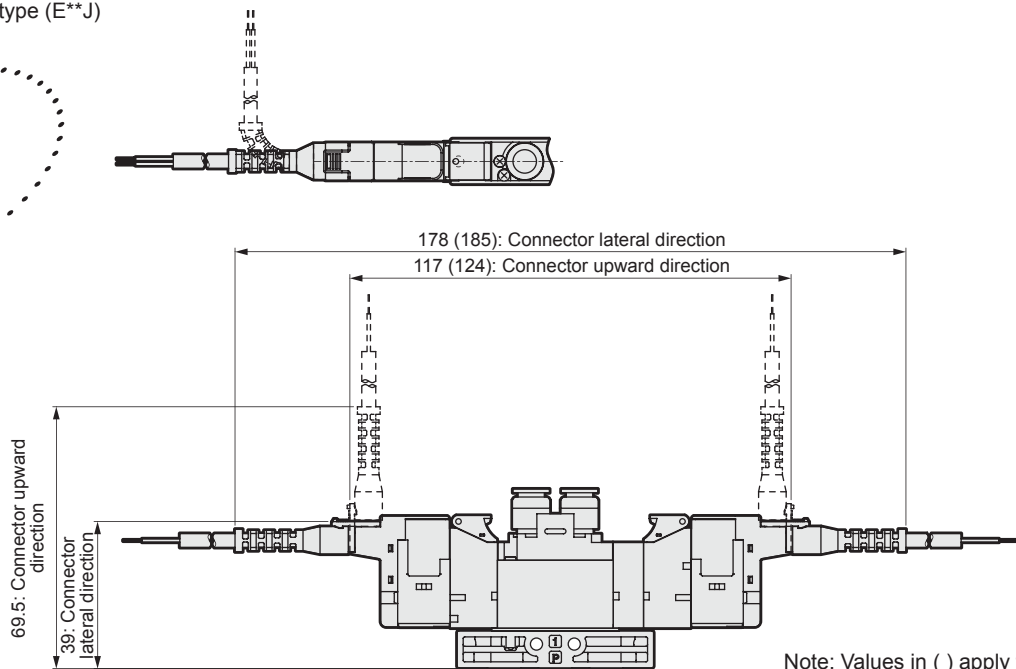
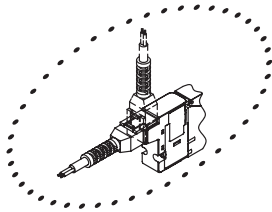
Dimensions

● E type connector type (E)



Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for AC

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GA2 Series

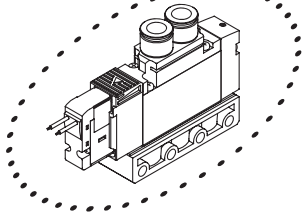
Discrete valve; body piping

Dimensions

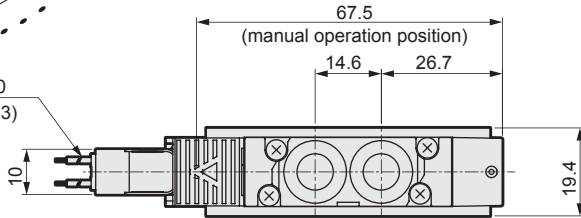


4GA210R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

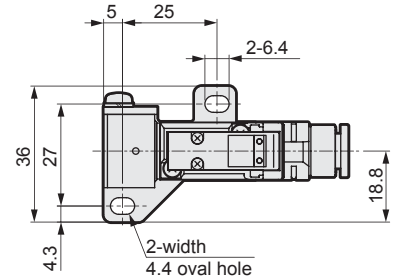
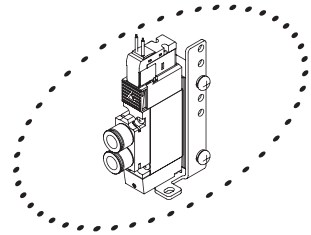
- 2-position single
Grommet lead wire (blank)



Lead wire length 300
(AWG#26, O.D. φ1.3)

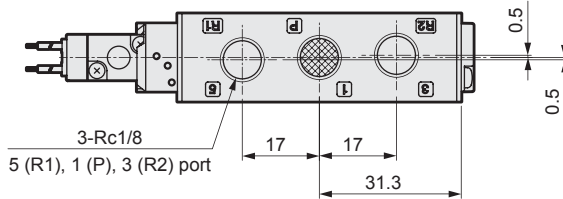
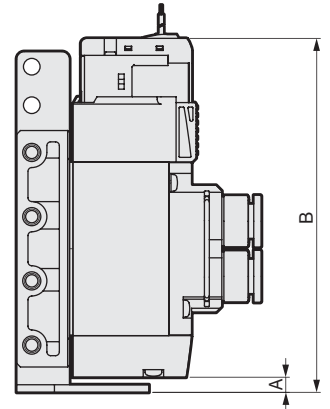
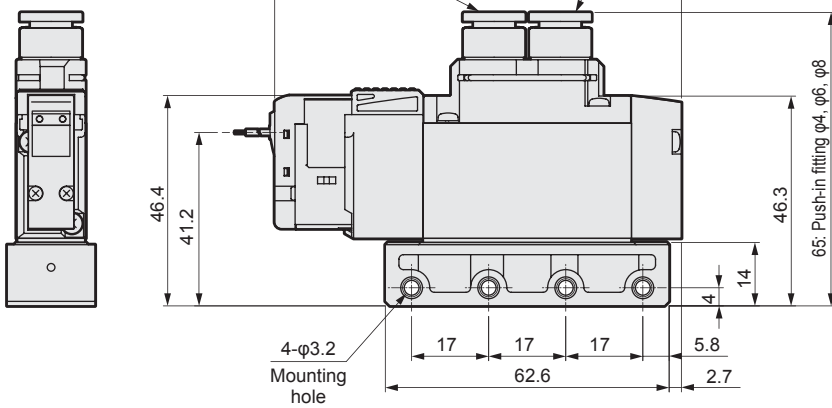


- Mounting plate type (P)

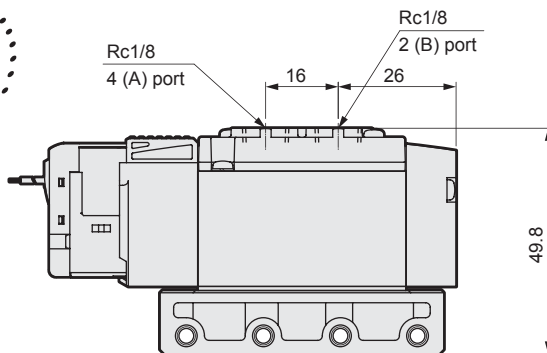
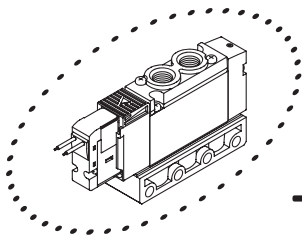


Push-in fitting φ4, φ6, φ8 (selection)
4 (A) port

Push-in fitting φ4, φ6, φ8 (selection)
2 (B) port



- Rc1/8 female thread type (06)

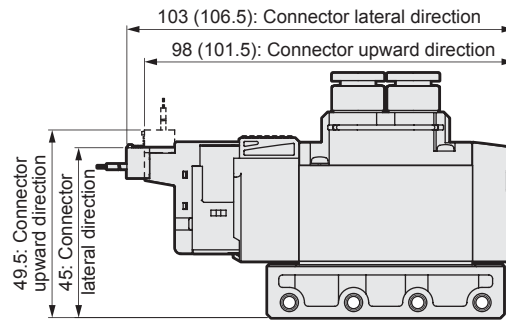
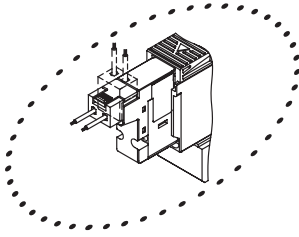


Electrical connections	A	B
Grommet lead wire	4	93.7
E, EJ type connector (upward direction), DC voltage		102
E, EJ type connector (upward direction), AC voltage		105.5
DIN terminal box (inner direction)		112.7

4GA/B
M4GA/B
MN4GA/B
4GA/B
Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety
precautions
Manifold
Specifications

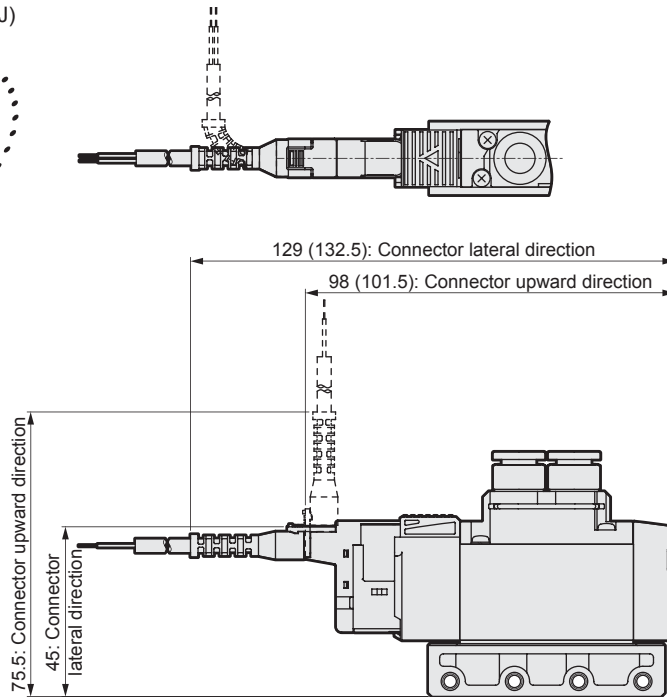
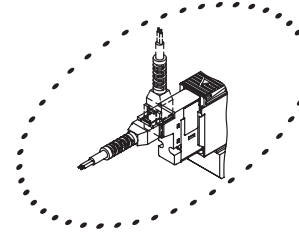
Dimensions

● E type connector type (E)



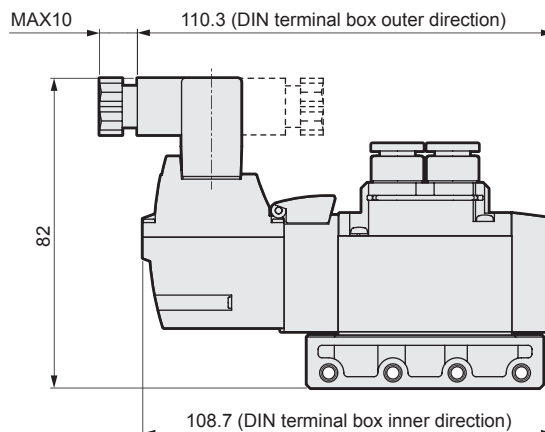
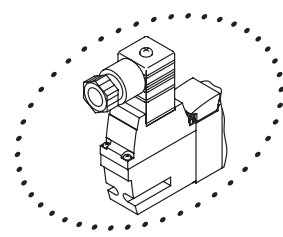
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GA2 Series

Discrete valve; body piping

Dimensions



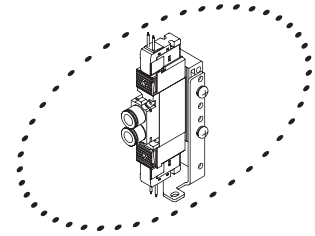
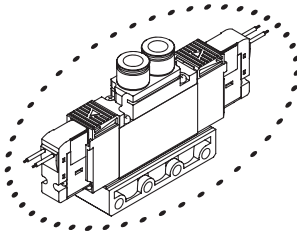
4GA220R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

- 2-position double grommet lead wire (blank)

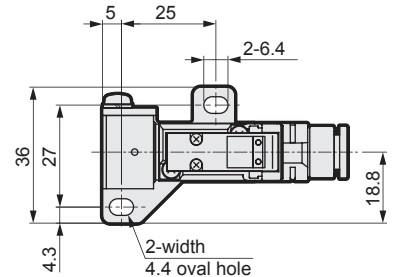
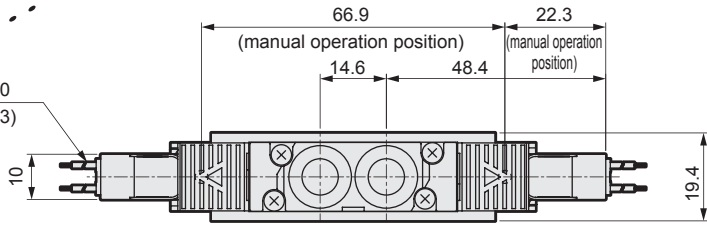
3GA2660R, 3GA2670R, 3GA2760R, 3GA2770R

- Dual 3 port valve integrated type
Grommet lead wire (blank)

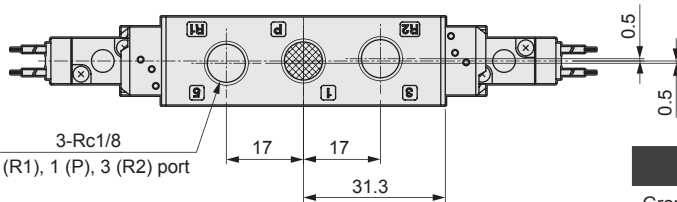
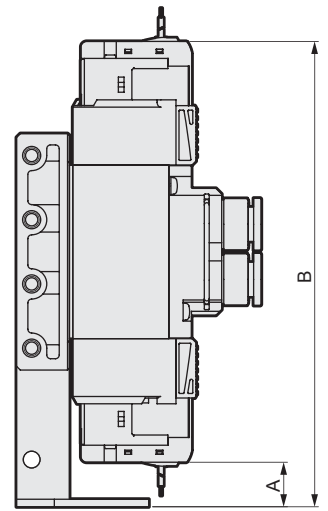
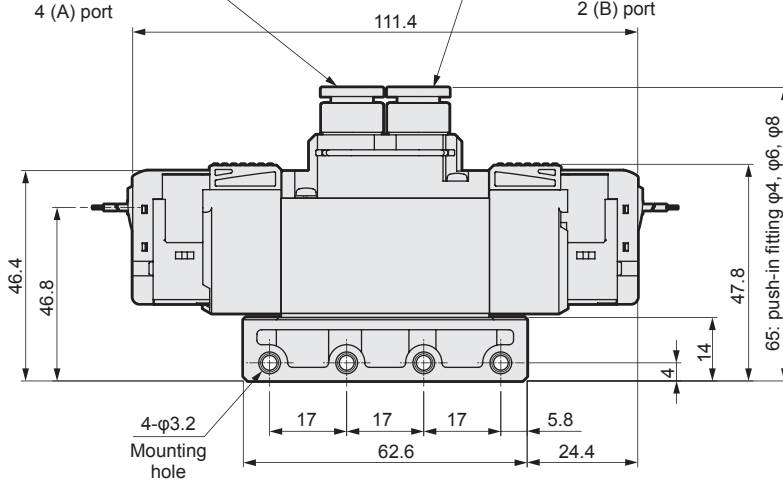
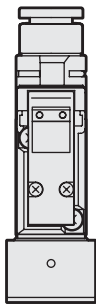
- Mounting plate type (P)



Lead wire length 300
(AWG#26, O.D. $\phi 1.3$)

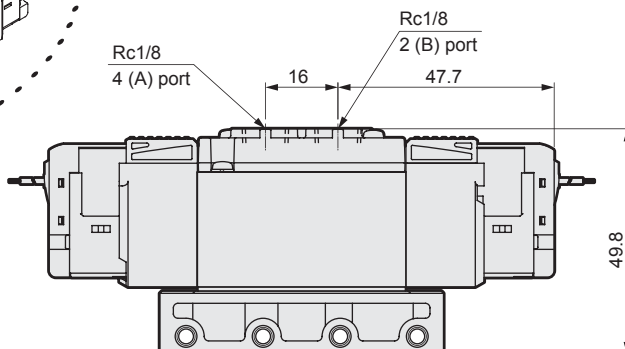
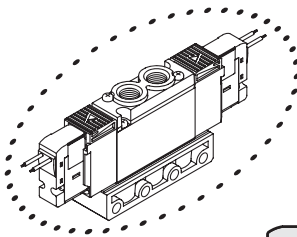


Push-in fitting $\phi 4, \phi 6, \phi 8$ (selection)
4 (A) port Push-in fitting $\phi 4, \phi 6, \phi 8$ (selection)
2 (B) port



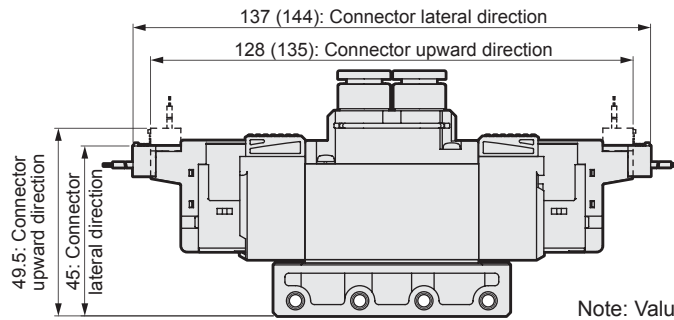
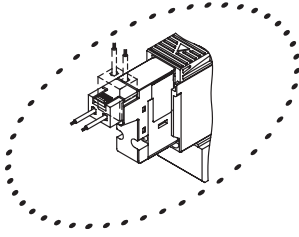
Electrical connections	A	B
Grommet lead wire	11.8	123.2
E, EJ type connector (upward direction), DC voltage	3.5	131.5
E, EJ type connector (upward direction), AC voltage	10.5	148.5
DIN terminal box (inner direction)	3	152.4

- Rc1/8 female thread type (06)



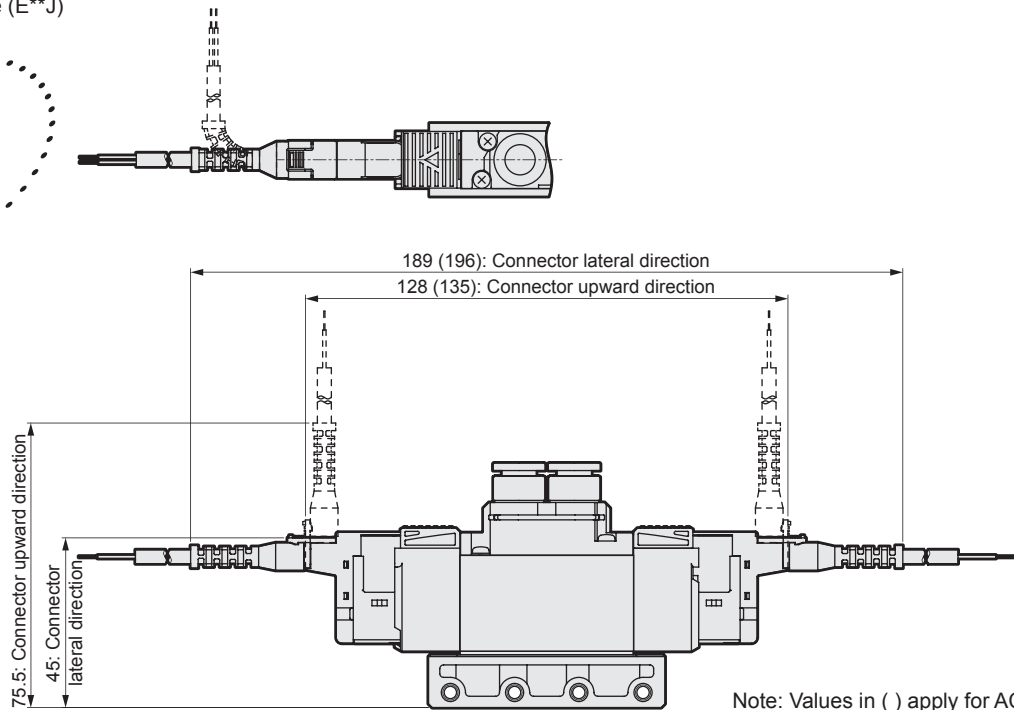
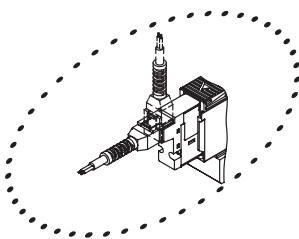
Dimensions

● E type connector type (E)



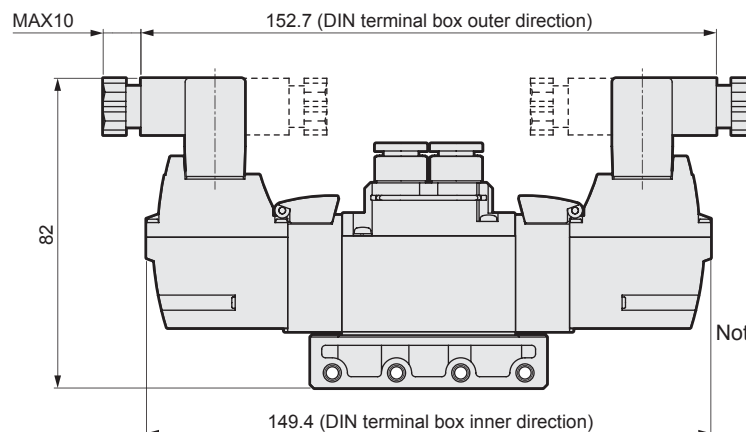
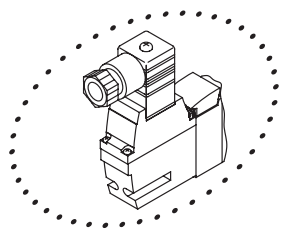
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for AC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GA2 Series

Discrete valve; body piping

Dimensions

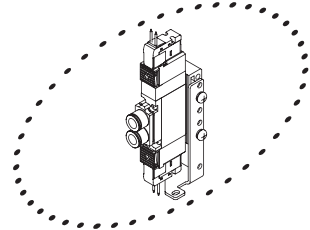
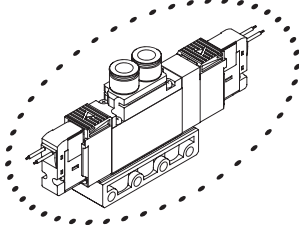


4GA2^{OR} * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

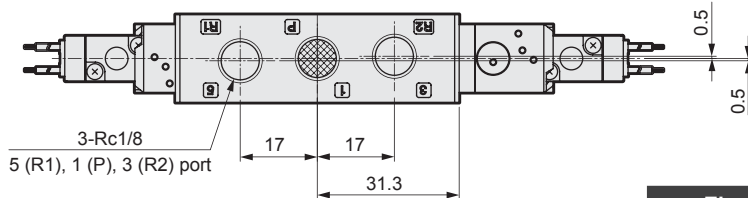
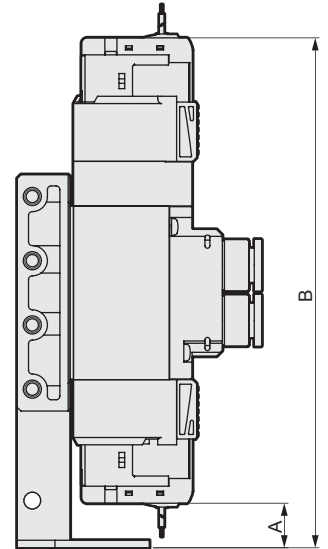
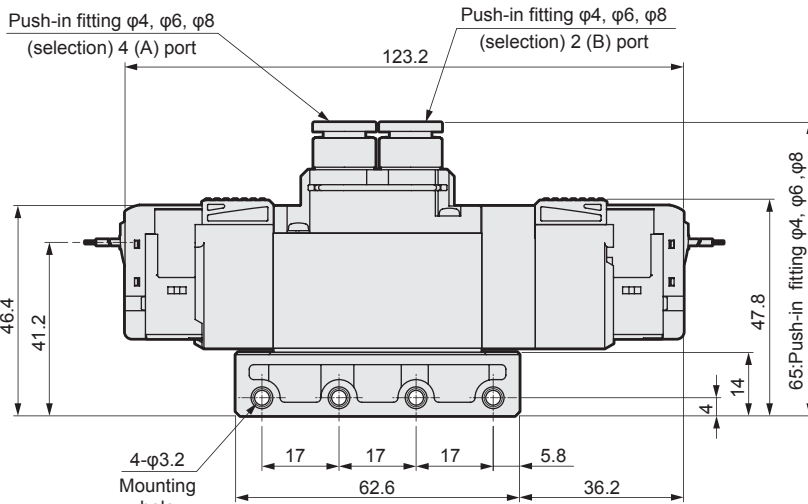
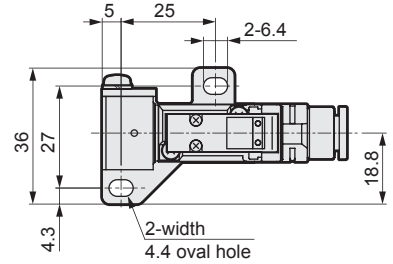
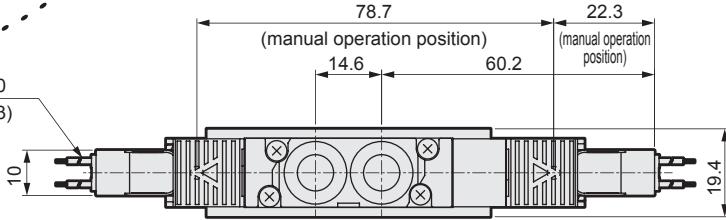
● 3 position

Grommet lead wire (blank)

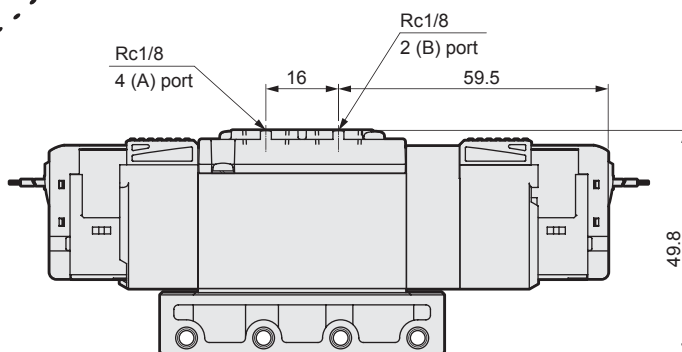
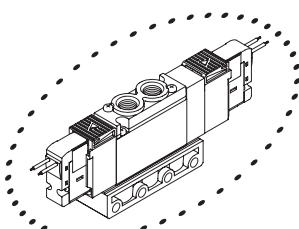
● Mounting plate type (P)



Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



● Rc1/8 female thread type (06)

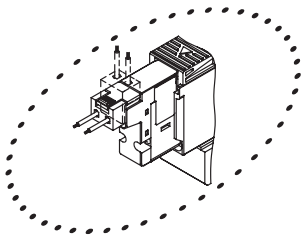


Electrical connections	A	B
Grommet lead wire	11.8	135
E, EJ type connector (upward direction), DC voltage	3.5	143
E, EJ type connector (upward direction), AC voltage	10.5	160.5
DIN terminal box (inner direction)	3	164.2

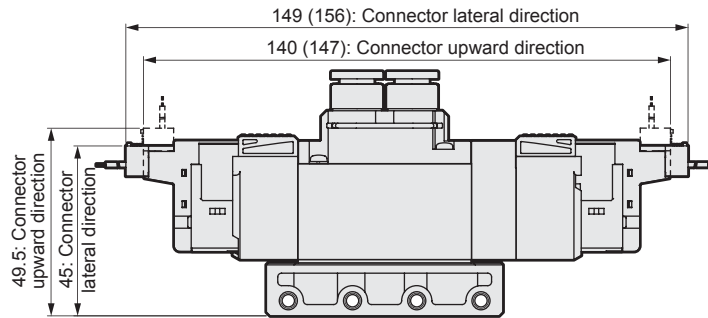
4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

Dimensions

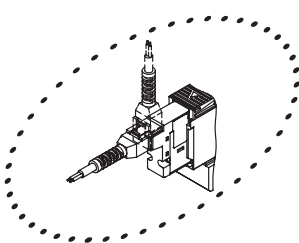
● E type connector type (E)



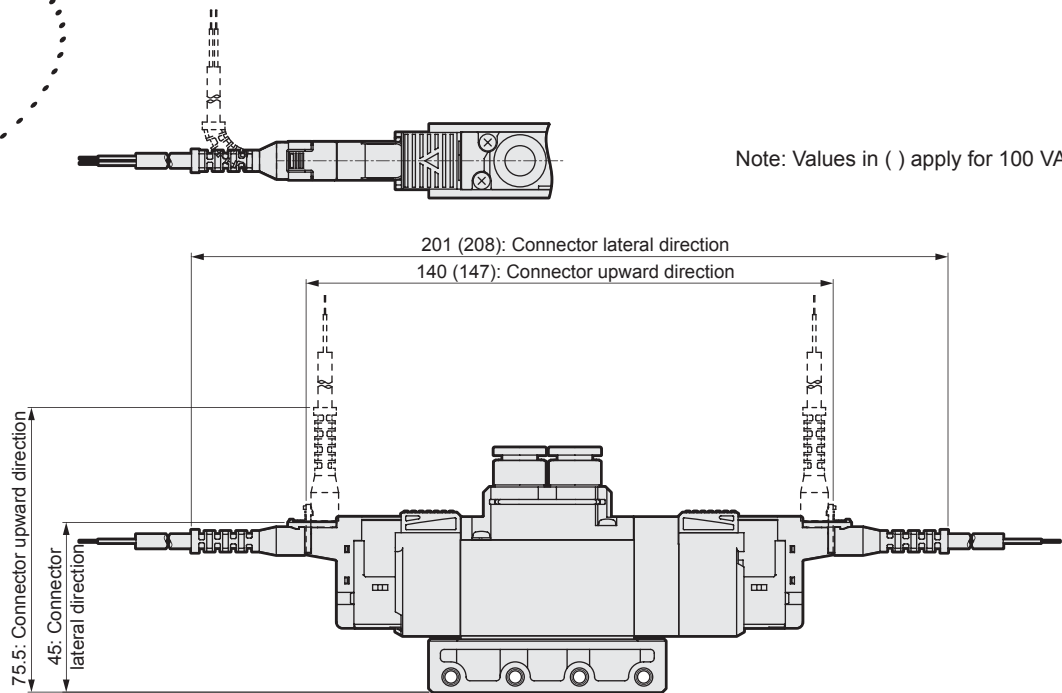
Note: Values in () apply for 100 VAC



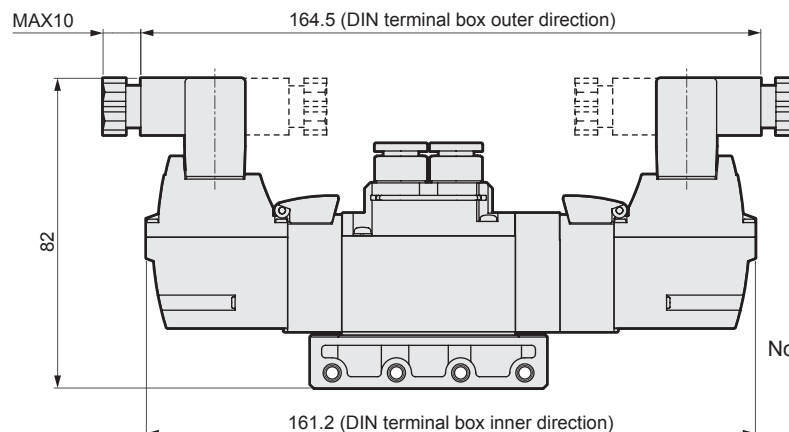
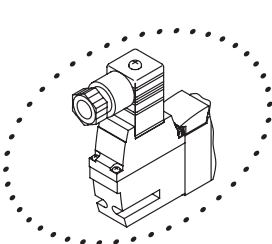
● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC



● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B	M4GA/B	MN4GA/B	4GA/B Master valve	4GD/E	M4GD/E	MN4GD/E	Technical data	Safety precautions	Manifold Specifications
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4GA3 Series

Discrete valve; body piping

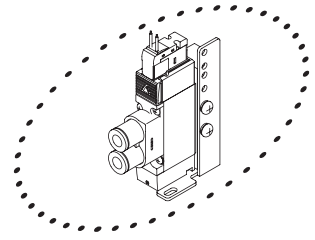
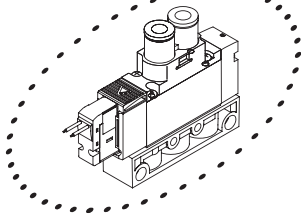
Dimensions



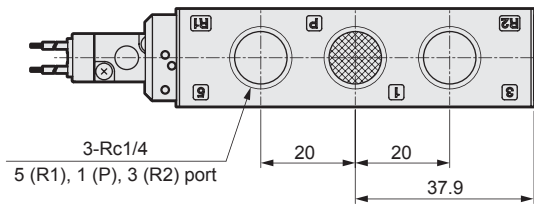
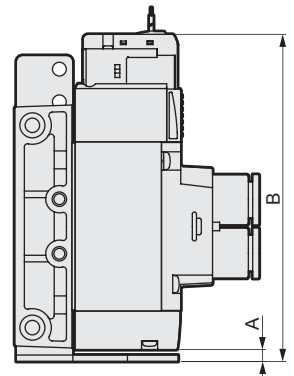
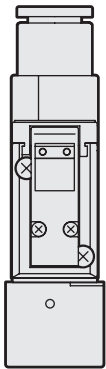
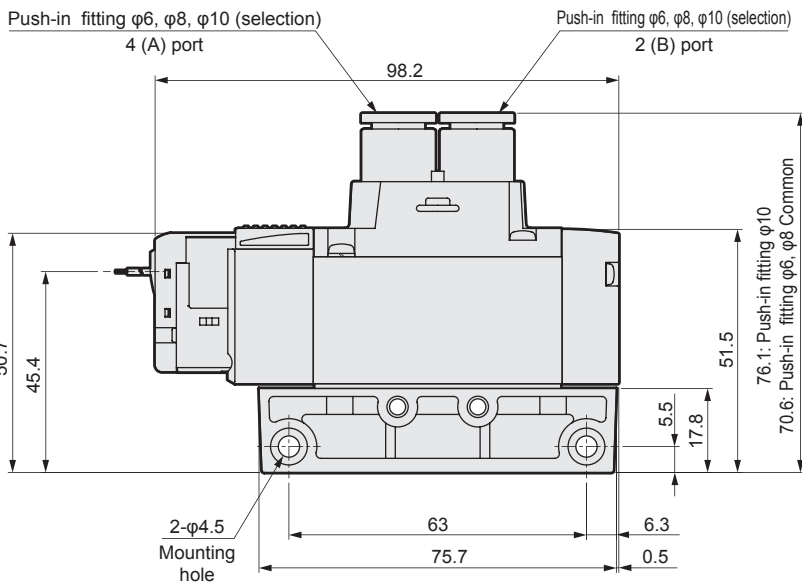
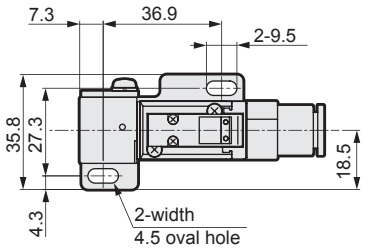
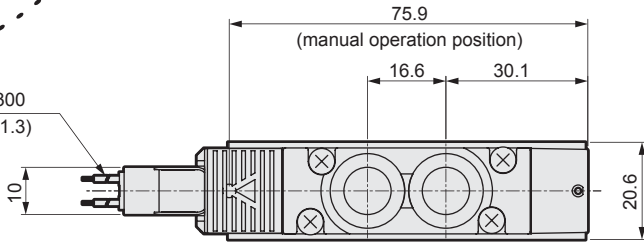
4GA310R * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

- 2-position single
Grommet lead wire (blank)

- Mounting plate type (P)

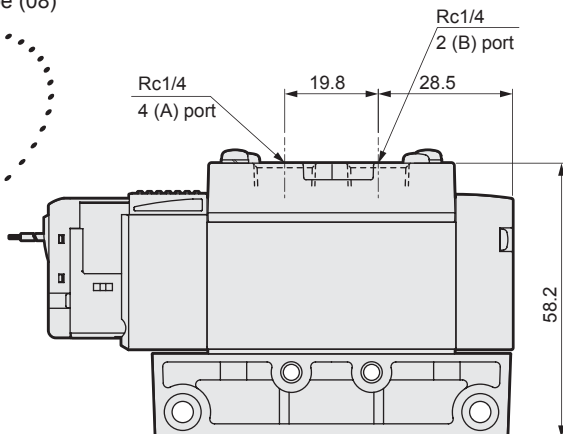
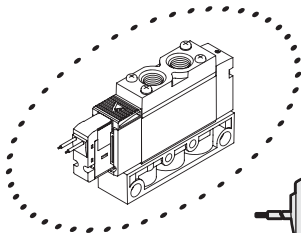


Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



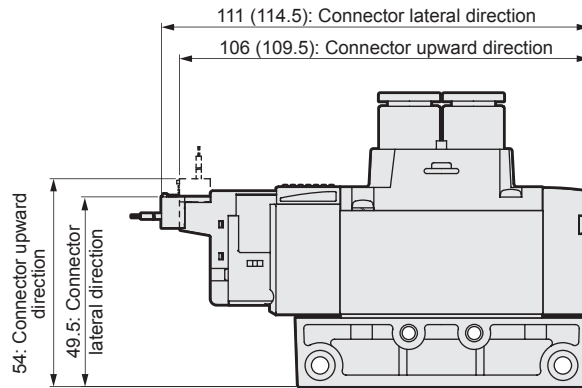
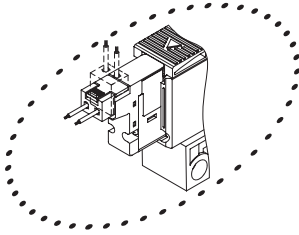
Electrical connections	A	B
Grommet lead wire	3.7	101.8
E, EJ type connector (upward direction), DC voltage		110
E, EJ type connector (upward direction), AC voltage		113.5
DIN terminal box (inner direction)		120.9

- Rc1/4 female thread type (08)



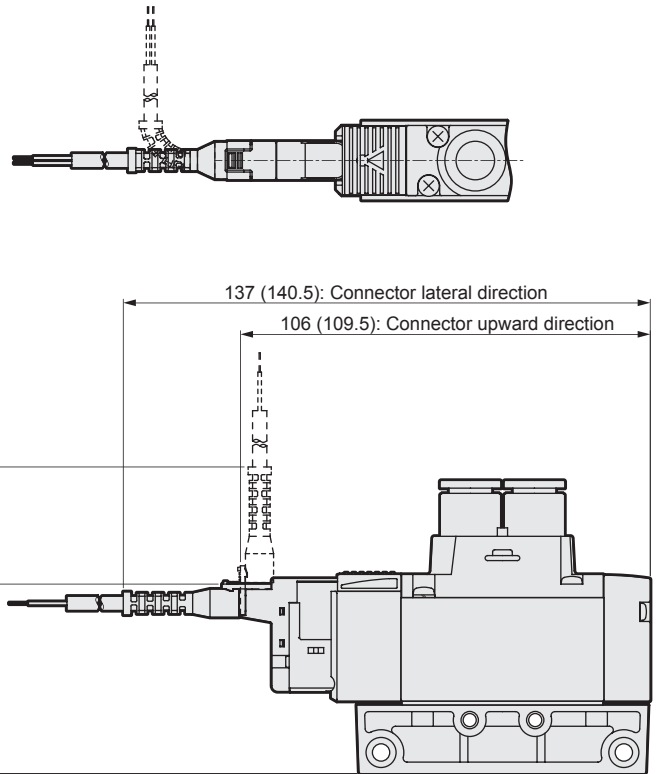
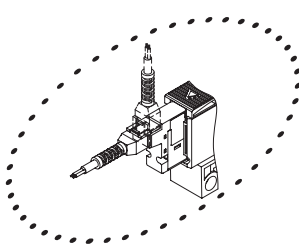
Dimensions

● E type connector type (E)



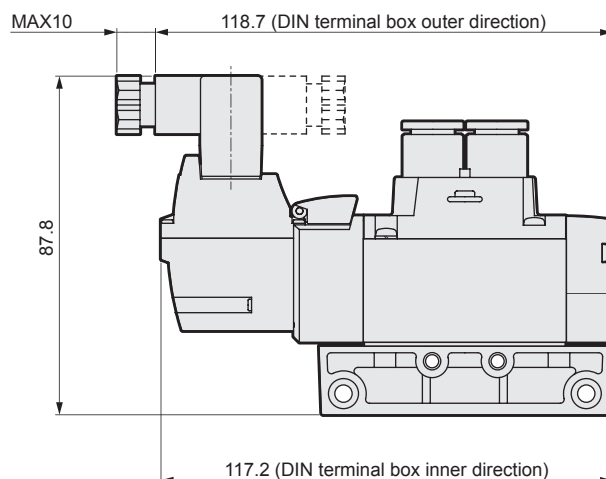
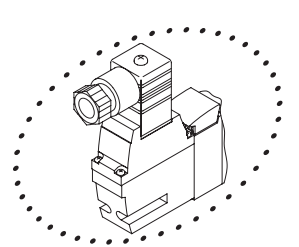
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)

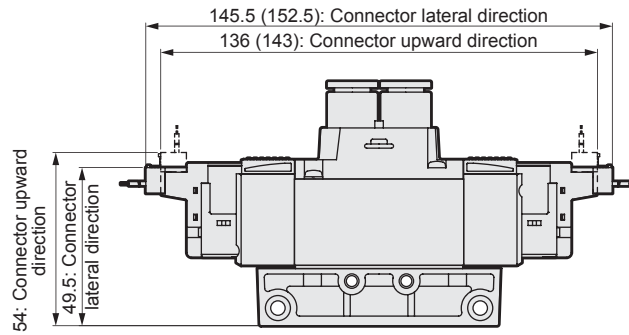
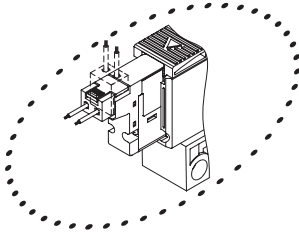


Note: The DIN terminal box assembly is shipped facing inward.

4GA/B	M4GA/B	MN4GA/B	4GA/B Master valve	4GD/E	M4GD/E	MN4GD/E	Technical data	Safety precautions	Manifold Specifications
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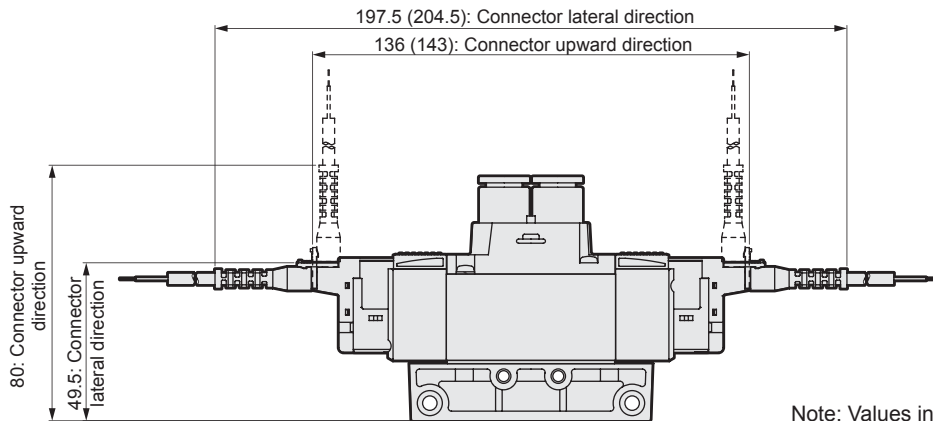
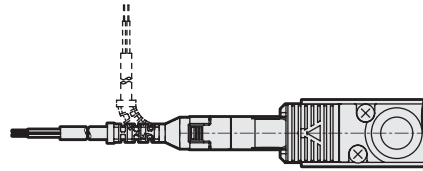
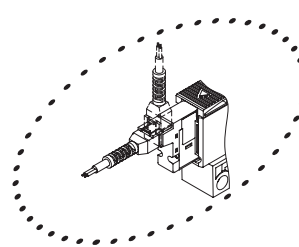
Dimensions

● E type connector type (E)



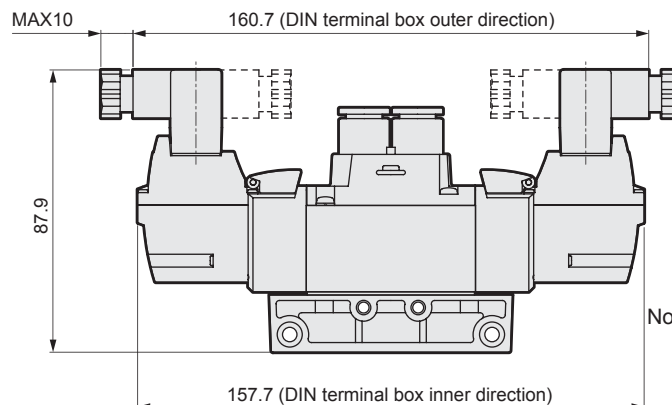
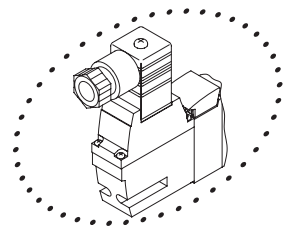
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GA3 Series

Discrete valve; body piping

Dimensions

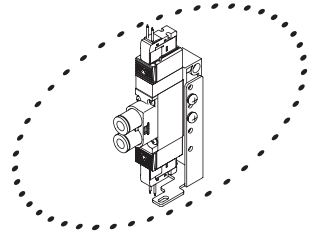
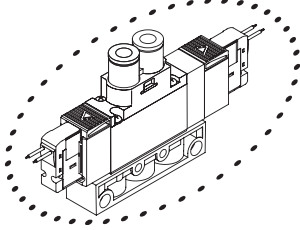


4GA3^{010R} * Please refer to page from 46 to 53 for the NPT threads and G threads specifications.

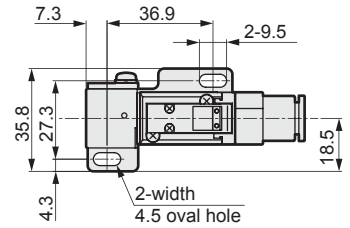
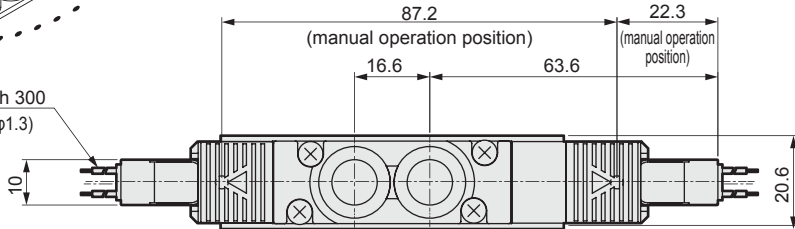
● 3 position

Grommet lead wire (blank)

● Mounting plate type (P)

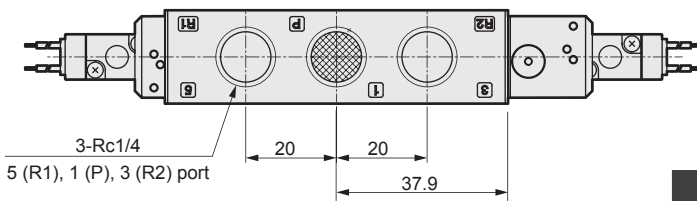
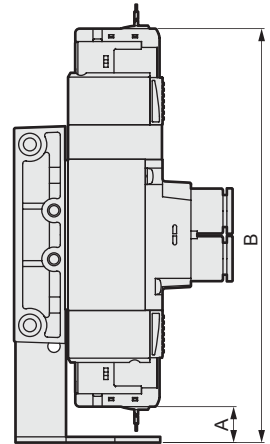
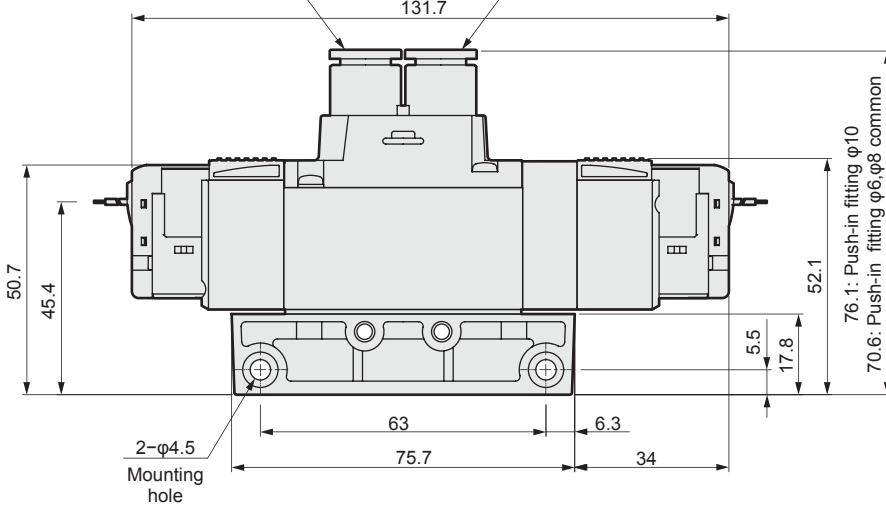
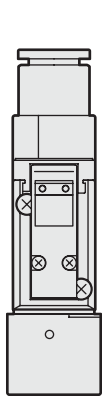


Lead wire length 300
(AWG#26, O.D. φ1.3)

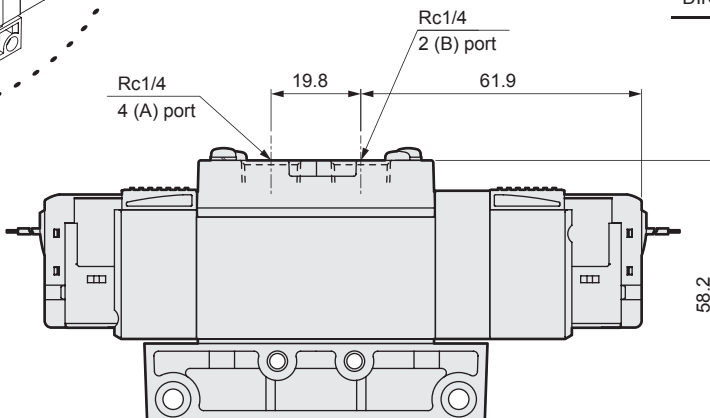
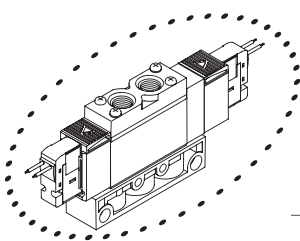


Push-in fitting φ6, φ8, φ10 (selection)
4 (A) port

Push-in fitting φ6, φ8, φ10 (selection)
2 (B) port



● Rc1/4 female thread type (08)

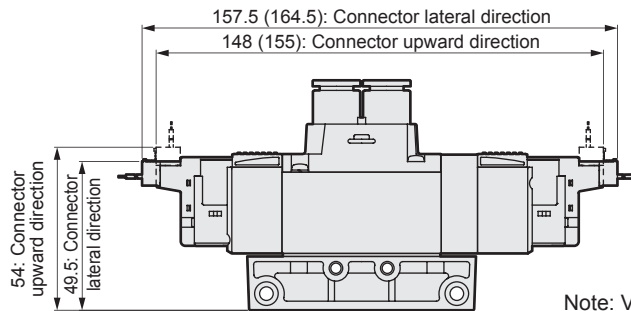
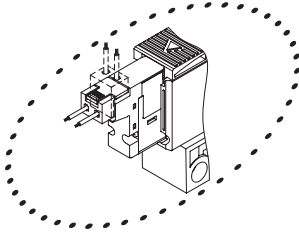


Electrical connections	A	B
Grommet lead wire	12.6	144.3
E, EJ type connector (upward direction), DC voltage	4.5	152.5
E, EJ type connector (upward direction), AC voltage	11	169.5
DIN terminal box (inner direction)	3.7	173.4

4GA/B
M4GA/B
MN4GA/B
4GA/B
Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety
precautions
Manifold
Specifications

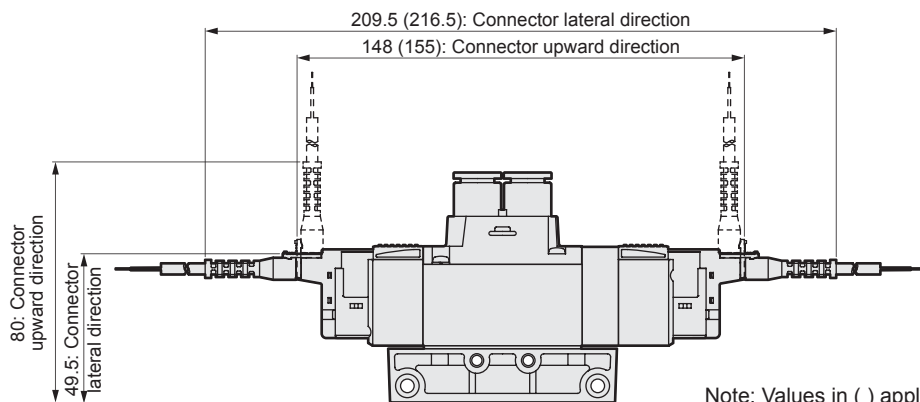
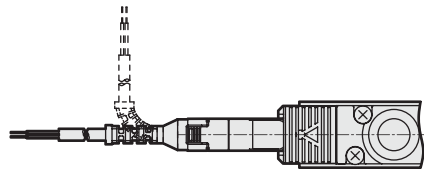
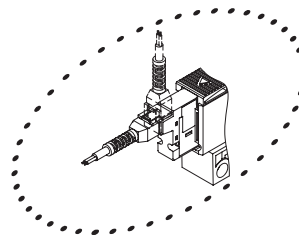
Dimensions

● E connector type (E)



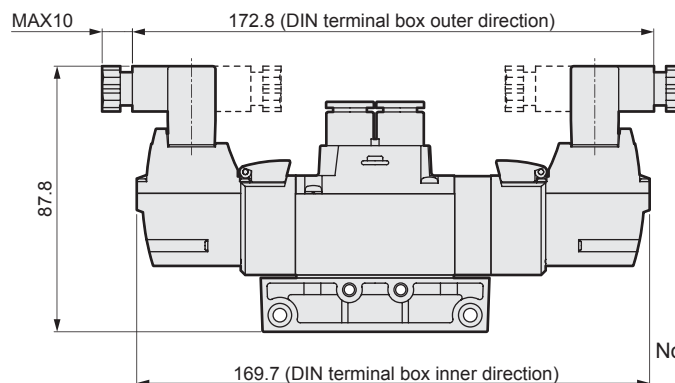
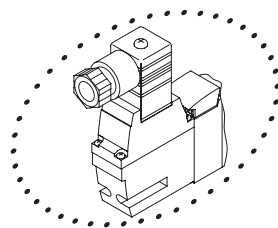
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GA1 & 4GA1 Series

Discrete valve; body piping

Dimensions Port size; NPT thread

3GA1 0R, 4GA1 0R

- 2-position single
- Grommet lead wire (blank)

- Mounting plate type (P)

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

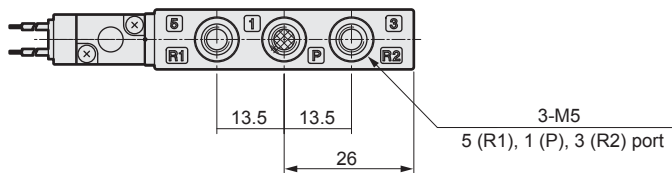
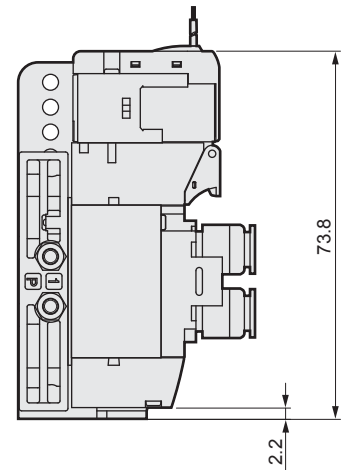
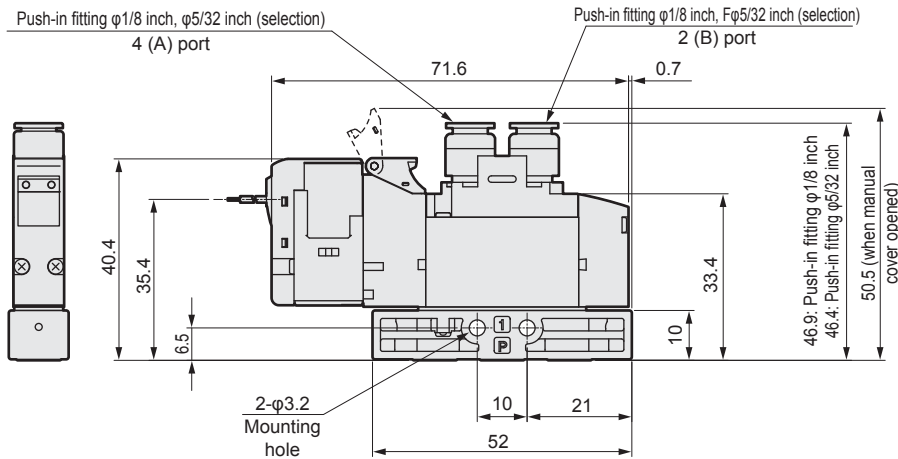
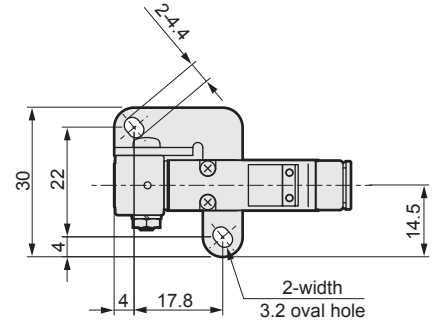
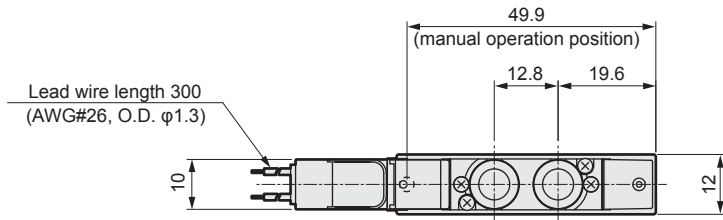
M4GD/E

MN4GD/E

Technical data

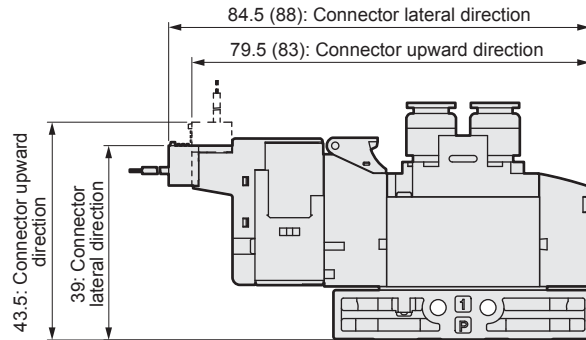
Safety
precautions

Manifold
Specifications



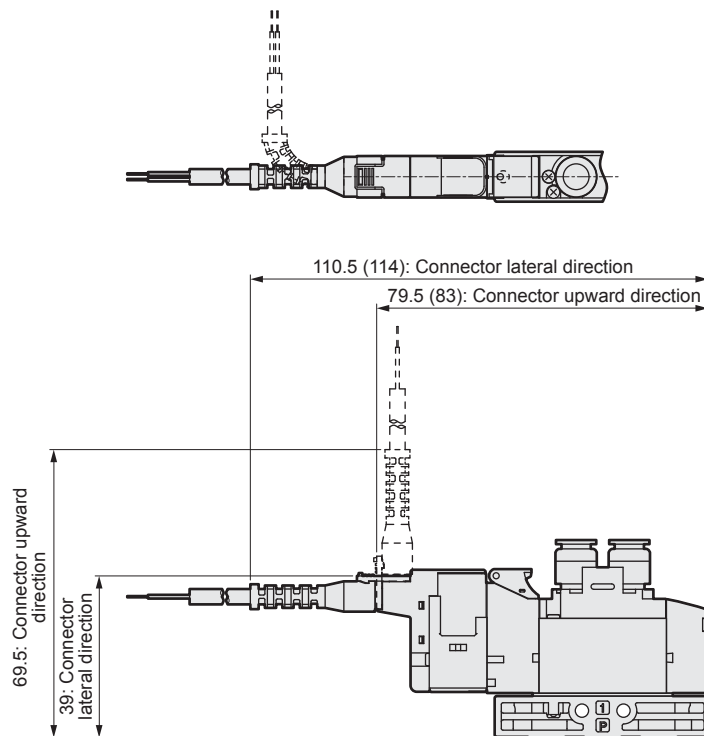
Dimensions Port size; NPT thread

- E type connector type (E)



Note: Values in () apply for 100 VAC

- EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GA2 & 4GA2 Series

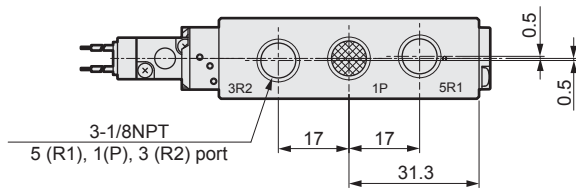
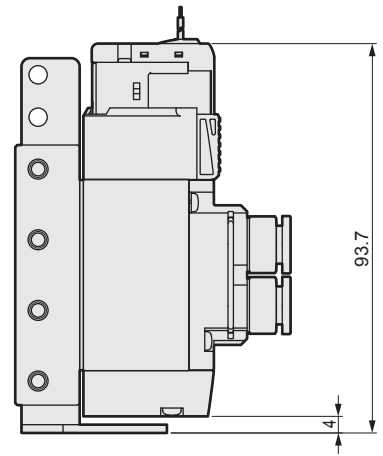
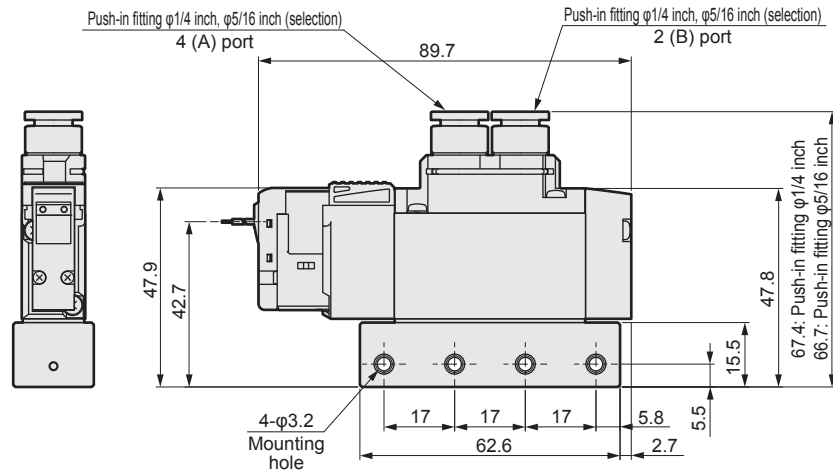
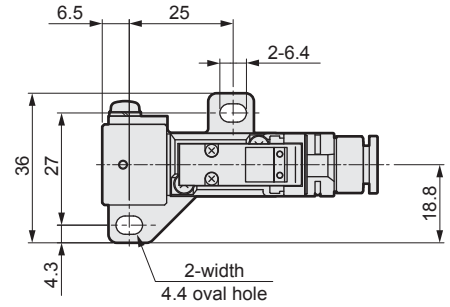
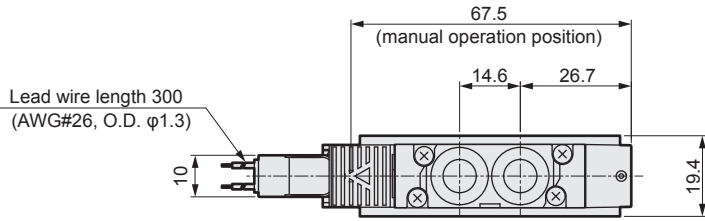
Discrete valve; body piping

Dimensions Port size; NPT thread

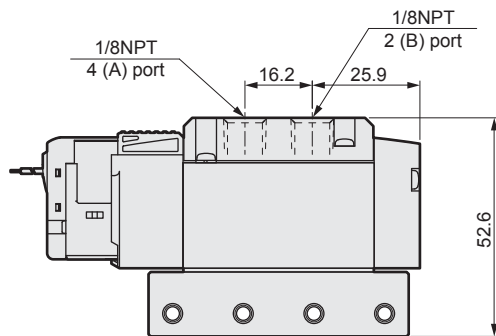
3GA2 1/8NPT, 4GA2 1/8NPT

● 2-position single grommet lead wire (blank)

● Mounting plate type (P)

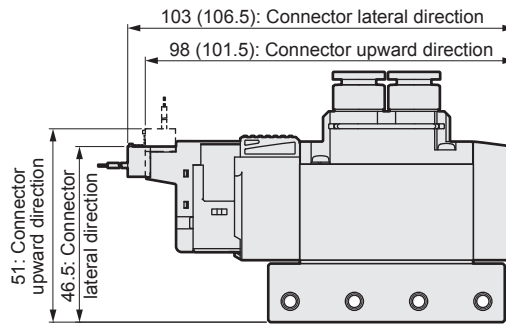


● 1/8NPT female thread type (06N)



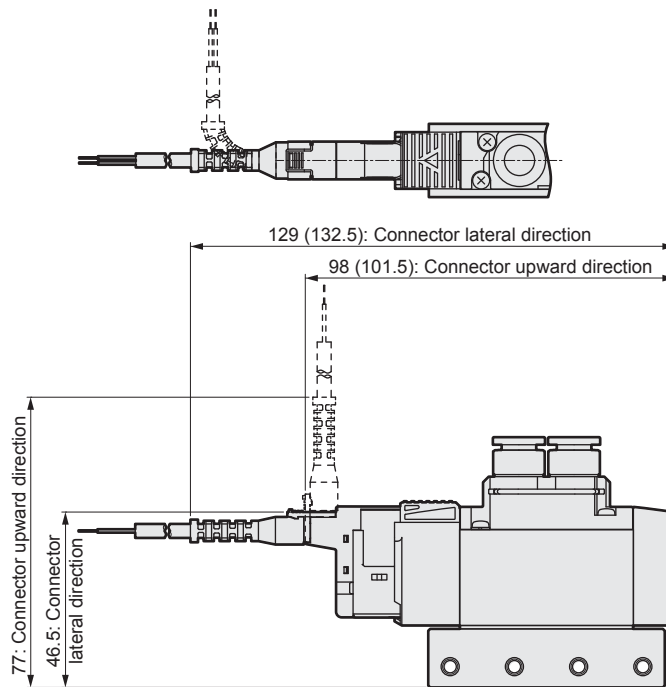
Dimensions Port size; NPT thread

● E type connector type (E)



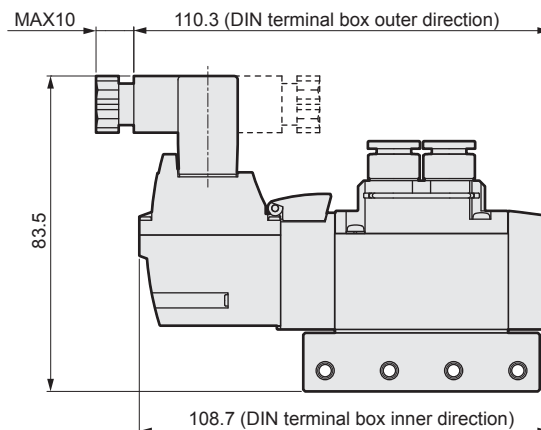
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

3GA3 & 4GA3 Series

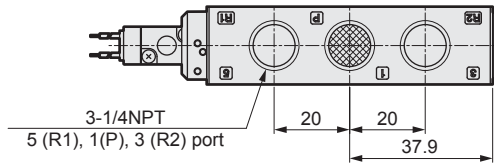
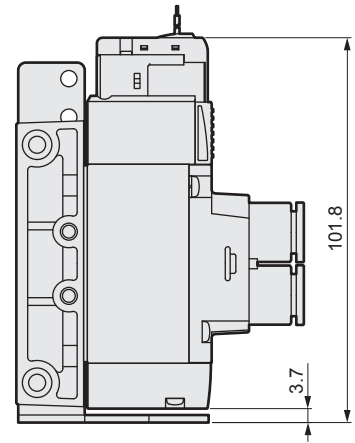
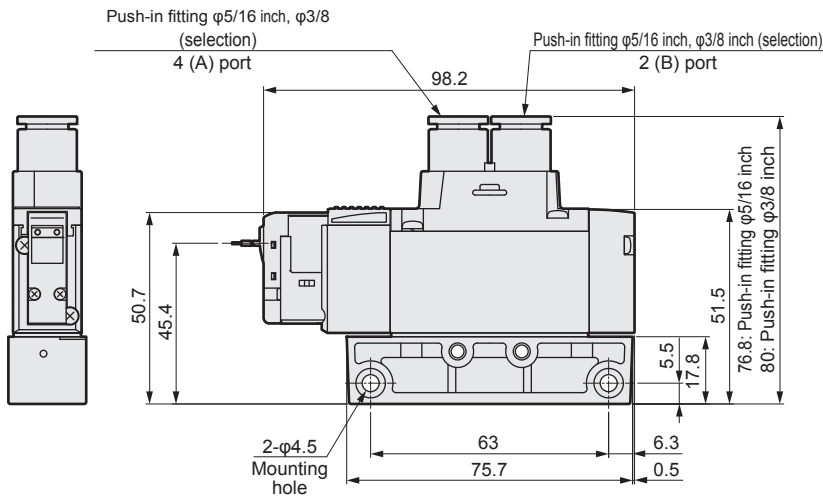
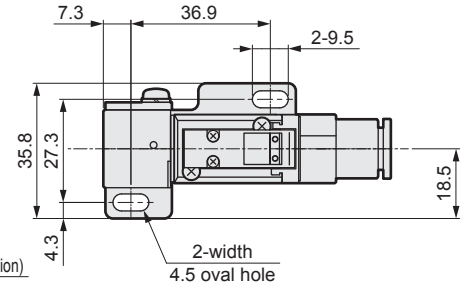
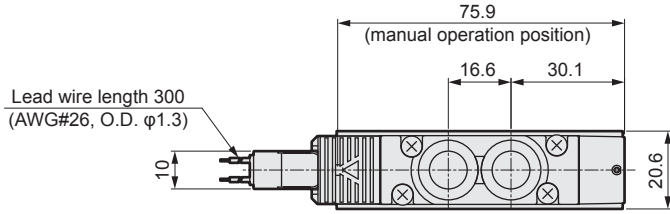
Discrete valve; body piping

Dimensions Port size; NPT thread

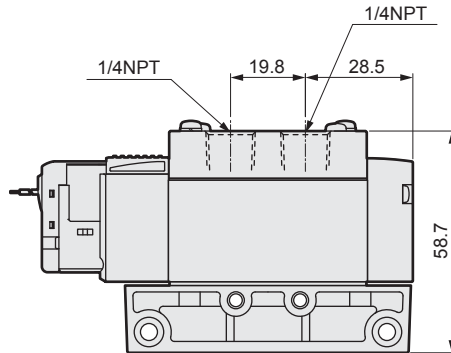
3GA3 1/4OR, 4GA3 1/4OR

- 2-position single grommet lead wire (blank)

- Mounting plate type (P)



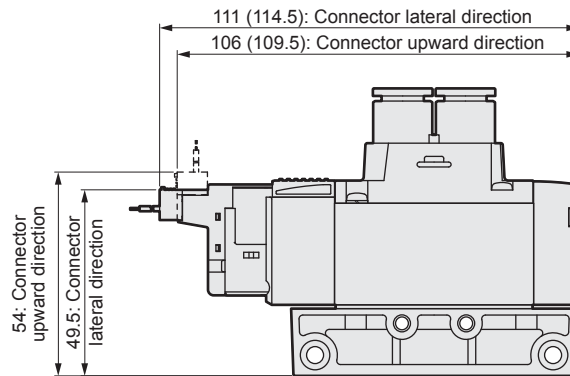
- 1/4NPT female thread type (08N)



4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

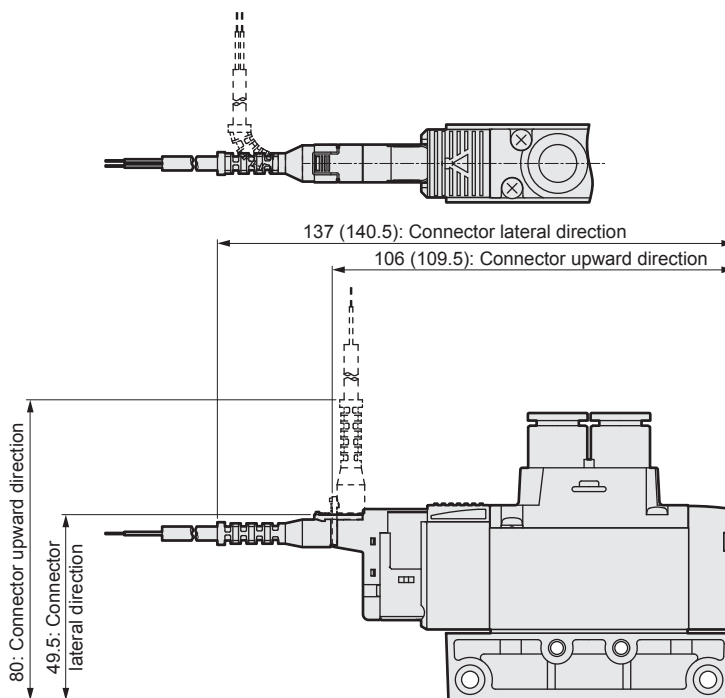
Dimensions Port size; NPT thread

● E type connector type (E)



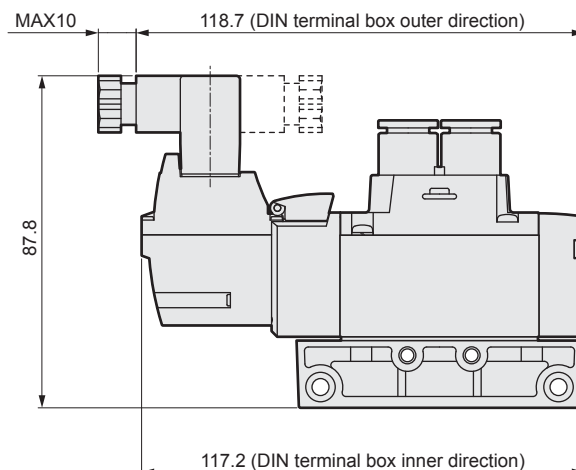
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GA2 & 4GA2 Series

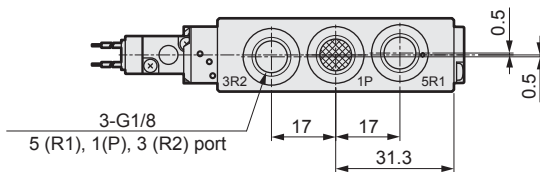
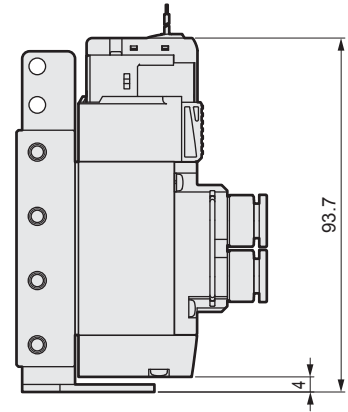
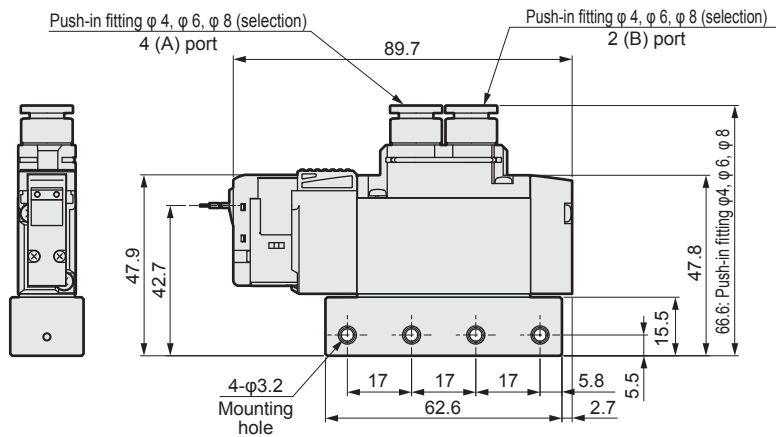
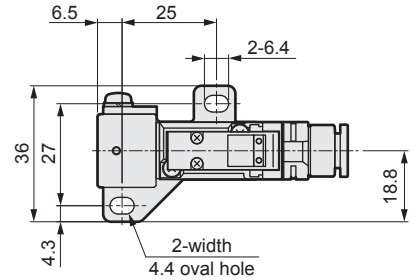
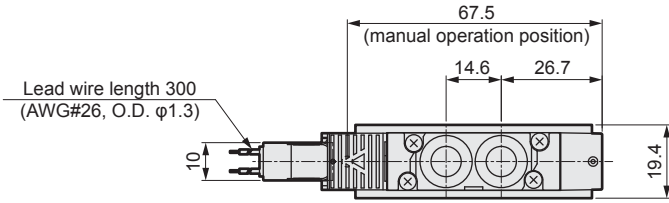
Discrete valve; body piping

Dimensions Port size; G thread

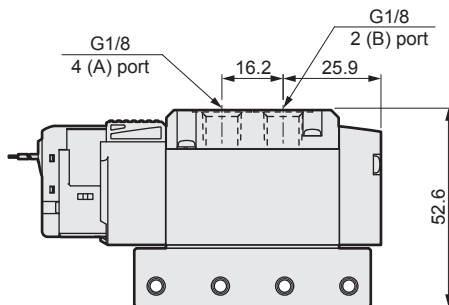
3GA2 10R, 4GA2 0R

- 2-position single
grommet lead wire (blank)

- Mounting plate type (P)



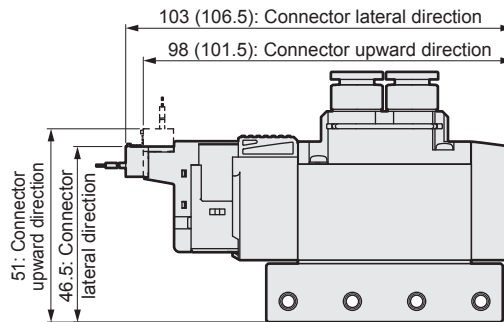
- G1/8 female thread type (06G)



4GA/B
M4GA/B
MN4GA/B
4GA/B
Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety
precautions
Manifold
Specifications

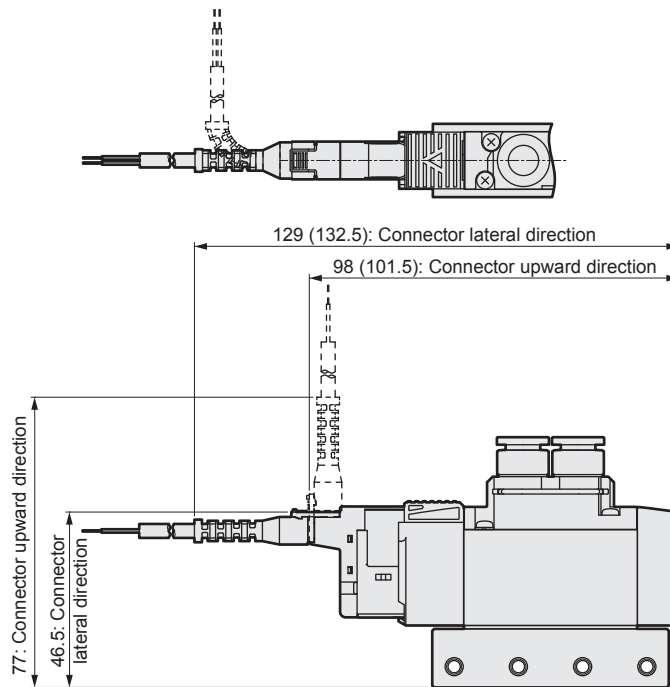
Dimensions Port size; G thread

● E type connector type (E)



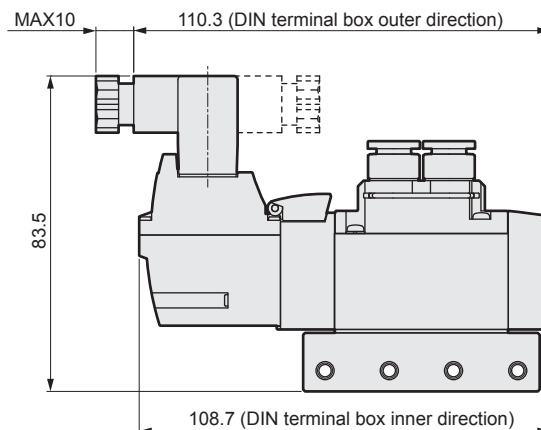
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

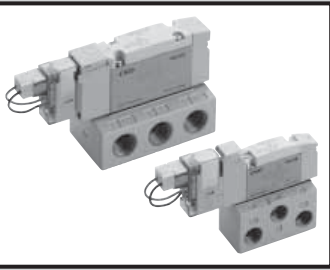
M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications



Discrete valve
Base piping

3GB1, 2 & 4GB1, 2, 3 Series

● Applicable cylinder bore size: $\phi 20$ to $\phi 100$

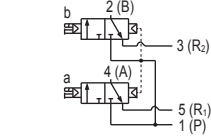


Refer to Ending for details.

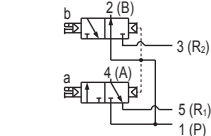


JIS symbol

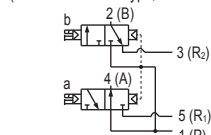
- Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



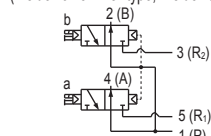
(A side valve: N.C. type, B side valve: N.O. type)



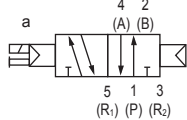
(A side valve: N.O. type, B side valve: N.C. type)



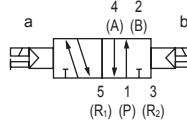
(A side valve: N.O. type, B side valve: N.O. type)



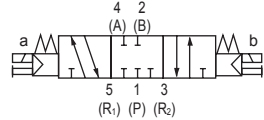
- 5 port valve
2-position single



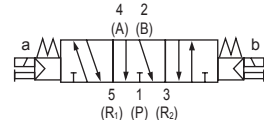
2-position double



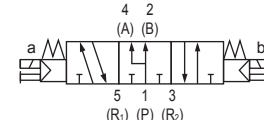
3-position
all ports closed



3-position A/B/R connection



3-position P/A/B connection



Common specifications

Descriptions		
Valve type and operation	Pilot operated soft spool valve	
Working fluid	Compressed air	
Max. working pressure MPa	0.7	
Min. working pressure MPa	0.2 (Note 3)	
Proof pressure MPa	1.05	
Ambient temperature °C	-5 to 55 (no freezing)	
Fluid temperature °C	5 to 55	
Manual operating device	Non-locking/locking common type (standard)	
Pilot exhaust method	Internal pilot	Main valve/pilot valve common exhaust type
	External pilot	Main valve/pilot valve individual exhaust type
Lubrication	Note 1 Not required	
Degree of protection	Note 2 Dust proof	
Vibration resistance m/s ²	50 or less	
Shock resistance m/s ²	300 or less	
Atmosphere	Containing corrosive gas is not permissible	

Note 1 Use the turbine oil Class 1 ISO VG32 if lubricated. Excessive or intermittent lubrication results in unstable operation.

Note 2 Avoid water drops or oil, etc. during use. IP65 (jet-proof type) applies for DIN terminal box specifications. Note that the specified adaptive cord outer diameter and tightening torque must be used for fixing.

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

Electric specifications

Descriptions							
Rated voltage		24 VDC	12 VDC	5 VDC	3 VDC	100 VAC	200 VAC
Voltage fluctuation range		±10%					
Holding current A	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)
	(Note 4) With low heat energy-saving circuit	0.005	0.010	-	-	-	-
Power consumption W	Standard	0.35 (0.40)		0.35 (0.40)		-	
	(Note 4) With low heat energy-saving circuit	0.1		-		-	
Apparent power VA (Note 4) (Note 5)	Standard	-	-	-	-	0.93 (0.98)	1.26
		Thermal class B					
Surge suppressor		Option					
Indicator		Light (option)					

Note 4 Values in () apply when a light is attached. In addition, the low heat energy-saving circuits only have a light attached.

Note 5 200 VAC is the DIN terminal box (with light) value.

Individual specifications

Port size		3GB1 & 4GB1	3GB2 & 4GB2	4GB3
Rc thread	A/B port	Rc1/8	Rc1/4	Rc1/4, Rc3/8
	P/R1/R2 port	Rc1/8	Rc1/4	Rc1/4, Rc3/8
NPT thread (Note 5)	A/B port	1/8NPT	1/4NPT	1/4NPT, 3/8NPT
	P/R1/R2 port	1/8NPT	1/4NPT	1/4NPT, 3/8NPT
G thread (Note 5)	A/B port	G1/8	G1/4	-
	P/R1/R2 port	G1/8	G1/4	-

Note 5: This is a available consult factory order.

Descriptions			3GB1 & 4GB1		3GB2 & 4GB2		4GB3	
			ON	OFF	ON	OFF	ON	OFF
Response time ms	Dual 3 port valve integrated type		9	12	12	29	-	-
	2-position	Single	12	12	19	19	25	28
		Double	9	-	18	-	24	-
3-position	ABR connection	8	15	17	30	23	45	

Values including a light surge suppressor. The response time is the value at 0.5 MPa supply pressure, 20°C, with no lubrication. It varies depending on the pressure and the lubricant quality.

Descriptions			3GB1 & 4GB1	3GB2 & 4GB2	4GB3
Weight g	2-position	Single			
		Grommet lead wire	80 (38)	156 (74)	215 (96)
		E type connector	82 (40)	158 (76)	217 (98)
	2-position	DIN terminal box	-	193 (111)	249 (130)
		Double			
		Grommet lead wire	97 (55)	173 (91)	233 (114)
	3-position	E type connector	101 (59)	177 (95)	237 (118)
		DIN terminal box	-	216 (134)	273 (154)
		All ports closed			
Grommet lead wire	98 (56)	184 (102)	242 (123)		
E type connector	102 (60)	188 (106)	246 (127)		
DIN terminal box	-	227 (145)	282 (163)		

• Values in () do not include a discrete sub-plate. Values for E type connector include the socket assembly (with 300 mm lead wire).

For EJ type connector, add 16 g/connector to E type connector weight.

• The weight of dual 3 port valve integrated type is the same as that of 2-position double.

Flow characteristics

Model no.	Valve Position	P→A/B		A/B→R1/R2		
		C [dm ³ /(s·bar)]	b	C [dm ³ /(s·bar)]	b	
3GB1 4GB1	Dual 3 port valve integrated type	0.92	0.08	1.1	0.26	
	2-position	1.3	0.27	1.2	0.22	
	3-position	All ports closed	1.1	0.31	1.1	0.27
		ABR connection	1.1	0.31	1.3	0.29
	PAB connection	1.4	0.30	1.1	0.26	
3GB2 4GB2	Dual 3 port valve integrated type	1.7	0.42	2.1	0.26	
	2-position	2.6	0.20	2.6	0.19	
	3-position	All ports closed	2.3	0.32	2.2	0.22
		ABR connection	2.2	0.23	2.6	0.16
	PAB connection	2.4	0.10	2.4	0.22	
4GB3	2-position	4.3	0.24	4.2	0.24	
	3-position	All ports closed	3.3	0.40	3.4	0.27
		ABR connection	3.3	0.36	4.2	0.18
		PAB connection	4.5	0.28	3.4	0.30

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

Ozone proof specifications / Cutting oil proof type specifications

Select the option "A" of (E) in how to order on page 56.

Clean room specifications (Catalog No. CB-033S)

- Particle generation preventing structure for use in clean rooms

** - Voltage - P7*

Specifications for secondary battery (Catalog No. CC-947A)

- In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section

** - Voltage - P4

4G/A/B

M4G/A/B

MN4G/A/B

4G/A/B
Master valve

4G/D/E

M4G/D/E

MN4G/D/E

Technical data

Safety
precautions

Manifold
Specifications

3GB1, 2 & 4GB1, 2, 3 Series

Discrete valve; base piping

How to order

4GB1 1 0 R - 06 - E2 - 3

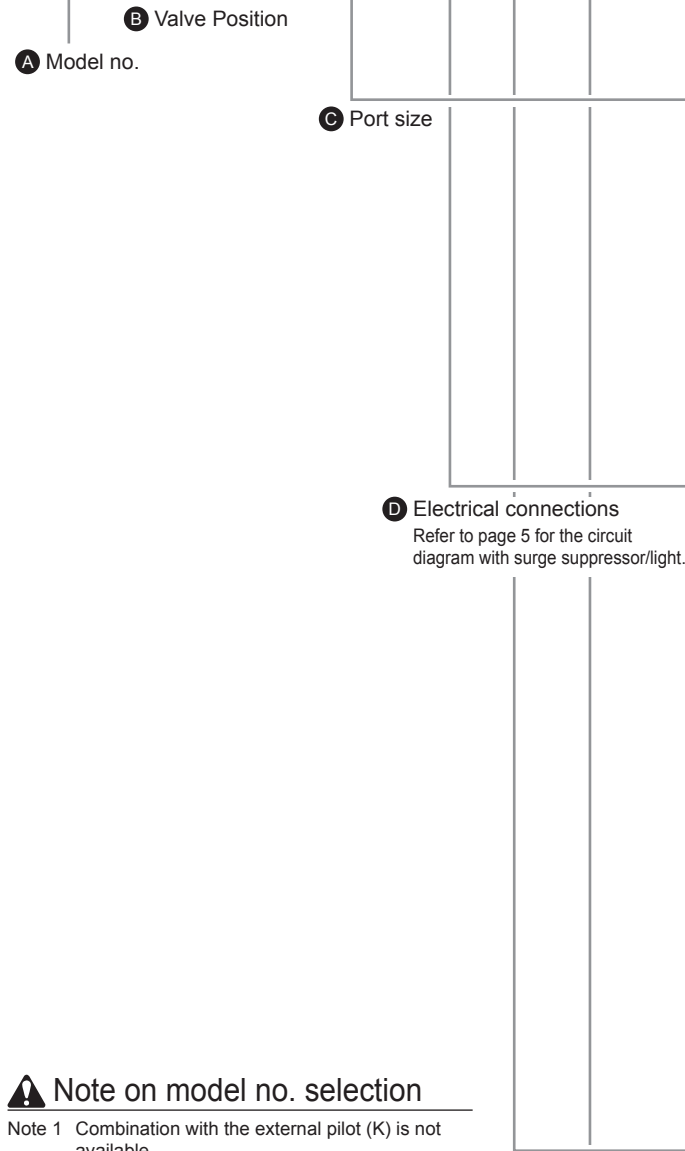
3GB1 66 0 R - 06 - E2 - 3

Discrete valve for mounting base

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

3 port discrete valve for mounting base

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



Note on model no. selection

- Note 1 Combination with the external pilot (K) is not available. Dimensions are the same as the respective 2-position double.
- Note 2 Available consult factory order.
- Note 3 3-position all ports closed and PAB connection are not provided with check valve. Refer to page 628 for details on check valve.
- Note 4 Only the E2* type, E2* J type connector and 12/24 VDC are supported. In addition, the surgeless "S" and Low heat energy-saving circuit "E" cannot be selected at the same time.
- Note 5 This is surgeless specifications.
- Note 6 The P port has a filter built inside as a standard.
- Note 7 Only the DIN terminal box are supported.
- Note 8 Grommet lead wire specifications are only for DC voltage.
- Note 9 Supports AC voltage and 12/24 VDC. The light is also attached to the terminal box.
- Note 10 AC voltage comes with a rectifier circuit.

A Model No.

3GB1	3GB2	4GB1	4GB2	4GB3
------	------	------	------	------

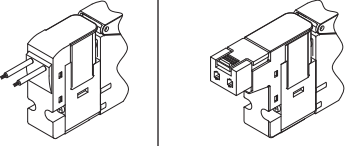
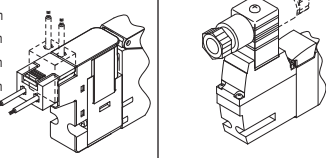
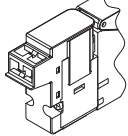
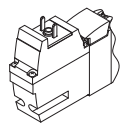
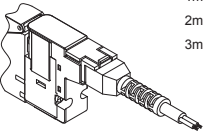
Symbol	Descriptions	3GB1	3GB2	4GB1	4GB2	4GB3
B Valve Position						
1	2-position single			●	●	●
2	2-position double			●	●	●
3	3-position all ports closed			●	●	●
4	3-position ABR connection			●	●	●
5	3-position PAB connection			●	●	●
66	Dual 3 port valve integrated type Note 1 A side valve: Normally closed B side valve: Normally closed	●	●			
67	Dual 3 port valve integrated type Note 1 A side valve: Normally closed B side valve: Normally closed	●	●			
76	Dual 3 port valve integrated type Note 1 A side valve: Normally open B side valve: Normally closed	●	●			
77	Dual 3 port valve integrated type Note 1 A side valve: Normally open B side valve: Normally open	●	●			
C Port size						
Port	4 (A)/2 (B)port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8				
06	Rc1/8	(2)		(2)		
08	Rc1/4		(3)		(3)	(3)
10	Rc3/8					(4)
Port	4 (A)/2 (B)port	P/R1/R2 port (5) = 1/8NPT (6) = 1/4NPT (7) = 3/8NPT				
06N	1/8NPT (Note 2)	(5)		(5)		
08N	1/4NPT (Note 2)		(6)		(6)	(6)
10N	3/8NPT (Note 2)					(7)
Port	4 (A)/2 (B)port	P/R1/R2 port (8) = G1/8 (9) = G1/8				
06G	G1/8 (Note 2)	(8)		(8)		
08G	G1/4 (Note 2)		(9)		(9)	
00	Discrete valve for mounting base	●	●	●	●	●
D Electrical connections						
Blank	Grommet lead wire (300 mm) (Note 8)	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/light (Note 9)		●		●	●
BN	DIN terminal box (Pg7) (without terminal box) with surge suppressor (Note 9)		●		●	●
E type connector (upward/lateral direction common)						
E0	Lead wire (300 mm) (Note 10)	●	●	●	●	●
E00	Lead wire (500 mm) (Note 10)	●	●	●	●	●
E01	Lead wire (1000 mm) (Note 10)	●	●	●	●	●
E02	Lead wire (2000 mm) (Note 10)	●	●	●	●	●
E03	Lead wire (3000 mm) (Note 10)	●	●	●	●	●
E0N	Without lead wire (without socket) (Note 10)	●	●	●	●	●
E1	Without lead wire (with socket/terminal) (Note 10)	●	●	●	●	●
E2	Lead wire (300 mm) with surge suppressor/light	●	●	●	●	●
E20	Lead wire (500 mm) with surge suppressor/light	●	●	●	●	●
E21	Lead wire (1000 mm) with surge suppressor/light	●	●	●	●	●
E22	Lead wire (2000 mm) with surge suppressor/light	●	●	●	●	●
E23	Lead wire (3000 mm) with surge suppressor/light	●	●	●	●	●
E2N	Without lead wire (without socket) with surge suppressor/light	●	●	●	●	●
E3	Without lead wire (with socket/terminal) with surge suppressor/light	●	●	●	●	●
EJ type connector (socket with cover, upward/lateral direction common)						
E01J	Lead wire (1000 mm) (Note 10)	●	●	●	●	●
E02J	Lead wire (2000 mm) (Note 10)	●	●	●	●	●
E03J	Lead wire (3000 mm) (Note 10)	●	●	●	●	●
E21J	Lead wire (1000 mm) with surge suppressor/light	●	●	●	●	●
E22J	Lead wire (2000 mm) with surge suppressor/light	●	●	●	●	●
E23J	Lead wire (3000 mm) with surge suppressor/light	●	●	●	●	●
F Voltage						
Blank	Non-locking/locking common manual override	●	●	●	●	●
M	Non-locking manual override	●	●	●	●	●
H	With check valve (Note 3)	●	●	●	●	●
K	External pilot			●	●	●
A	Ozone/cutting oil proof	●	●	●	●	●
S	Surgeless (Note 4)	●	●	●	●	●
E	Low heat and energy saving circuit (Note 4), (Note 5)	●	●	●	●	●
F	A/B port filter integrated (Note 6)	●	●	●	●	●
F Voltage						
1	100 VAC (rectifier integrated)	●	●	●	●	●
2	200 VAC (rectified integrated) (Note 7)		●		●	●
3	24 VDC	●	●	●	●	●
4	12 VDC	●	●	●	●	●
7	3 VDC	○	○	○	○	○
8	5 VDC	○	○	○	○	○

is not available.

○ Contact CKD for price and availability.

3GB1, 2 & 4GB1, 2, 3 Series

Discrete valve; base piping

Electrical connections	
Discrete valve/individual wiring manifold	
Blank Grommet lead wire	E1 E3 E type connector with socket/terminal
<p>● Lead wire length 300mm</p> 	
E0 E2 E type connector	B DIN terminal box
<p>● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm</p> 	
E0N E2N E type connector without socket	BN DIN terminal box without terminal box
	
E0*J E2*J EJ type connector	
<p>● Lead wire length 1m 2m 3m</p> 	

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

3GB1 & 4GB1 Series

Discrete valve; base piping

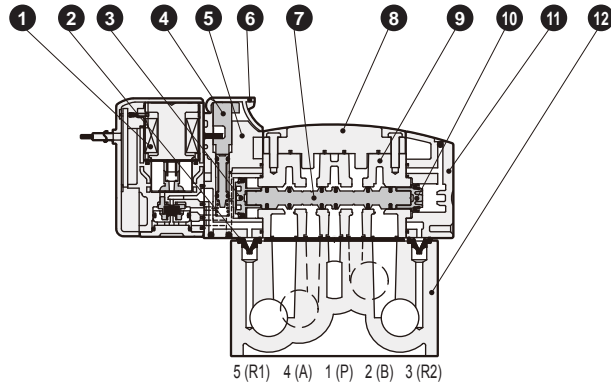
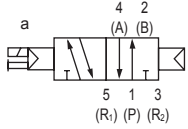
Internal structure and parts list

3GB1660R, 1670R, 1760R, 1770R

- Dual 3 port valve integrated type Refer to page 60.
- Grommet lead wire (blank)

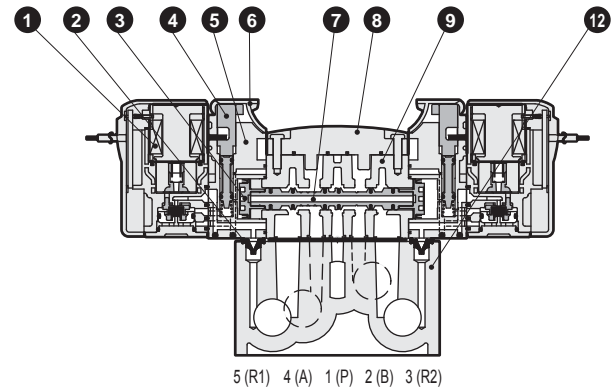
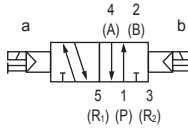
4GB110R

- 2-position single
- Grommet lead wire (blank)



4GB120R

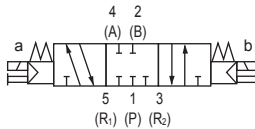
- 2-position double
- Grommet lead wire (blank)



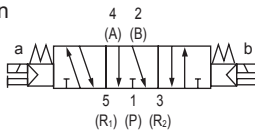
4GB1³/₄0R

- 3-position
- Grommet lead wire (blank)

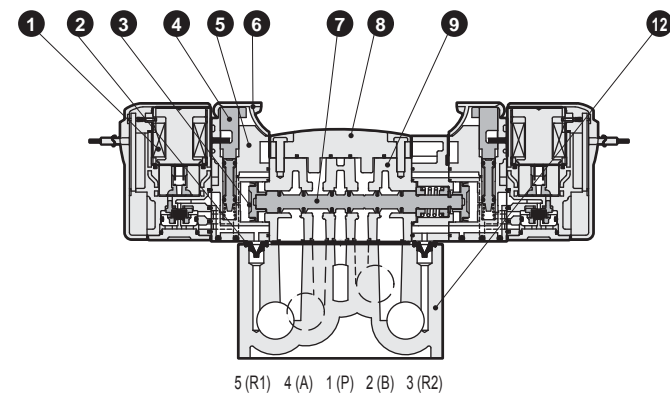
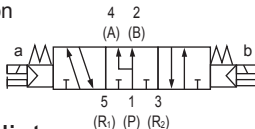
All ports closed



A/B/R connection



P/A/B Connection



Main parts list

No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR
3	Piston D assembly	-
4	Manual operating device	Plastic
5	Piston room	Plastic
6	Manual protection cover	Plastic
7	Spool assembly	-
8	Plate	Plastic
9	Body	Aluminum alloy die-casting
10	Piston S assembly	-
11	Cap	Plastic
12	Discrete sub-plate	Aluminum alloy die-casting

Parts list

No.	Parts name	Model no.
1	Coil assembly	4GR - Electrical connections - * - COIL - Voltage
		Blank: Standard
		A: Ozone specifications
		Blank: Grommet lead wire

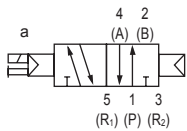
Internal structure and parts list

3GB2660R, 2670R, 2760R, 2770R

- Dual 3 port valve integrated type Refer to page 60.
- Grommet lead wire (blank)

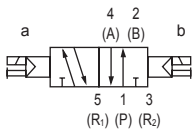
4GB210R & 4GB310R

- 2-position single
- Grommet lead wire (blank)



4GB220R & 4GB320R

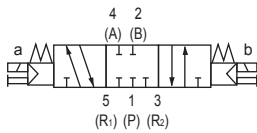
- 2-position double
- Grommet lead wire (blank)



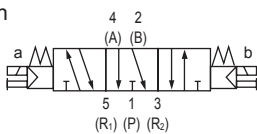
4GB2^{3/4}0R & 4GB3^{3/4}0R

- 3-position
- Grommet lead wire (blank)

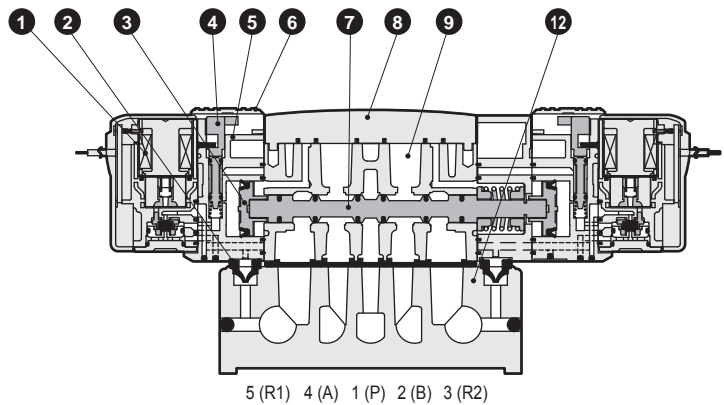
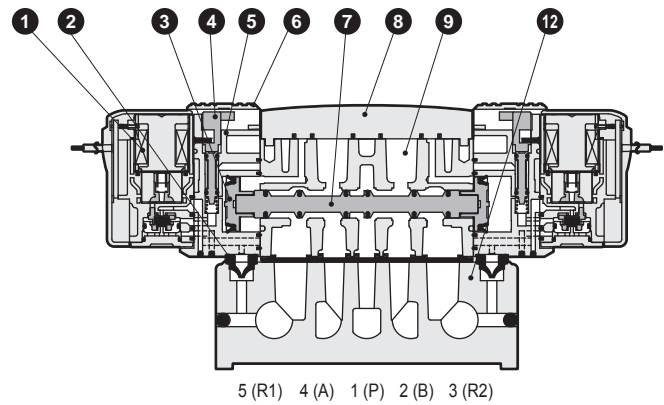
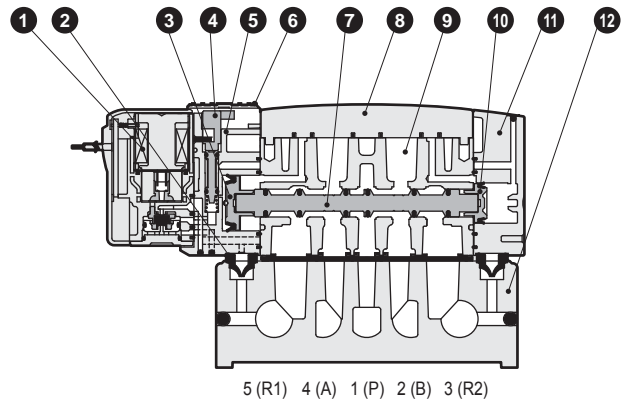
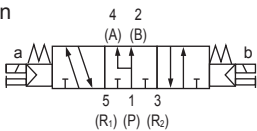
All ports closed



A/B/R connection



P/A/B Connection



Main parts list

No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR
3	Piston D assembly	-
4	Manual operating device	Plastic
5	Piston room	Plastic
6	Manual protection cover	Plastic
7	Spool assembly	-
8	Plate	Plastic
9	Body	Aluminum alloy die-casting
10	Piston S assembly	-
11	Cap	Plastic
12	Discrete sub-plate	Aluminum alloy die-casting

Parts list

No.	Parts name	Model no.							
1	Coil assembly	4GR - <table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td>Electrical connections</td> <td>-</td> <td>*</td> <td>-</td> <td>COIL</td> <td>-</td> <td>[Voltage]</td> </tr> </table>	Electrical connections	-	*	-	COIL	-	[Voltage]
Electrical connections	-	*	-	COIL	-	[Voltage]			

Blank: Standard
A: Ozone specifications
Blank: Grommet lead wire

4G/A/B

M4G/A/B

MN4G/A/B

4G/A/B
Master valve

4G/D/E

M4G/D/E

MN4G/D/E

Technical data

Safety
precautions

Manifold
Specifications

3GB1, 2 Series

Discrete valve; base piping

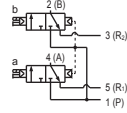
Internal structure and parts list

4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

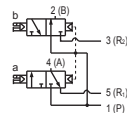
3GB1⁶⁶₆₇⁷⁶₇₇0R

- Dual 3 port valve integrated type
Grommet lead wire (blank)

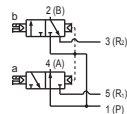
A side valve: Normally closed,
B side valve: Normally closed
NC/NC type



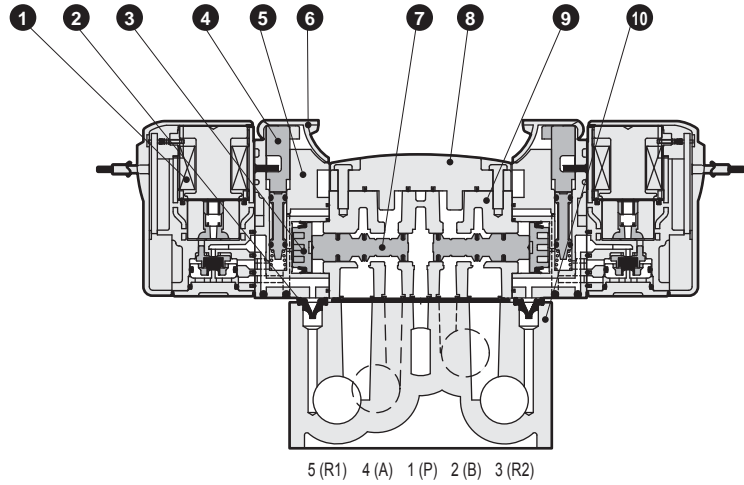
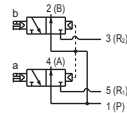
A side valve: Normally closed,
B side valve: Normally open
N.C./N.O. type



A side valve: Normally open,
B side valve: Normally open
N.O./N.C. type



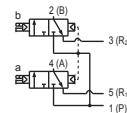
A side valve: Normally open,
B side valve: Normally open
N.O./N.O. type



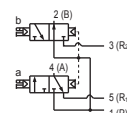
3GB2⁶⁶₆₇⁷⁶₇₇0R

- Dual 3 port valve integrated type
Grommet lead wire (blank)

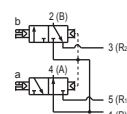
A side valve: Normally closed,
B side valve: Normally closed
NC/NC type



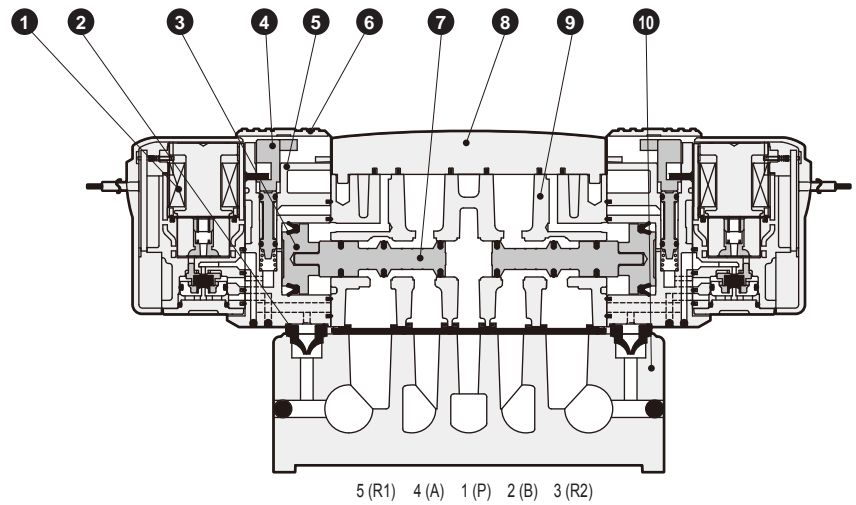
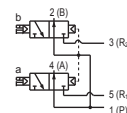
A side valve: Normally closed,
B side valve: Normally open
N.C./N.O. type



A side valve: Normally open,
B side valve: Normally closed
N.O./N.C. type



A side valve: Normally open,
B side valve: Normally open
N.O./N.O. type



Main parts list

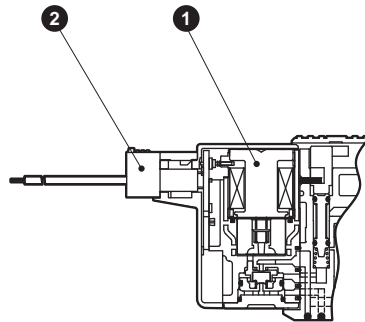
No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber, HNBR
3	Piston assembly	-
4	Manual operating device	Plastic
5	Piston room	Plastic
6	Manual protection cover	Plastic
7	Spool assembly	-
8	Plate	Plastic
9	Body	Aluminum alloy die-casting
10	Discrete sub-plate	Aluminum alloy die-casting

Parts list

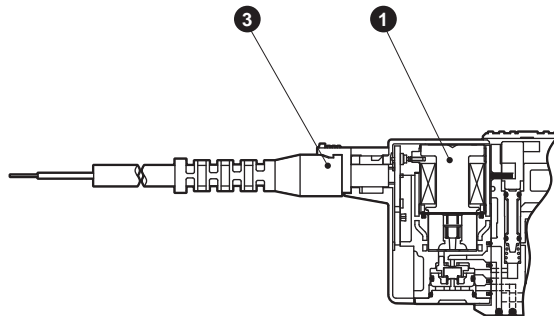
No.	Parts name	Model no.
1	Coil assembly	4GR - <input type="text" value="Electrical connections"/> - * - COIL - <input type="text" value="Voltage"/>
		Blank: Standard
		A: Ozone specifications
		Blank: Grommet lead wire

Electrical connections internal structure and parts list

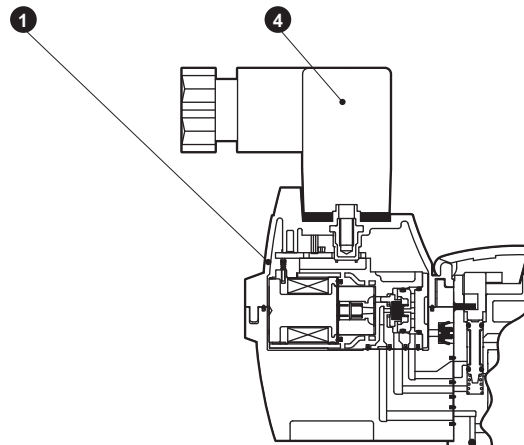
● E type connector type E**



● EJ type connector type E**J



● DIN terminal box type B



Main parts list

No.	Parts name	Material
1	Coil assembly	
2	E type connector socket assembly	-
3	Socket assembly with cover	-
4	DIN terminal box assembly	-

Parts list

No.	Parts name	Model no.
1	Coil assembly	4GR - Electrical connections - * - COIL - Voltage Blank: Standard A: Ozone specifications E* : E type connector type E*J: Socket with cover type B : DIN terminal box type B includes the DIN terminal box BN dose not include DIN terminal box
2	E type connector socket assembly	4GR - SOCKET - ASSY - E** - Voltage
3	Socket assembly with cover	4GR - SOCKET - ASSY - E**J
4	DIN terminal box assembly	4GR - TERMINAL - BOX - Voltage

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E


MN4GD/E

Technical data

Safety
precautionsManifold
Specifications

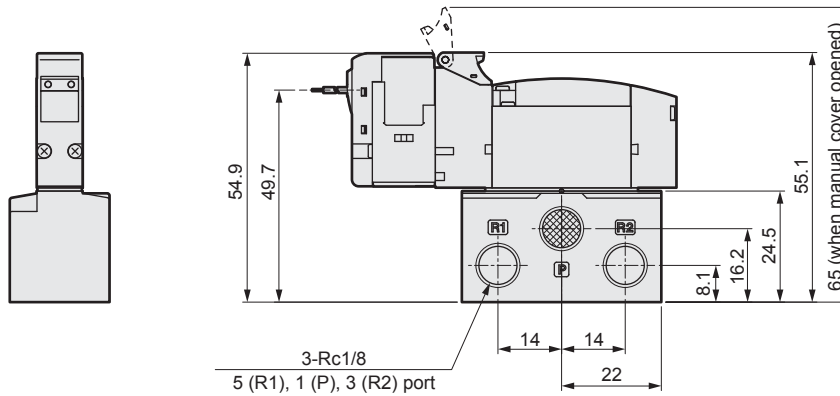
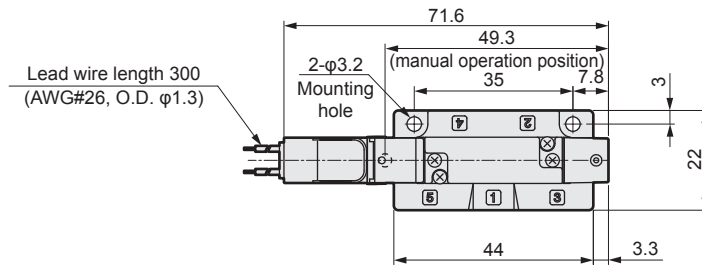
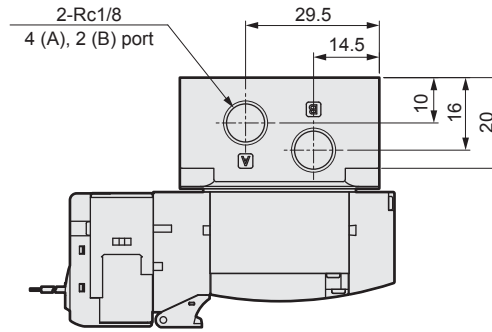
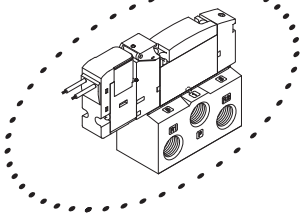
4GB1 Series

Discrete valve; base piping

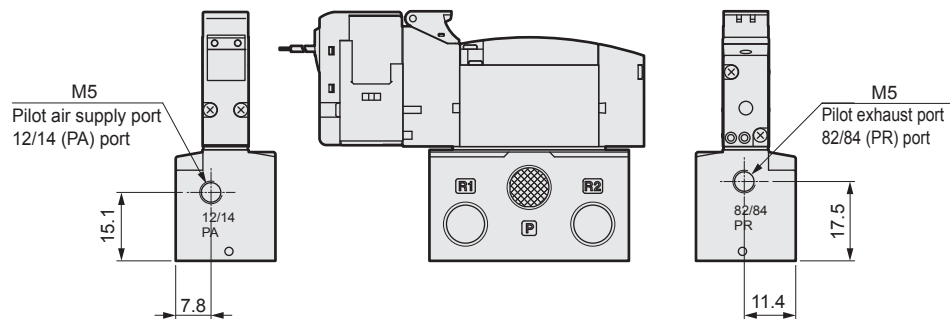
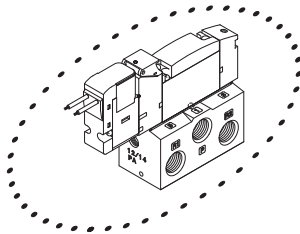
Dimensions 

4GB110R * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

- 2-position single grommet lead wire (blank)



- External pilot type (K)



4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

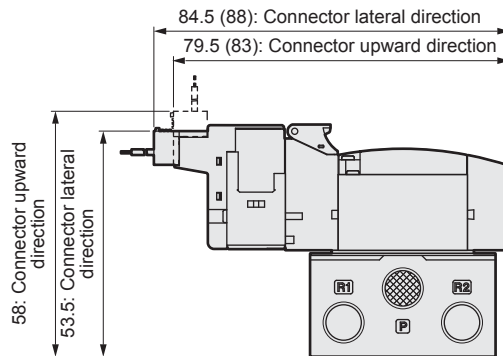
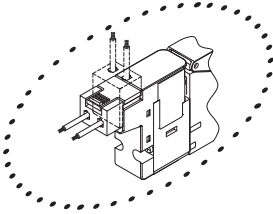
Technical data

Safety
precautions

Manifold
Specifications

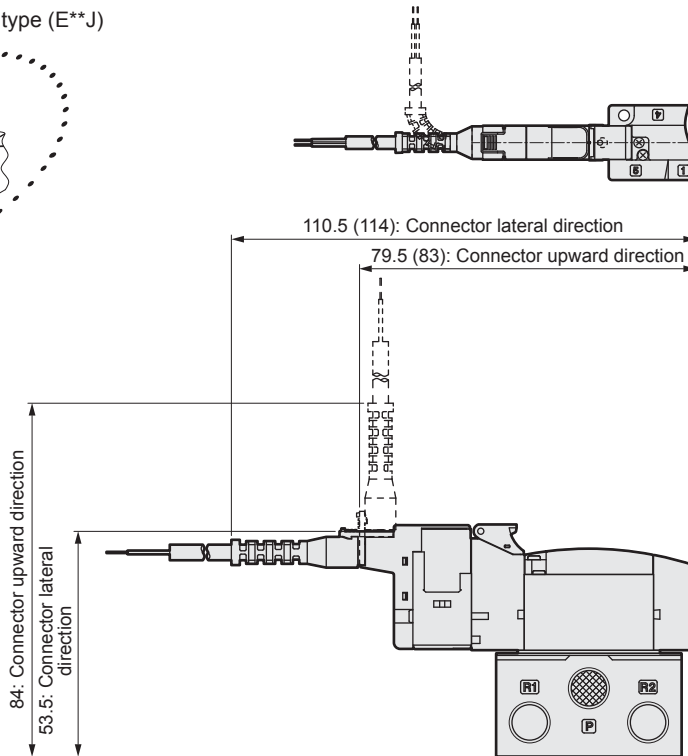
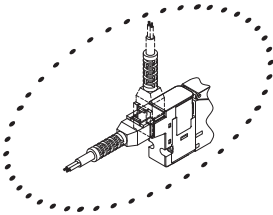
Dimensions

● E type connector type (E)



Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GB1 Series

Discrete valve; base piping

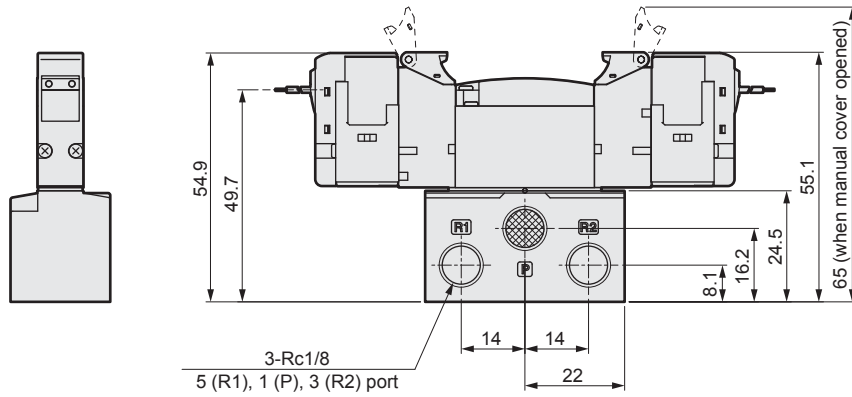
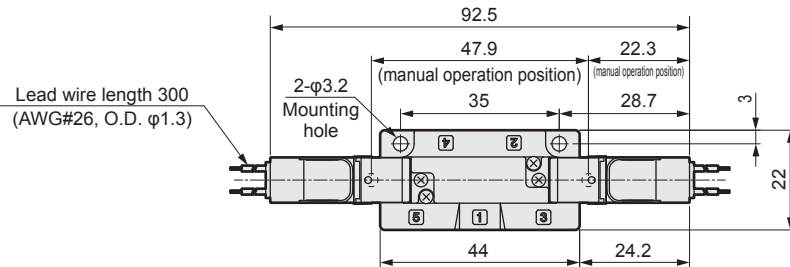
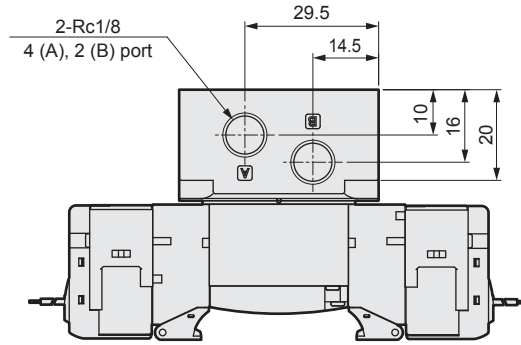
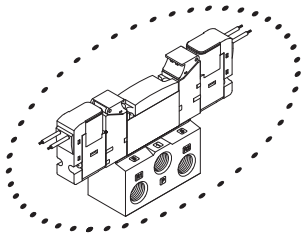
Dimensions 

4GB120R * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

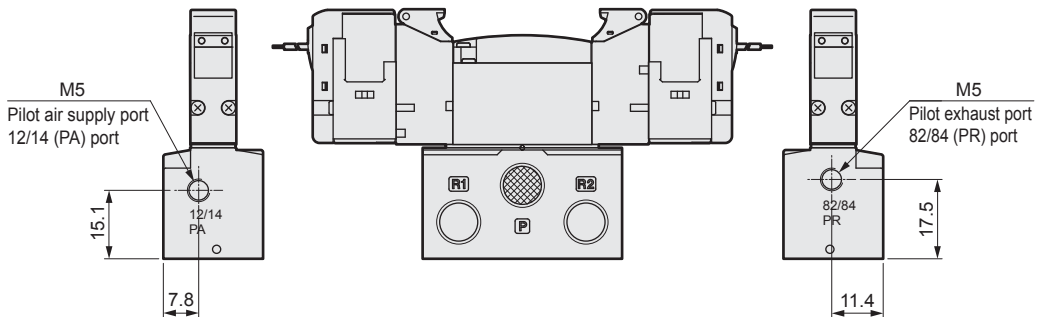
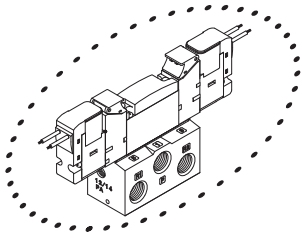
- 2-position double grommet lead wire (blank)

3GB1660R, 3GB1670R, 3GB1760R, 3GB1770R

- Dual 3 port valve integrated type grommet lead wire (blank)



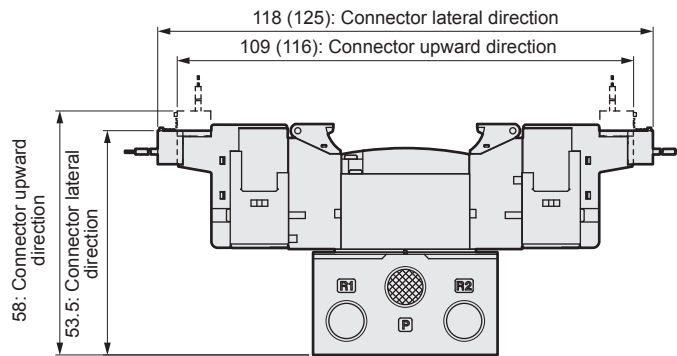
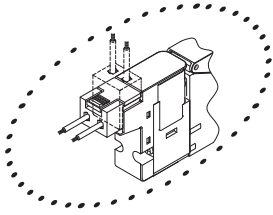
- External pilot type (K)



Note: Combination of dual 3 port valve integrated type and external pilot type is not available.

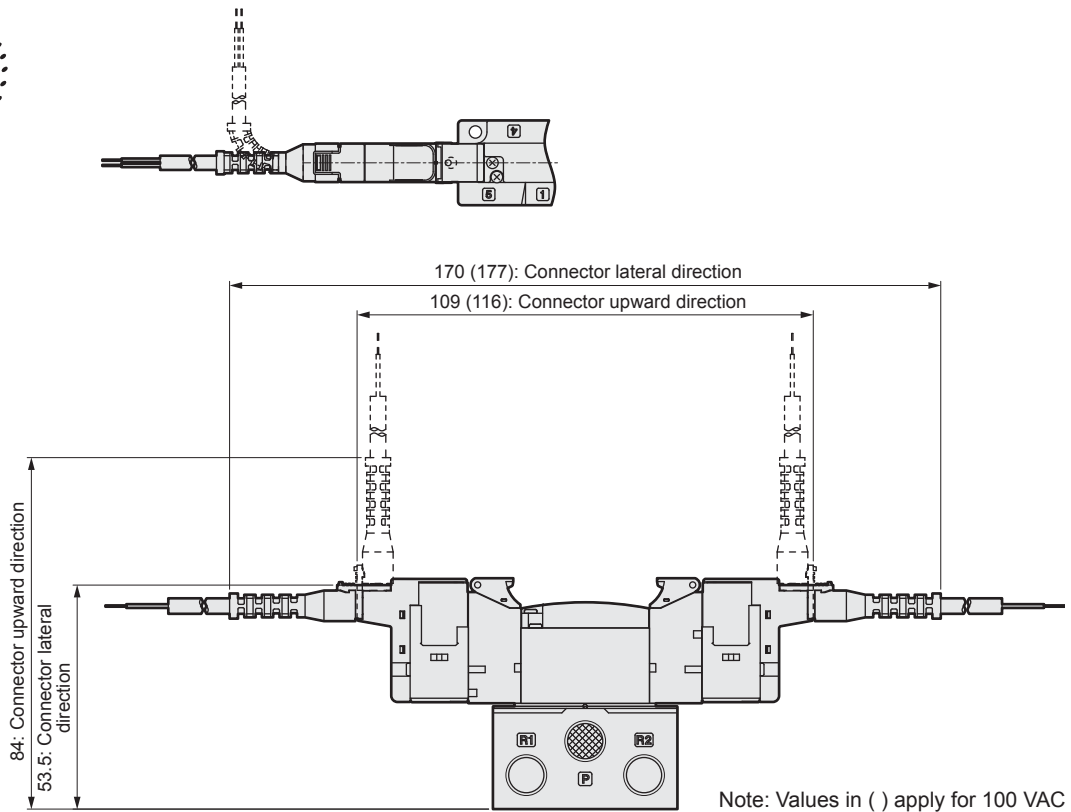
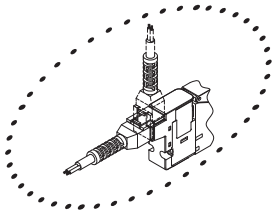
Dimensions

● E type connector type (E)



Note: Values in () apply for 100 VAC.

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GB1 Series

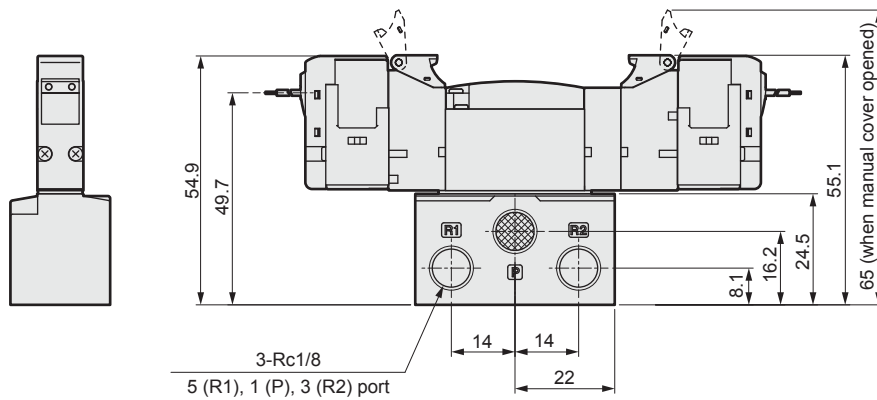
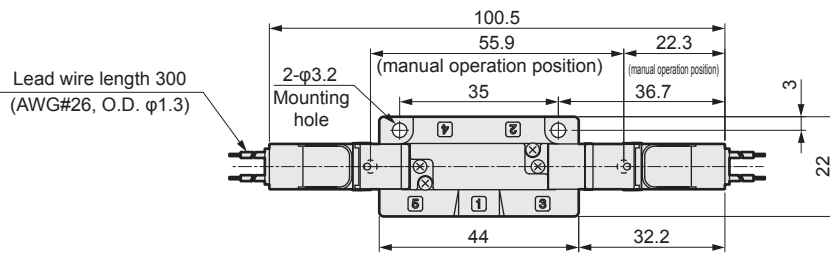
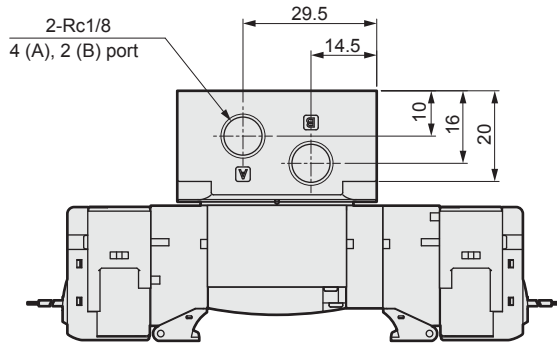
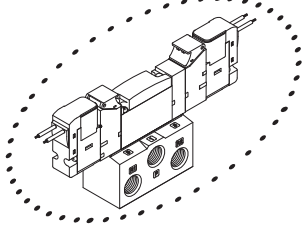
Discrete valve; base piping

Dimensions

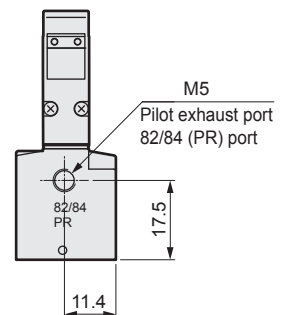
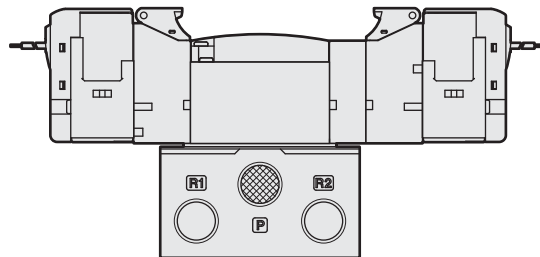
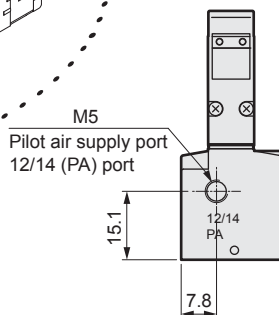
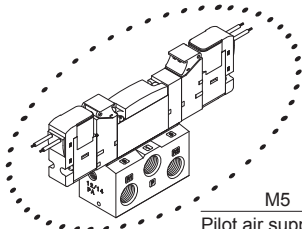


4GB1³/₄ 0R * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

- 3 position
Grommet lead wire (blank)

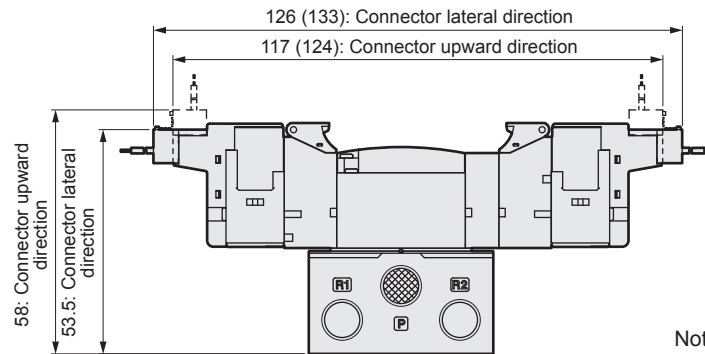
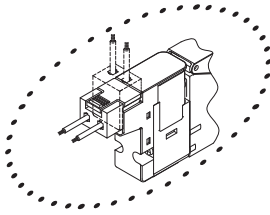


- External pilot type (K)



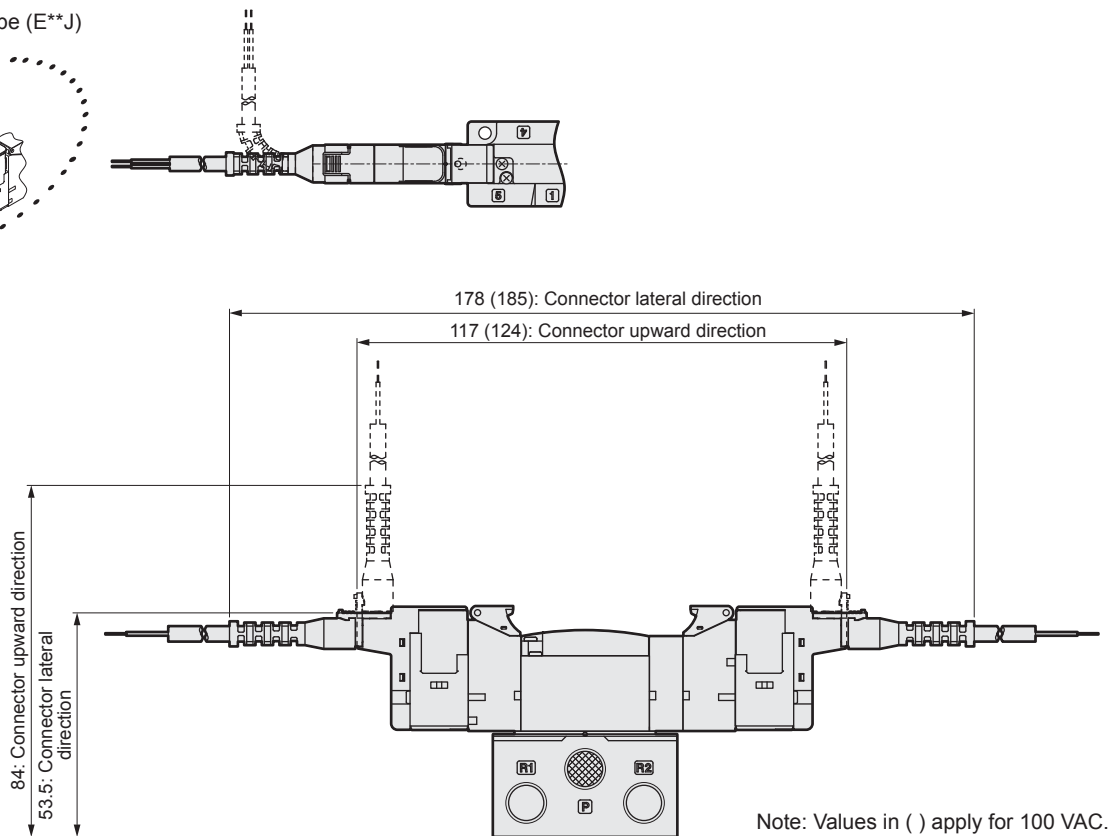
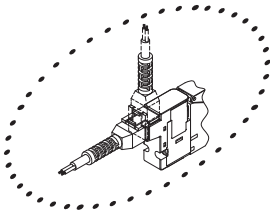
Dimensions

● E type connector type (E)



Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GB2 Series

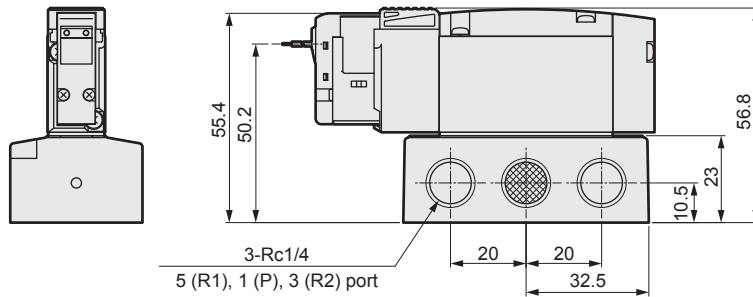
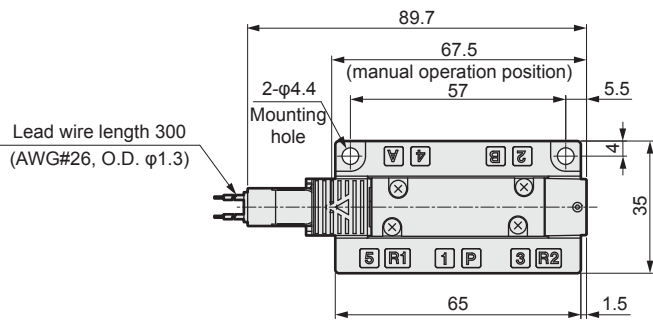
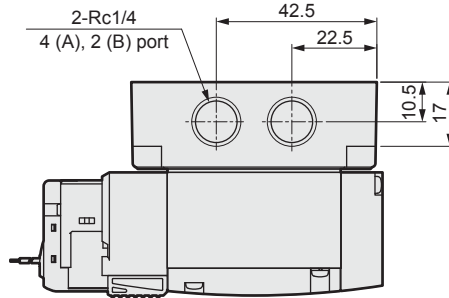
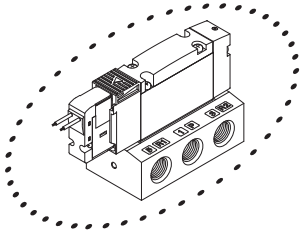
Discrete valve; base piping

Dimensions

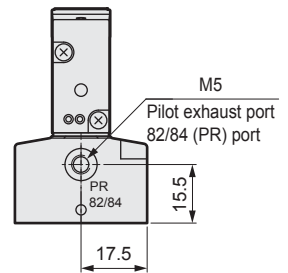
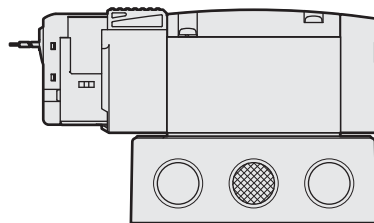
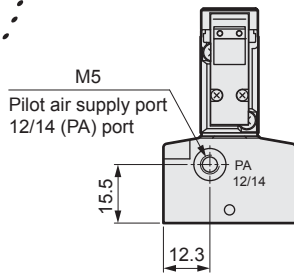
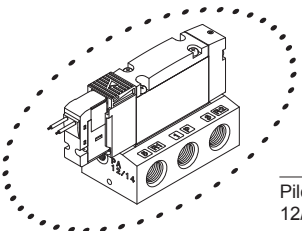


4GB210R * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

- 2-position single grommet lead wire (blank)



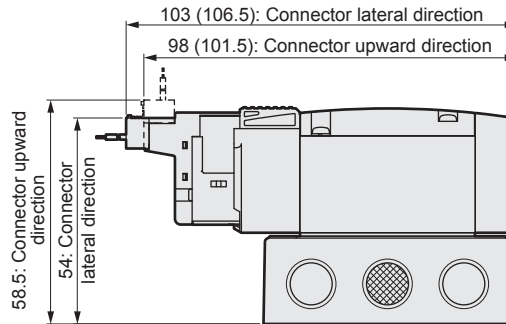
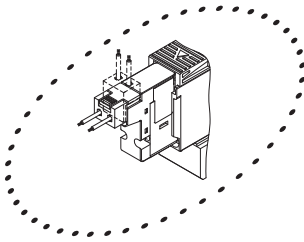
- External pilot type (K)



4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

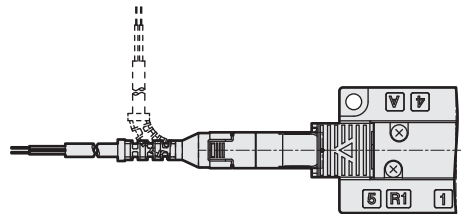
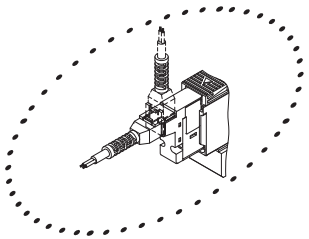
Dimensions

● E type connector type (E)

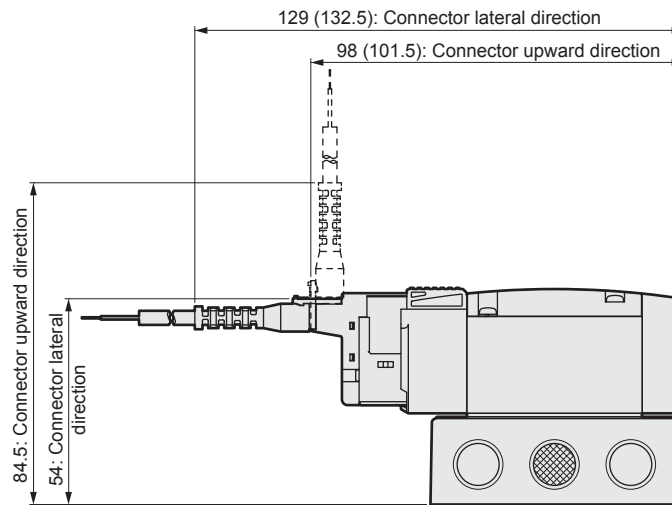


Note: Values in () apply for 100 VAC

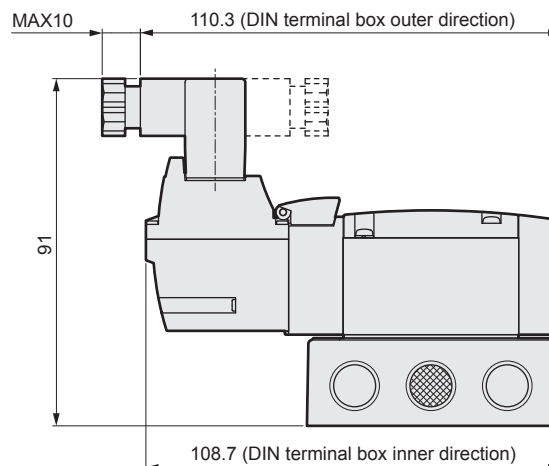
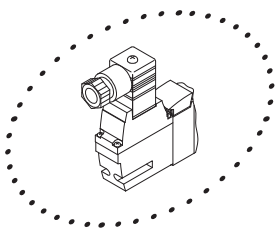
● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC



● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GB2 Series

Discrete valve; base piping

Dimensions

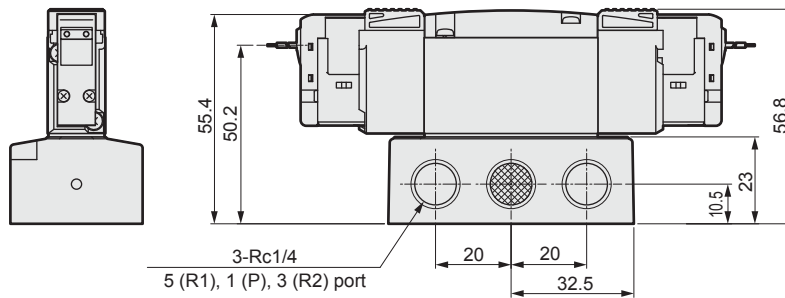
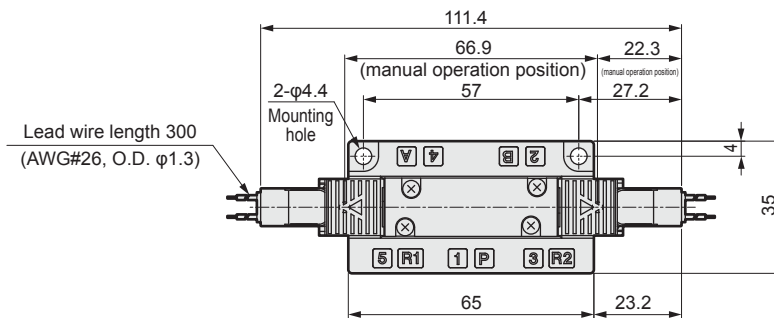
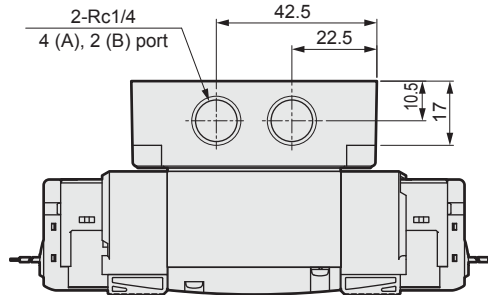
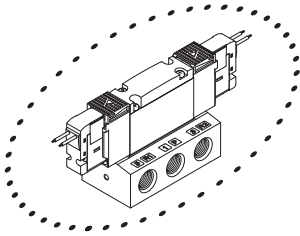


4GB220R * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

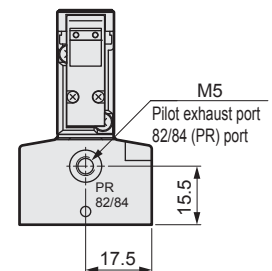
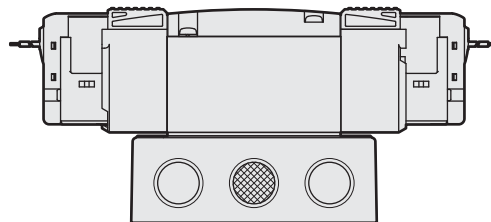
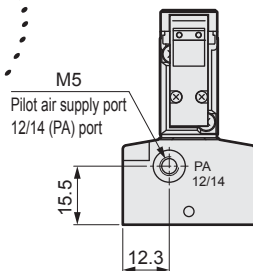
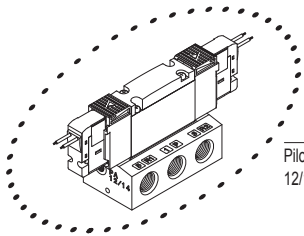
- 2-position double grommet lead wire (blank)

3GB2660R, 3GB2670R, 3GB2760R, 3GB2770R

- Dual 3 port valve integrated type grommet lead wire (blank)



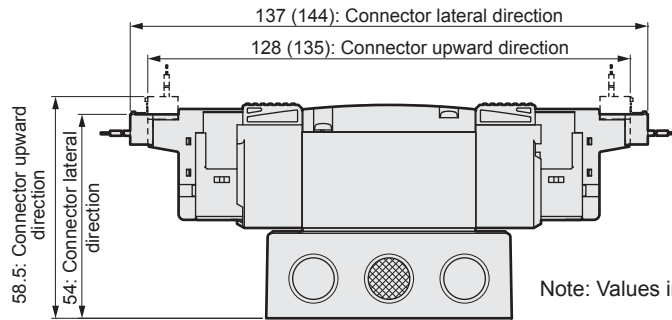
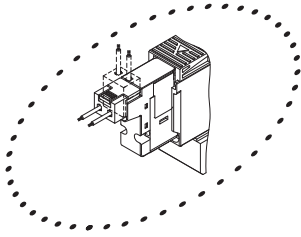
- External pilot type (K)



Note: Combination of dual 3 port valve integrated type and external pilot type is not available.

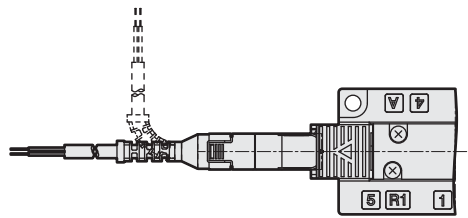
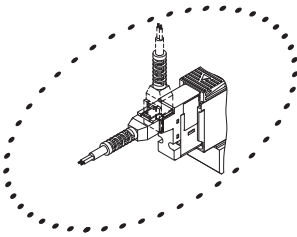
Dimensions

● E type connector type (E)

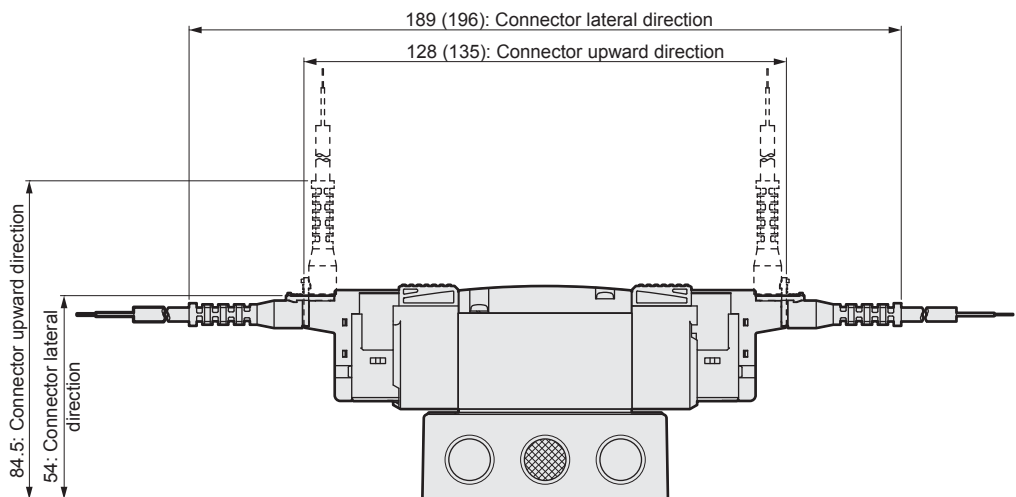


Note: Values in () apply for 100 VAC.

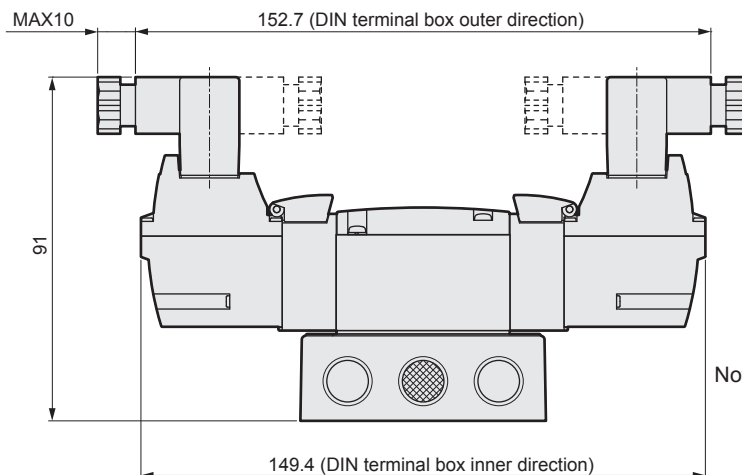
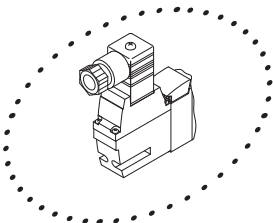
● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.



● DIN terminal box type (B)



Note The DIN terminal box assembly is shipped facing inward.

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GB2 Series

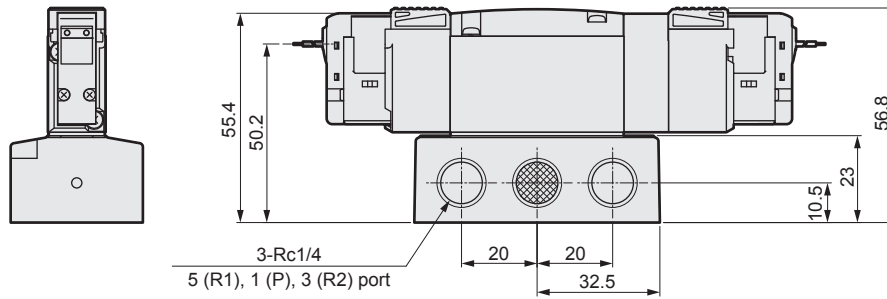
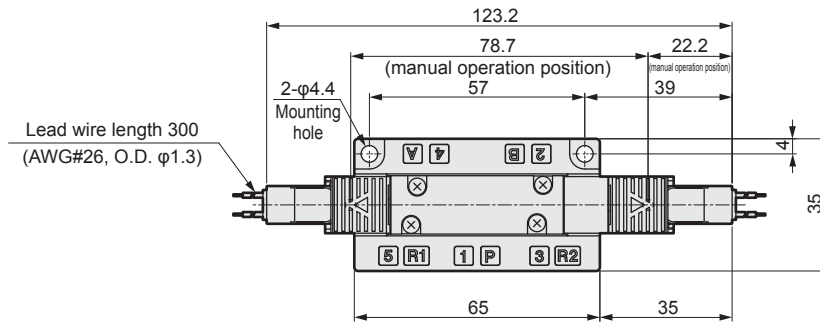
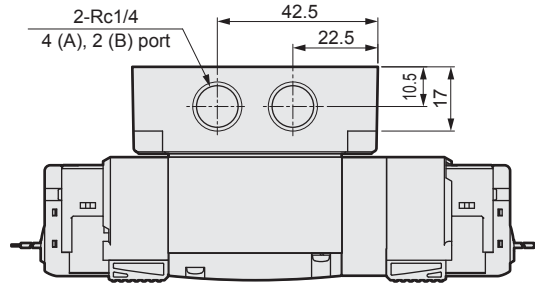
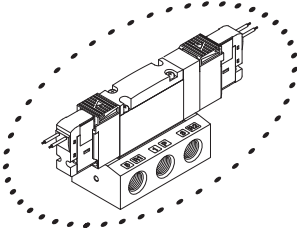
Discrete valve; base piping

Dimensions

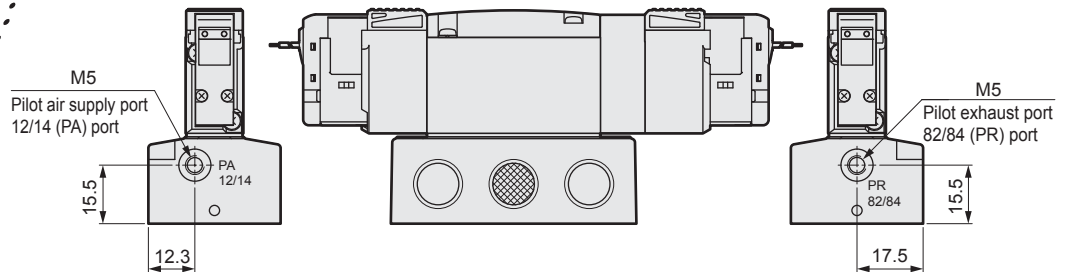
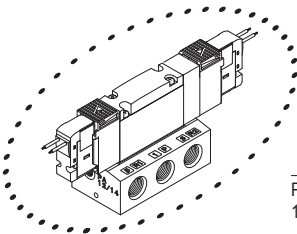


4GB2³_{5,4,3} 0R * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

- 3 position
Grommet lead wire (blank)



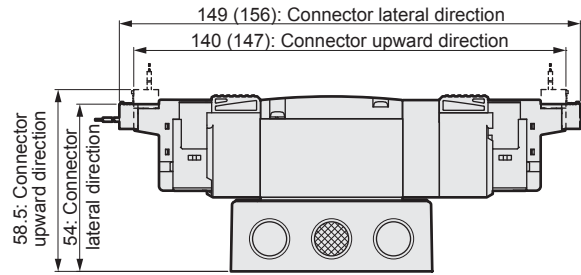
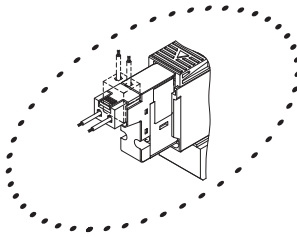
- External pilot type (K)



4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

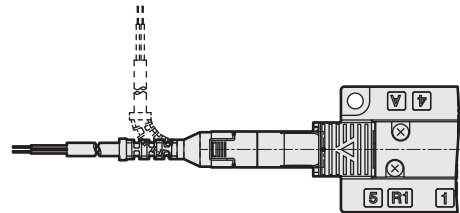
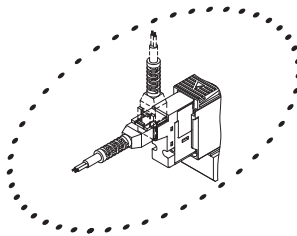
Dimensions

● E type connector type (E)



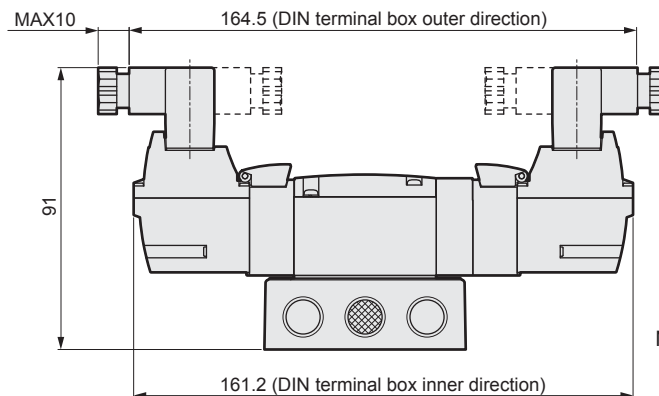
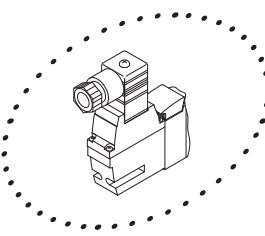
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

4GB3 Series

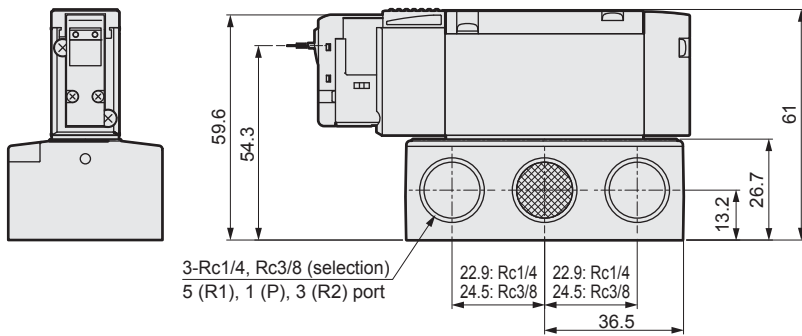
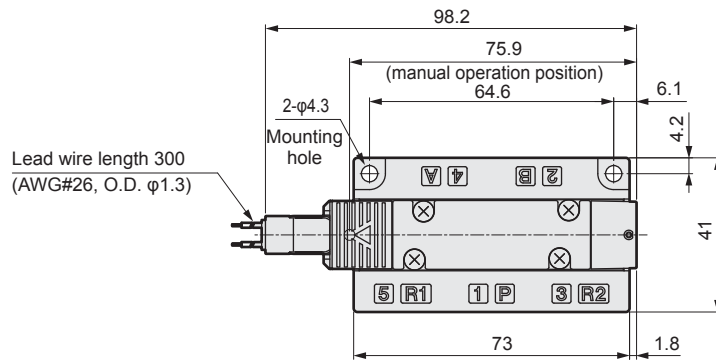
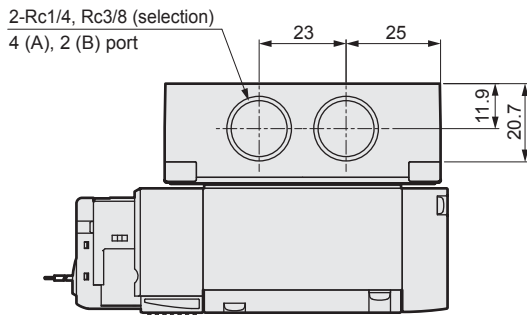
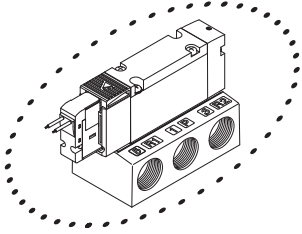
Discrete valve; base piping

Dimensions

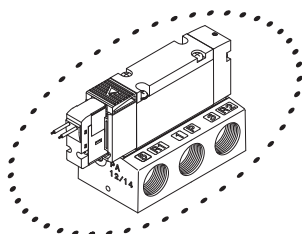


4GB310R * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

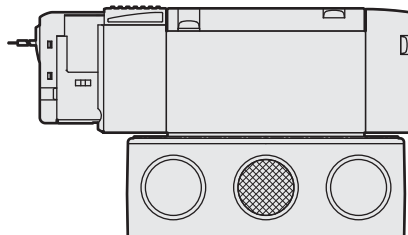
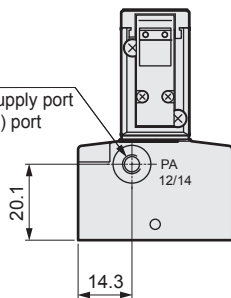
- 2-position single
- Grommet lead wire (blank)



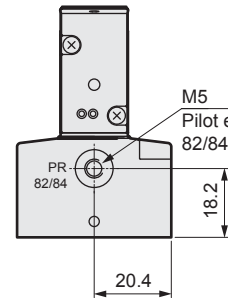
- External pilot type (K)



M5
Pilot air supply port
12/14 (PA) port

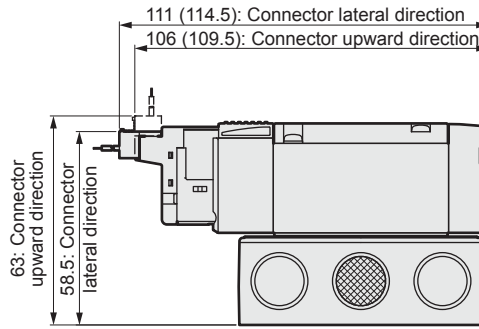
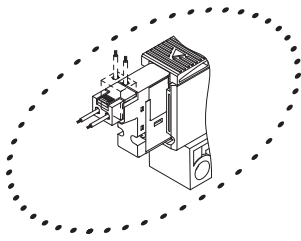


M5
Pilot exhaust port
82/84 (PR) port



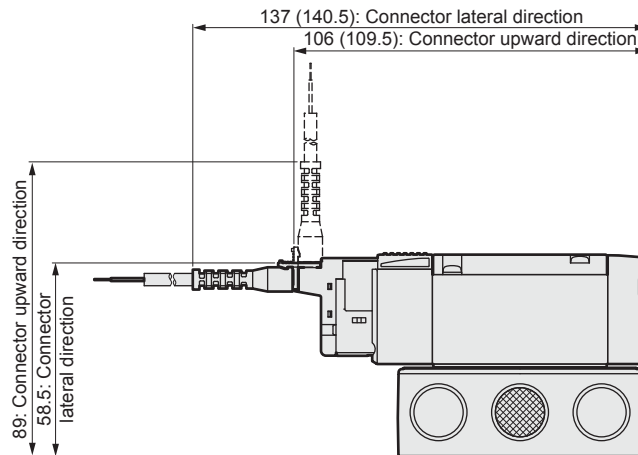
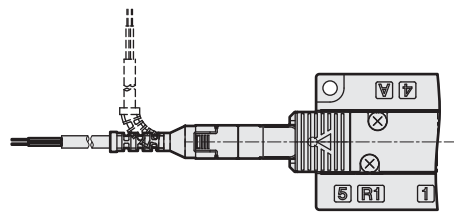
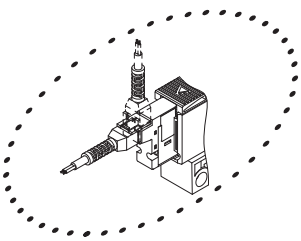
Dimensions

● E type connector type (E)



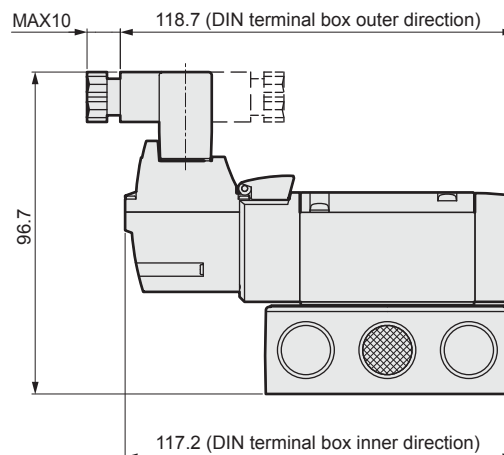
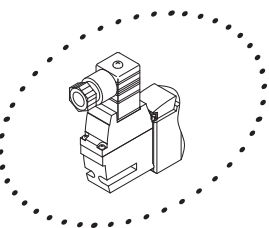
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB	M4GAB	MN4GAB	4GAB Master valve	4GD/E	M4GD/E	MN4GD/E	Technical data	Safety precautions	Manifold Specifications
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4GB3 Series

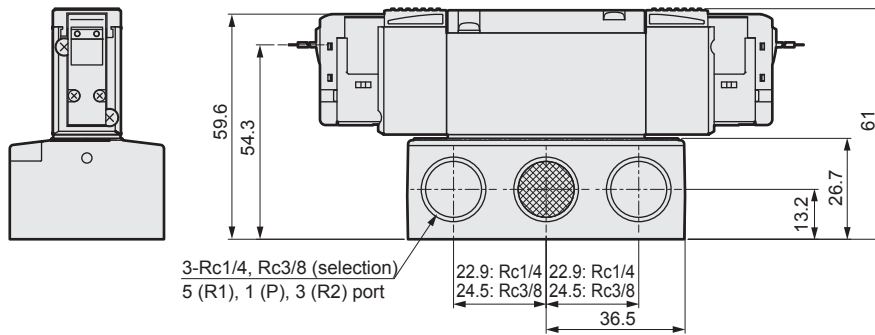
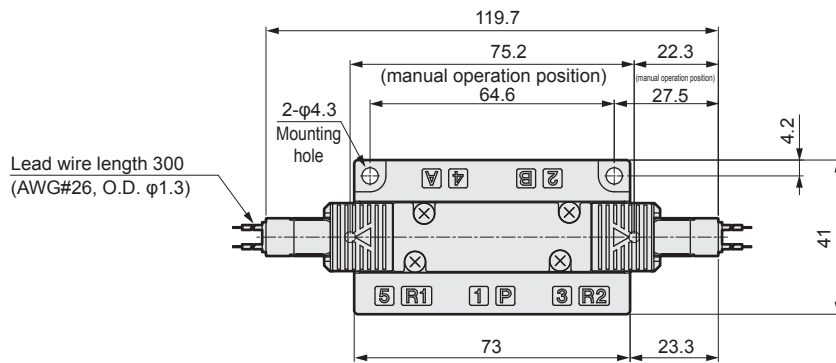
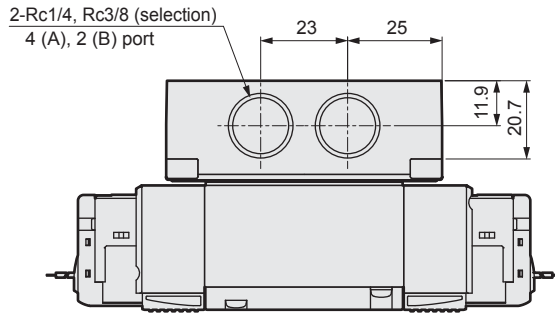
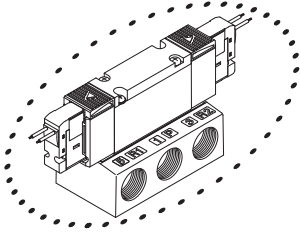
Discrete valve; base piping

Dimensions

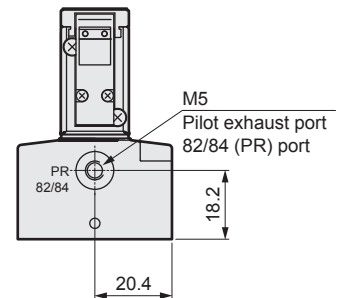
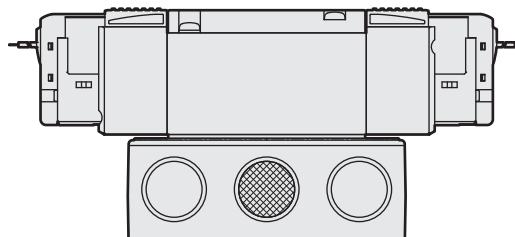
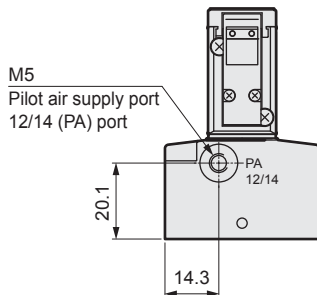
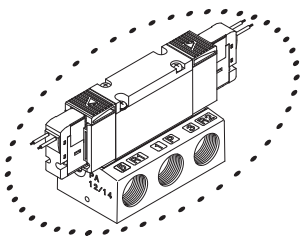


4GB320R * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

- 2-position single grommet lead wire (blank)

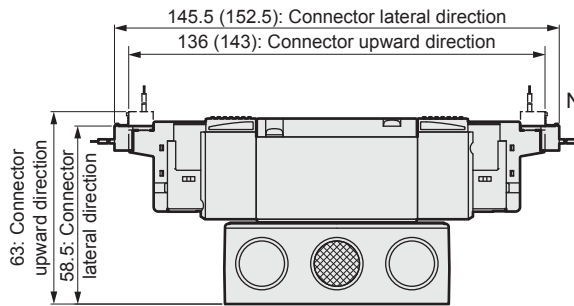
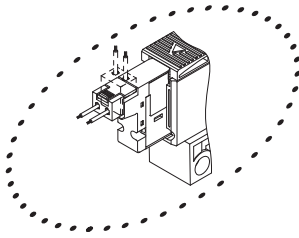


- External pilot type (K)



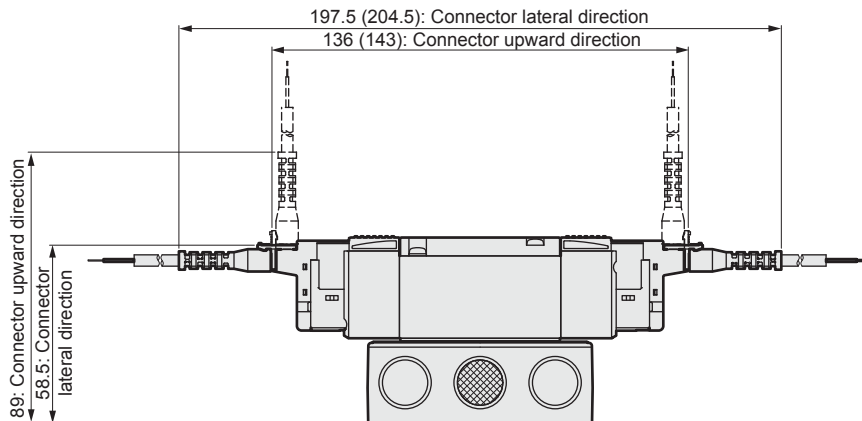
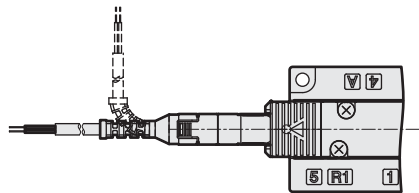
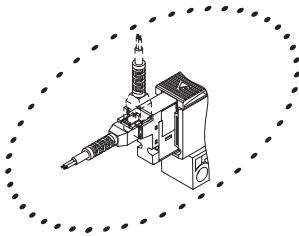
Dimensions

● E type connector type (E)



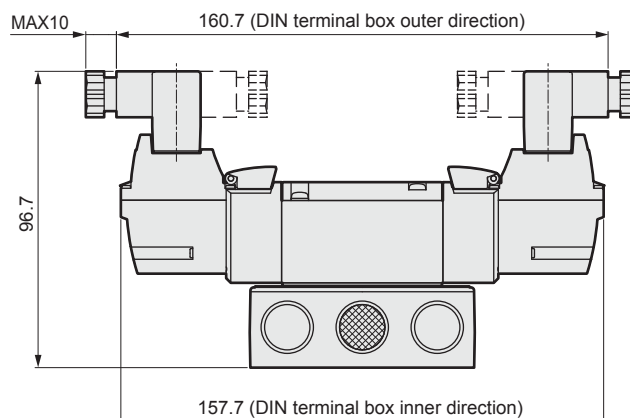
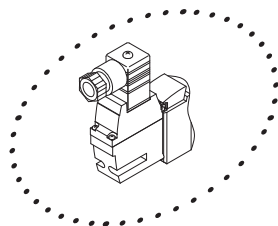
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

4GB3 Series

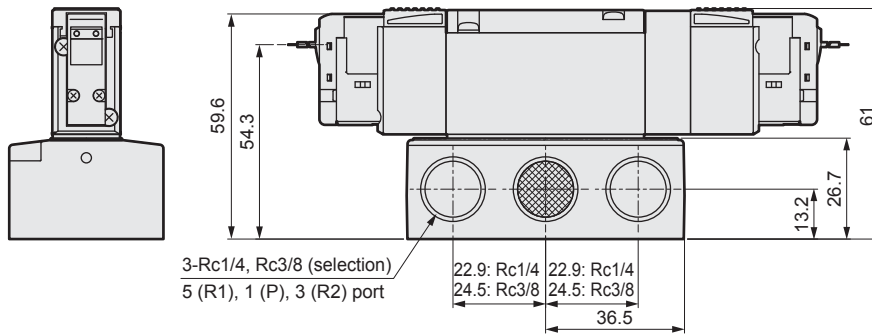
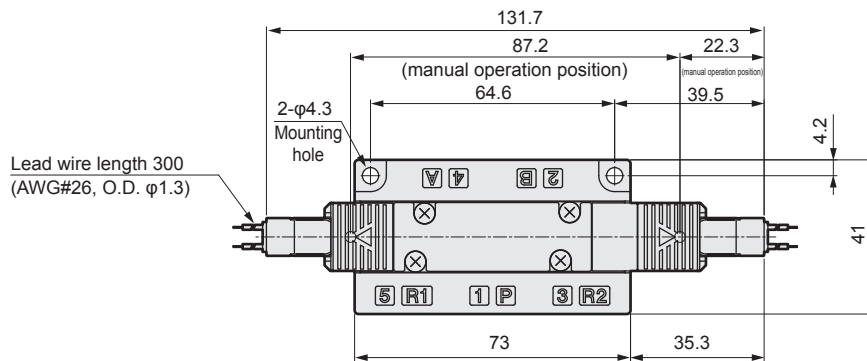
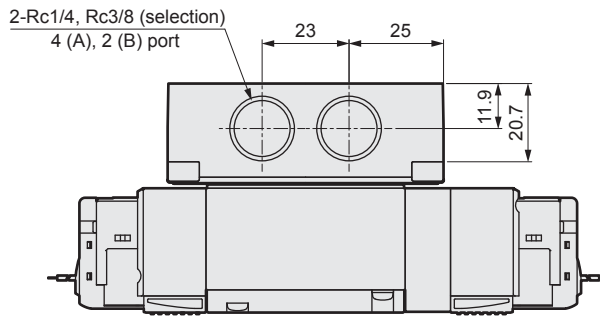
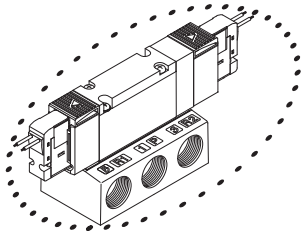
Discrete valve; base piping

Dimensions

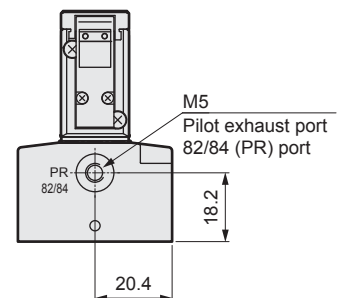
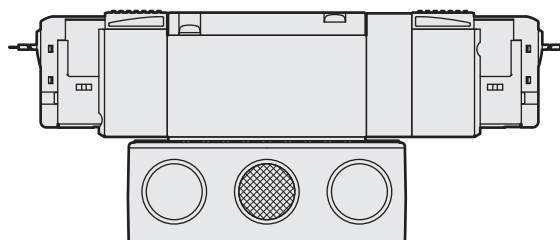
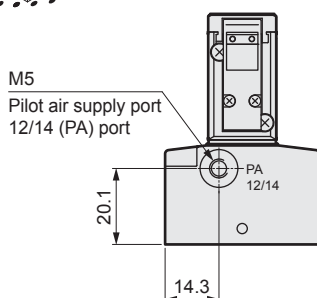
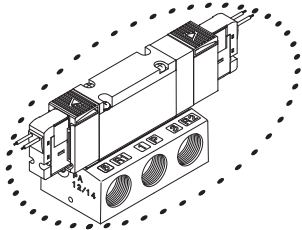


4GB3^{0R} * Please refer to page 80 and page 89 for the NPT threads and G threads specifications.

- 3 position
- Grommet lead wire (blank)

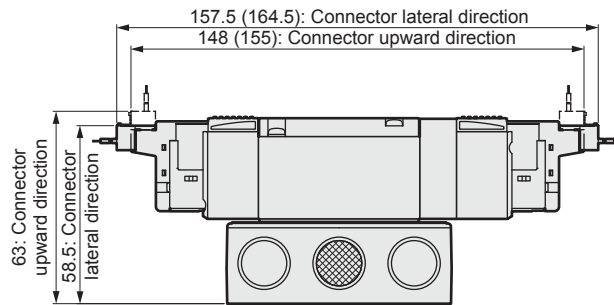
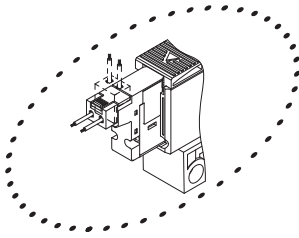


- External pilot type (K)



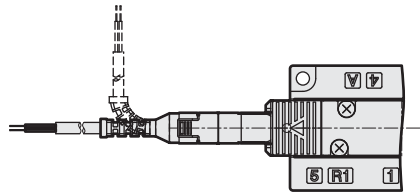
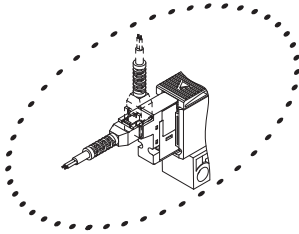
Dimensions

● E type connector type (E)

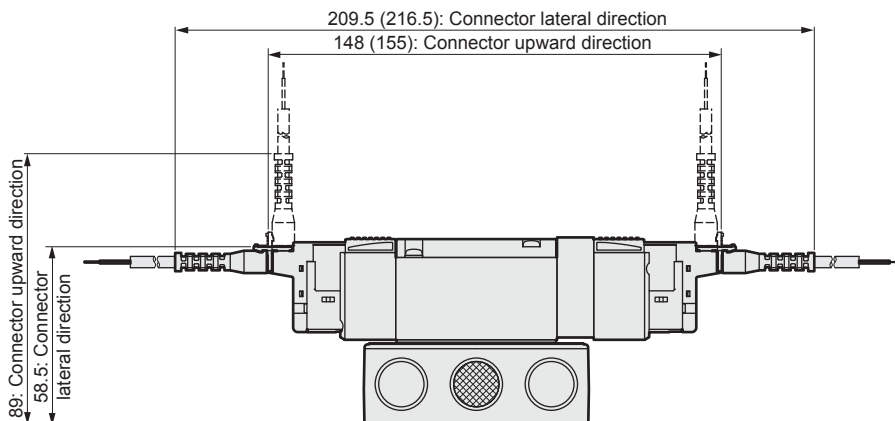


Note: Values in () apply for 100 VAC

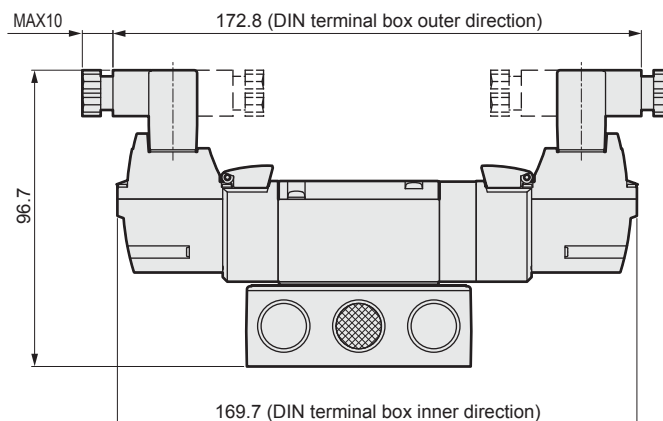
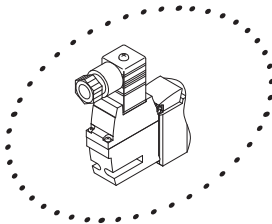
● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC



● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4G/A/B

M4G/A/B

MN4G/A/B

4G/A/B
Master valve

4G/D/E

M4G/D/E

MN4G/D/E

Technical data

Safety
precautions

Manifold
Specifications

3GB1 & 4GB1 Series

Discrete valve; base piping

Dimensions Port size; NPT thread

3GB1⁶⁶₆₇⁷⁶₇₇ 0R, 4GB1 0R

- 2-position single
- Grommet lead wire (blank)

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

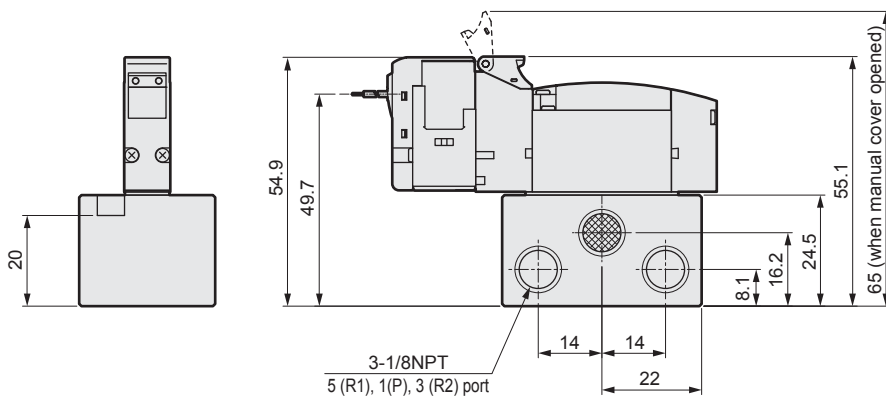
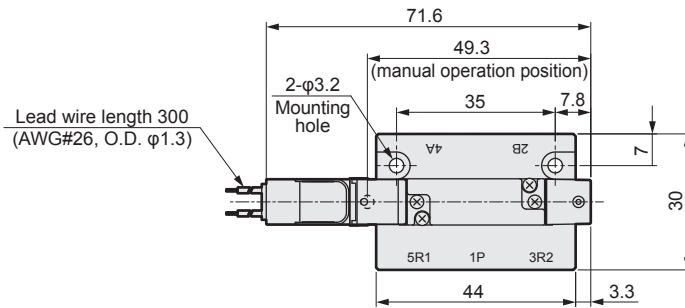
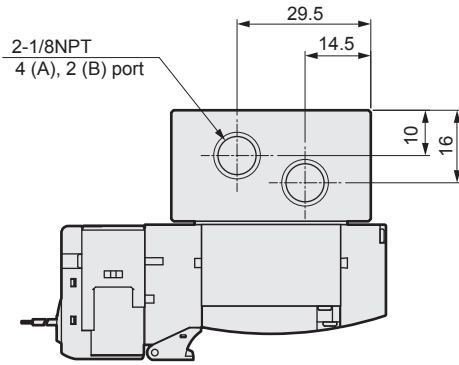
M4GD/E

MN4GD/E

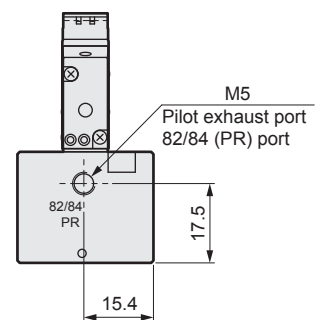
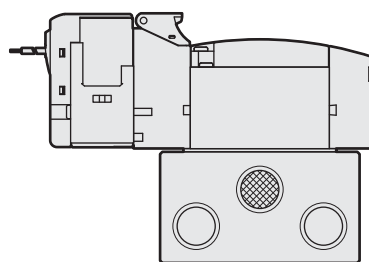
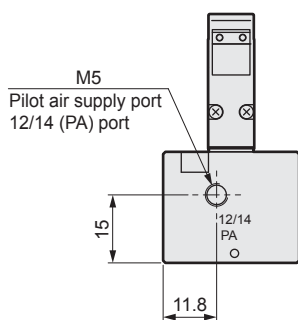
Technical data

Safety
precautions

Manifold
Specifications

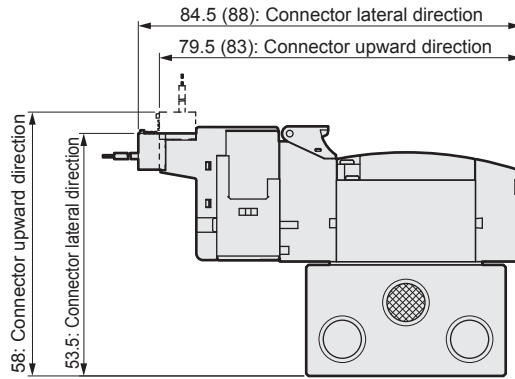


- External pilot type (K)



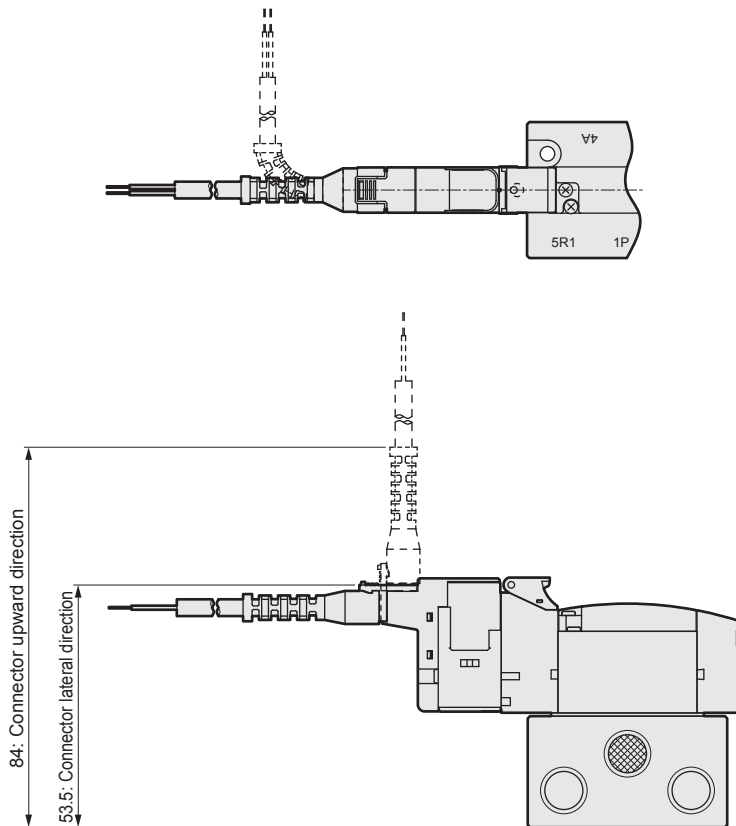
Dimensions Port size; NPT thread

- E type connector type (E)



Note: Values in () apply for 100 VAC.

- EJ type connector type (E**J)



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

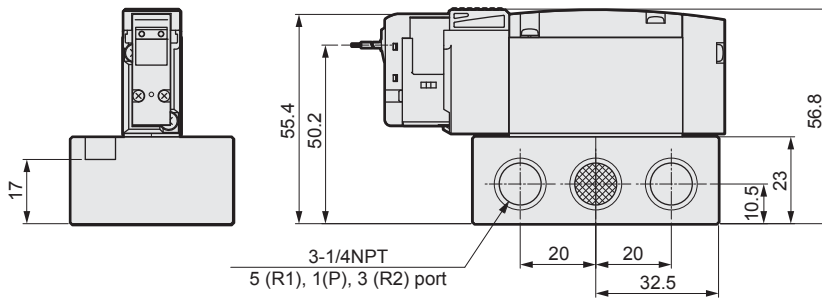
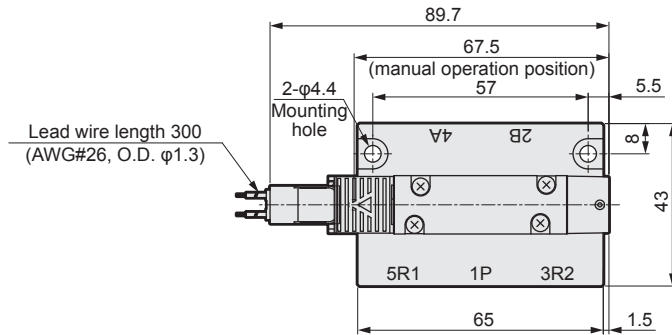
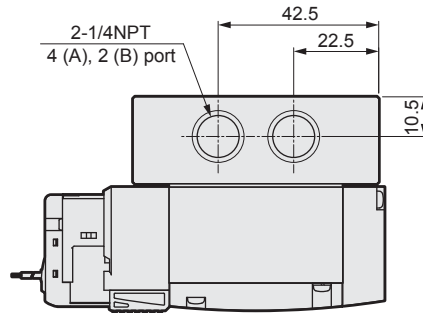
3GB2 & 4GB2 Series

Discrete valve; base piping

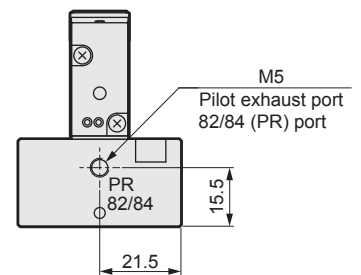
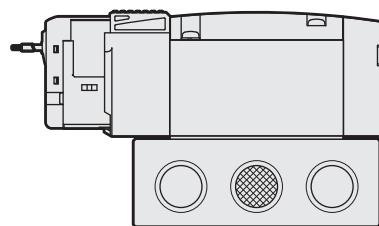
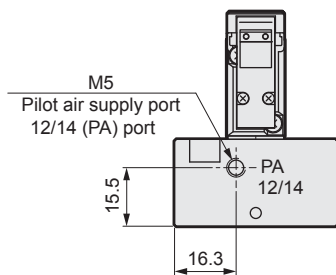
Dimensions Port size; NPT thread

3GB2⁸⁶₆₇^{0R}, 4GB2¹₄^{OR}

- 2-position single
Grommet lead wire (blank)

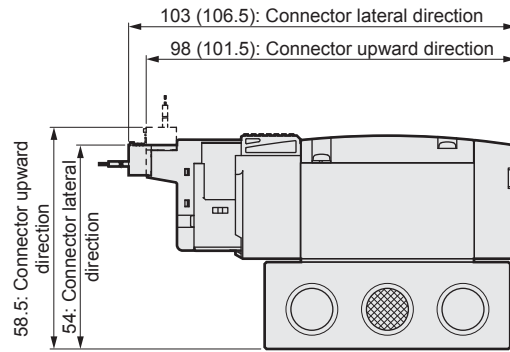


- External pilot type (K)



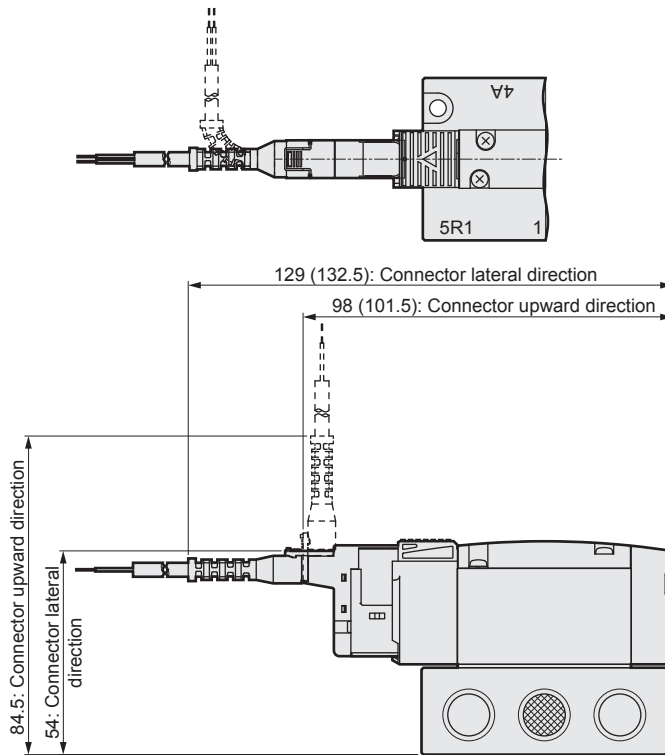
Dimensions Port size; NPT thread

● E type connector type (E)



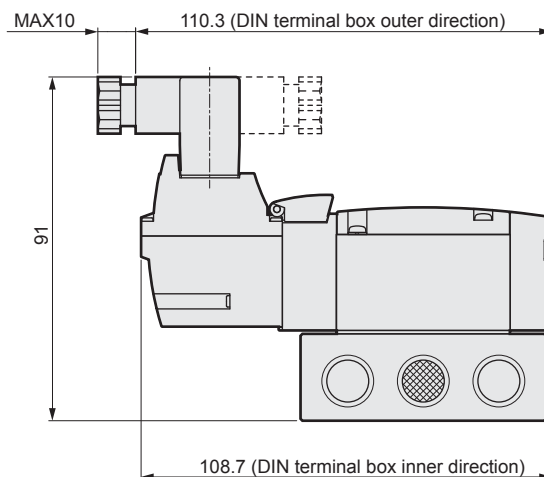
Note: Values in () apply for 100 VAC.

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

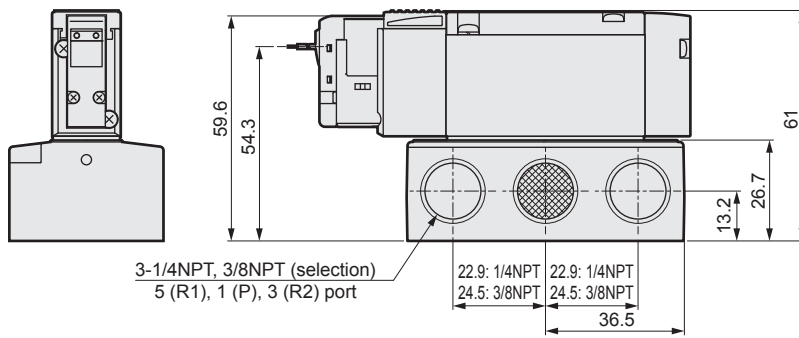
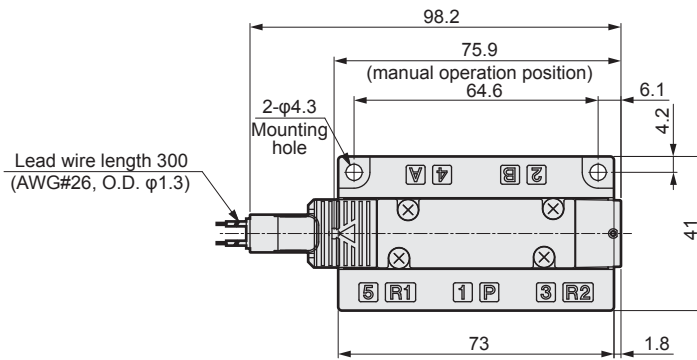
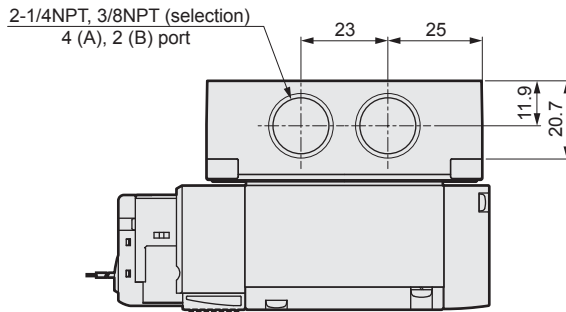
4GB3 Series

Discrete valve; base piping

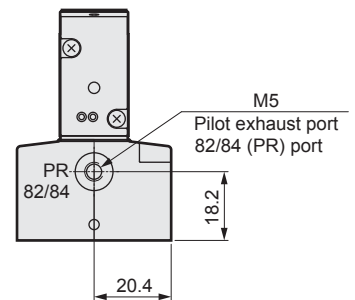
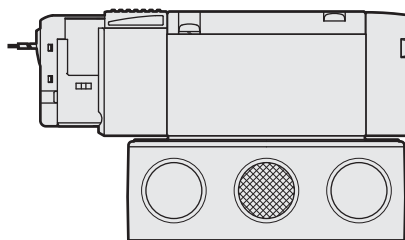
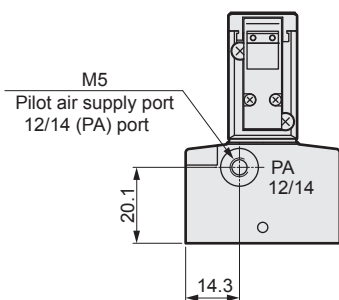
Dimensions Port size; NPT thread

4GB3 0R

- 2-position single
Grommet lead wire (blank)

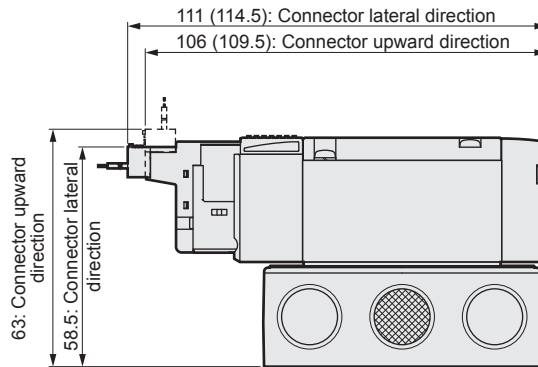


- External pilot type (K)



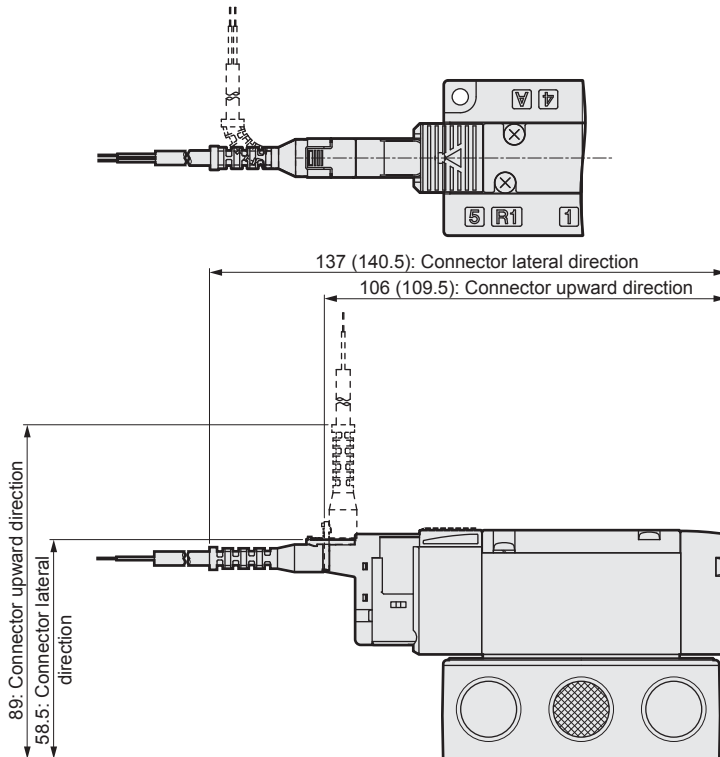
Dimensions Port size; NPT thread

● E type connector type (E)



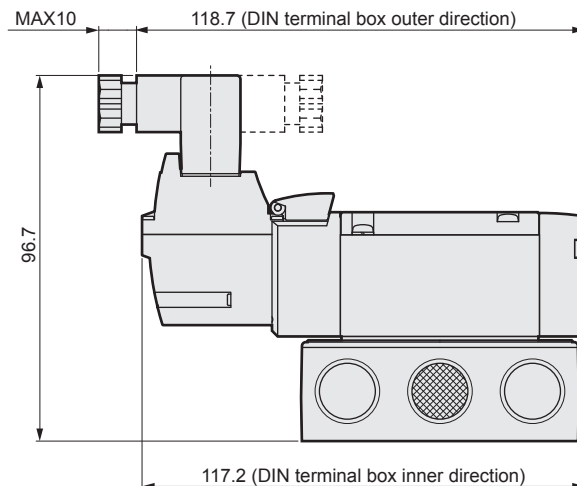
Note: Values in () apply for 100 VAC.

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB/B

M4GAB/B

MN4GAB/B

4GAB/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

3GB1 & 4GB1 Series

Discrete valve; base piping

Dimensions Port size; G thread

3GB1⁶⁶₆₇⁶⁶₇₆ 0R, 4GB1⁶⁶₇₇ 0R

- 2-position single
Grommet lead wire (blank)

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

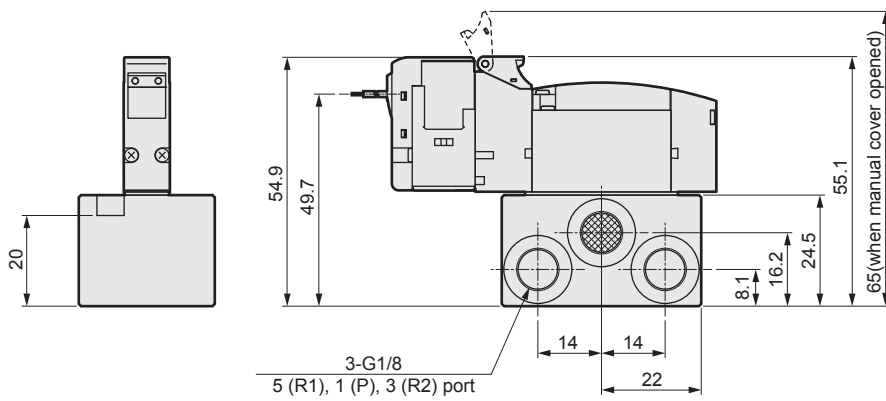
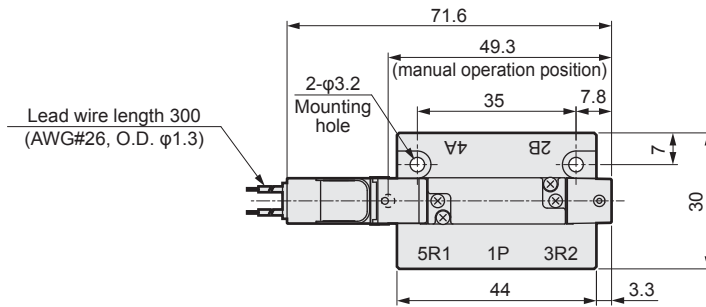
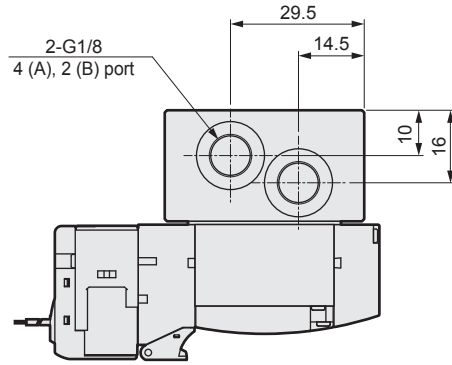
M4GD/E

MN4GD/E

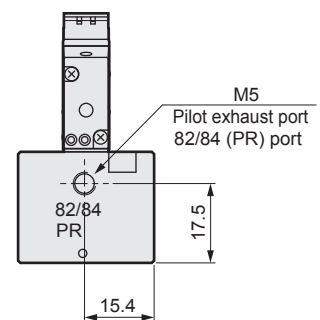
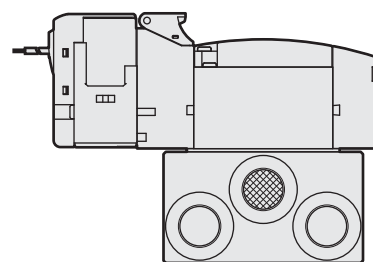
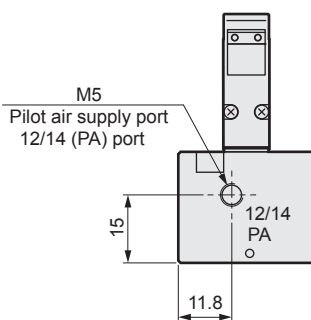
Technical data

Safety
precautions

Manifold
Specifications

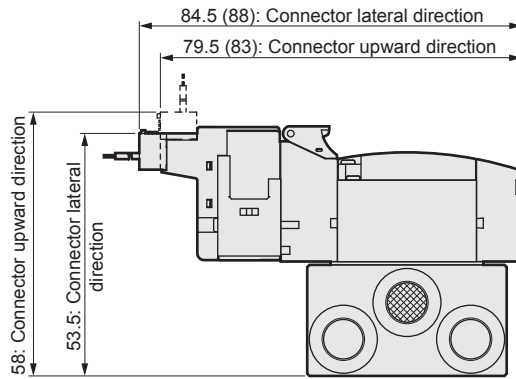


- External pilot type (K)



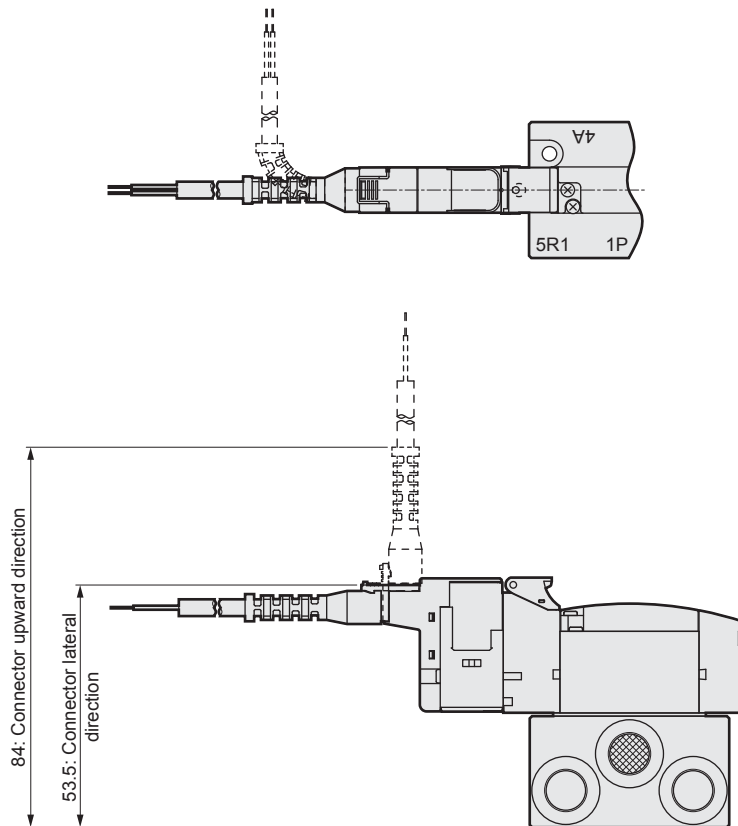
Dimensions Port size; G thread

- E type connector type (E)



Note: Values in () apply for 100 VAC.

- EJ type connector type (E**J)



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

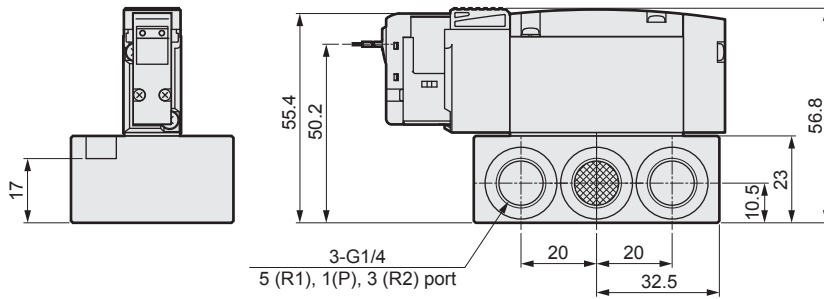
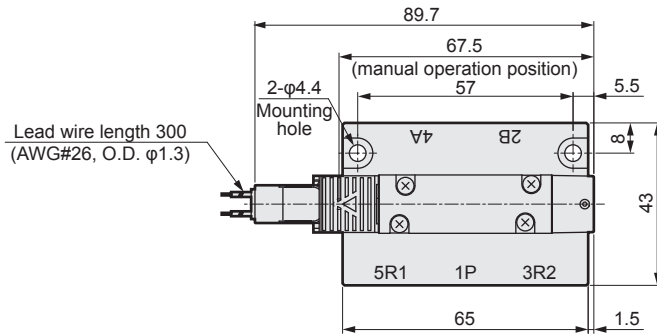
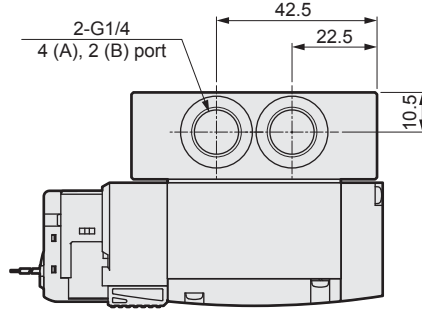
3GB2 & 4GB2 Series

Discrete valve; base piping

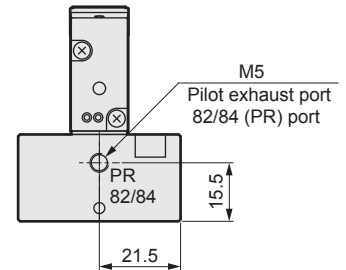
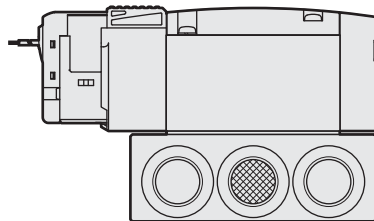
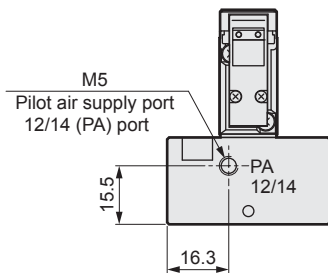
Dimensions Port size; G thread

3GB2⁸⁶₆₇^{0R}, 4GB2¹₀^{0R}

- 2-position single
Grommet lead wire (blank)

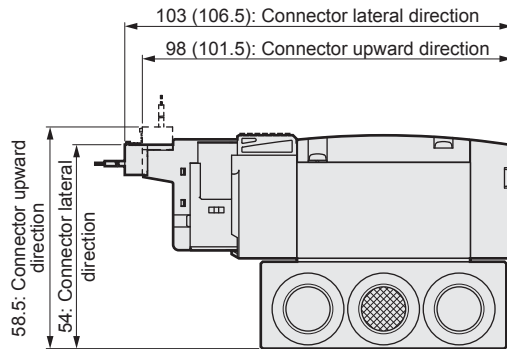


- External pilot type (K)



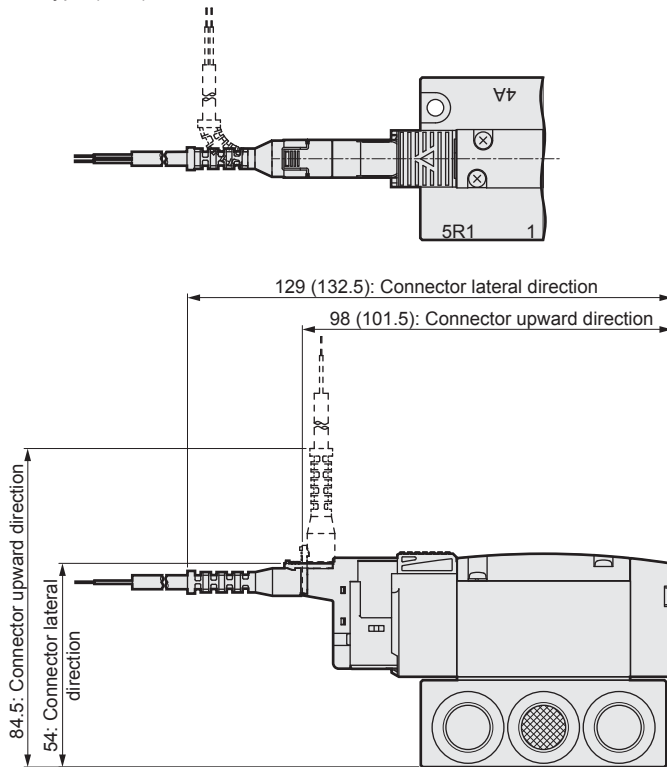
Dimensions Port size; G thread

● E type connector type (E)



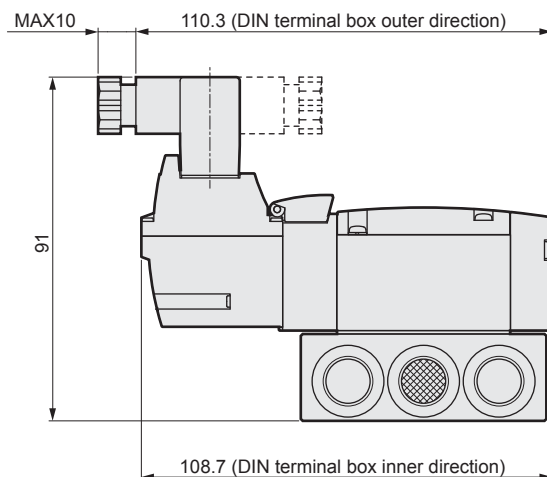
Note: Values in () apply for 100 VAC.

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

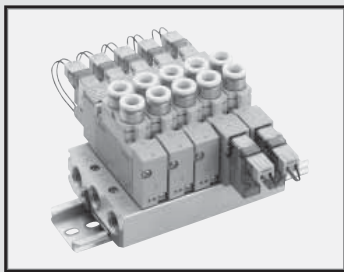
M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications



Individual wiring manifold
Body piping
Direct mount type/DIN rail mount type

M3GA1, 2, 3-(D) / M4GA1, 2, 3-(D) Series

● Applicable cylinder bore size: $\phi 20$ to $\phi 100$



Refer to Ending for details.



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

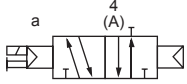
Technical data

Safety
precautions

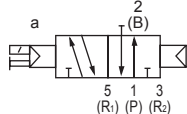
Manifold
Specifications

JIS symbol

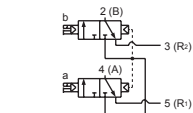
- 3 port valve
2-position single N.C. type



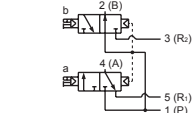
- 2-position single N.O. type



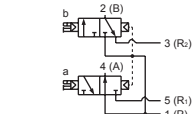
- Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



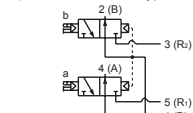
- (A side valve: N.C. type, B side valve: N.O. type)



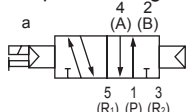
- (A side valve: N.O. type, B side valve: N.C. type)



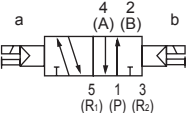
- (A side valve: N.O. type, B side valve: N.O. type)



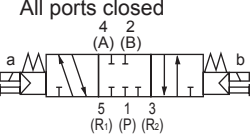
- 5 port valve
2-position single



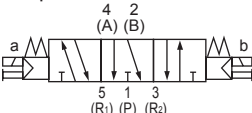
- 2-position double



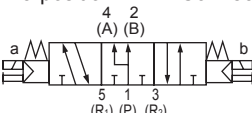
- 3-position
All ports closed



- 3-position A/B/R Connection



- 3-position P/A/B Connection



Manifold common specifications

Descriptions		Integrated base
Manifold type		Integrated base
Mounting method		Direct mount type/DIN rail mount type
Supply and exhaust method		Common supply/common exhaust (check valve integrated)
Pilot exhaust method	Internal pilot	Main valve/pilot valve common exhaust (Pilot exhaust check valve integrated)
	External pilot	Main valve/pilot valve individual exhaust
Piping direction		Valve top direction
Valve type and operation method		Pilot operated soft spool valve
Working fluid		Compressed air
Max. working pressure MPa		0.7
Min. working pressure MPa		0.2 (Note 3)
Proof pressure MPa		1.05
Ambient temperature °C		-5 to 55 (no freezing)
Fluid temperature °C		5 to 55
Manual operating device		Non-locking/locking common type (standard)
Lubrication		Note 1 Not required
Degree of protection		Note 2 Dust proof
Vibration resistance m/s ²		50 or less
Shock resistance m/s ²		300 or less
Atmosphere		Containing corrosive gas is not permissible

Note 1 Use the turbine oil Class 1 ISO VG32 if lubricated. Excessive or intermittent lubrication results in unstable operation.

Note 2 Avoid water drops or oil, etc. during use. IP65 (jet-proof type) applies for DIN terminal box specifications. Note that the specified adaptive cord outer diameter and tightening torque must be used for fixing.

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

Electric specifications

Descriptions							
Rated voltage		24 VDC	12 VDC	5 VDC	3 VDC	100 VAC	200 VAC
Voltage fluctuation range		±10%					
Holding current A (Note 4)	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)
	With low heat energy-saving circuit	0.005	0.010	-	-	-	-
Power consumption W (Note 4)	Standard	0.35 (0.40)		0.35 (0.40)		-	
	With low heat energy-saving circuit	0.1		-		-	
Apparent power VA (Note 4) (Note 5)	Standard	-		-		0.93 (0.98)	1.26
		-		-		-	
Thermal class		B					
Surge suppressor		Option					
Indicator		Light (option)					

Note 4 Values in () apply when a light is attached. In addition, the low heat energy-saving circuits only have a light attached.

Note 5 200 VAC is the DIN terminal box (with light) value.

Individual specifications

Descriptions		M3GA1/M4GA1		M3GA2/M4GA2		M3GA3/M4GA3	
		Direct mount	DIN rail mount	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	20 stations	16 stations	20 stations	16 stations
Port size	Rc thread, M5	A/B port		Push-in fitting $\phi 4, \phi 6, \phi 8$ Rc1/8		Push-in fitting $\phi 6, \phi 8, \phi 10$ Rc1/4	
		P/R1/R2 port		Rc1/8		Rc1/4	
	NPT thread, M5	A/B port		Push-in fitting $\phi 1.8$ $\phi 5/32$ M5		Push-in fitting $\phi 1/4$ $\phi 5/16$ 1/8NPT	
		P/R1/R2 port		1/8NPT		1/4NPT	
	G thread, M5	A/B port		Push-in fitting $\phi 4, \phi 6$ M5		Push-in fitting $\phi 4, \phi 6, \phi 8$ G1/8	
		P/R1/R2 port		G1/8		G1/4	
Manifold base formula (n: station no.) g	Standard	23n+52	25n+60	47n+64	49n+92	74n+88	76n+117
	External pilot	36n+105	38n+113	88n+135	90n+163	136n+194	138n+223

Note 5: This is a available consult factory order.

Refer to "Cautions for Mounting the DIN Rail" (page 630), and select the manifold.

For 10 or over manifold station no. (5 stations for 4G3), use ports on both sides for air supply and exhaust. The manifold base weight is the value for thread specifications.

M3GA1, 2, 3/M4GA1, 2, 3 Series

Individual wiring manifold; body piping

Flow characteristics

Model no.	Valve Position	P→A/B		A/B→R1/R2		
		C [dm³/(s/bar)]	b	C [dm³/(s/bar)]	b	
M3GA1 M4GA1	Dual 3 port valve integrated type	0.86	0.31	1.1 (0.66)	0.19 (0.22)	
	2-position	0.99	0.20	1.2 (0.70)	0.20 (0.12)	
	3-position	All ports closed	0.94	0.23	1.1 -	0.20 -
		ABR connection	0.93	0.18	1.3 (0.70)	0.23 (0.02)
PAB connection		1.1	0.28	1.1 -	0.23 -	
M3GA2 M4GA2	Dual 3 port valve integrated type	1.7	0.40	2.3 (1.7)	0.29 (0.32)	
	2-position	2.3	0.36	2.9 (1.7)	0.24 (0.33)	
	3-position	All ports closed	2.1	0.35	2.5 -	0.32 -
		ABR connection	2.2	0.37	2.9 (1.8)	0.32 (0.29)
PAB connection		2.4	0.34	2.5 -	0.33 -	
M3GA3 M4GA3	2-position	3.2	0.37	3.8 (2.5)	0.13 (0.28)	
	3-position	All ports closed	2.9	0.35	3.3 -	0.35 -
		ABR connection	3.0	0.34	3.8 (2.6)	0.12 (0.27)
		PAB connection	3.3	0.30	3.3 -	0.32 -

Note 1: Effective sectional area S and sonic conductance C are converted as $S \doteq 5.0 \times C$.

Note 2: Values in () apply when a check valve is attached.

Ozone proof specifications / Cutting oil proof type specifications

Select the option "A" of (E) in how to order on page 93.

Clean room specifications (Catalog No. CB-033S)

- Particle generation preventing structure for use in clean rooms

** - Voltage - P7*

Specifications for secondary battery (Catalog No. CC-947A)

- In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section

** - Voltage - P4

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA1/2/3 Series

Individual wiring manifold; body piping

How to order

Manifold model no.

M **4GA1** **1** **0R** - **C6** - **E2** **H** **D** - **3**

3 port manifold model no.

M **4GA1** **1** **0R** - **C6** - **E2** **H** **D** - **3**

● Discrete valve for mounting base

4GA1 **1** **9R** - **C6** - **E2** **H** - **3**

● Discrete 3 port valve for mounting base

4GA1 **1** **9R** - **C6** - **E2** **H** - **3**

B Valve Position

A Model no.

C Port size

D Electrical connections

E Option

F Mount type

G Station no.

H Voltage

* Always indicate "Manifold specifications" (page 200 to 214).

		A Model No.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Valve Position							
1	2-position single				●	●	●
2	2-position double				●	●	●
3	3-position all ports closed				●	●	●
4	3-position ABR connection				●	●	●
5	3-position PAB connection				●	●	●
1	2-position single normally closed Note 1	●	●	●			
11	2-position single normally open Note 1	●	●	●			
66	Dual 3 port valve integrated type Note 1, 2	●	●	A side valve: Normally closed			
67				B side valve: Normally closed			
76		●	●	A side valve: Normally open			
77				B side valve: Normally open			
8	Mix manifold (In case of multiple Valve Positions)	●	●	●	●	●	●
C Port size							
Port	4 (A) /2 (B) port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8					
CF	φ1.8 barbed fitting for fiber tube (applicable tube UP-9102-**) (2)			(2)			
C18	φ1.8 push-in fitting for fiber tube (applicable tube UP-9402-**) (2)			(2)			
C4	φ4 push-in fitting (2) (3)			(2) (3)			
C6	φ6 push-in fitting (2) (3) (4)			(2) (3) (4)			
C8	φ8 push-in fitting (3) (4)			(3) (4)			
C10	φ10 push-in fitting (4)			(4)			(4)
CX	Push-in fitting mix Note 3 (2) (3) (4)			(2) (3) (4)			
M5	M5 (1)			(1)			
06	Rc1/8 (2)			(2)			
08	Rc1/4 (3)			(3)			(3)
Port	4 (A) /2 (B) port	P/R1/R2 port (5) = 1/8NPT (6) = 1/4NPT (7) = 3/8NPT					
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) (7)			(6) (7)			
C10N	φ3/8 push-in fitting (7)			(7)			(7)
CXN	Push-in fitting mix Note 3 (5) (6) (7)			(5) (6) (7)			
M5N	M5 (5)			(5)			
06N	1/8NPT (6)			(6)			(6)
08N	1/4NPT Note 4 (7)			(7)			(7)
Port	4 (A) /2 (B) port	P/R1/R2 port (8) = G1/8 (9) = G1/4					
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)			
CXG	Push-in fitting mix Note 3 (8) (9)			(8) (9)			
M5G	M5 (8)			(8)			
4G	G1/8 (9)			(9)			

⚠ Note on model no. selection

Note 1 Select M4GA*80R when mixing with 3, 5 port valves.
Select M3GA*80R when mixing with the masking plate.

Note 2 Combination with the external pilot (K) is not available.
Dimensions are the same as the respective 2-position double solenoid.

Note 3 The push-in fitting cannot be mixed with the discrete valve's 4 (A) or 2 (B) port.

Note 4 Available consult factory order.

4GA/B
M4GA/B
MN4GA/B
4GA/B Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4GA1/2/3 Series

Individual wiring manifold; body piping

		A Model No.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
D Electrical connections							
Blank	Grommet lead wire (300 mm)	Note 13	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/light	Note 14	●	●	●	●	●
BN	DIN terminal box (Pg7) (without terminal box) with surge suppressor	Note 14	●	●	●	●	●
E type connector (upward/lateral direction common)							
E0	Lead wire (300 mm)	Note 15	●	●	●	●	●
E00	Lead wire (500mm)	Note 15	●	●	●	●	●
E01	Lead wire (1000mm)	Note 15	●	●	●	●	●
E02	Lead wire (2000mm)	Note 15	●	●	●	●	●
E03	Lead wire (3000mm)	Note 15	●	●	●	●	●
E0N	Without lead wire (without socket)	Note 15	●	●	●	●	●
E1	Without lead wire (with socket/terminal)	Note 15	●	●	●	●	●
E2	Lead wire (300 mm) With surge suppressor/light		●	●	●	●	●
E20	Lead wire (500mm) With surge suppressor/light		●	●	●	●	●
E21	Lead wire (1000mm) With surge suppressor/light		●	●	●	●	●
E22	Lead wire (2000mm) With surge suppressor/light		●	●	●	●	●
E23	Lead wire (3000mm) With surge suppressor/light		●	●	●	●	●
E2N	Without lead wire (without socket) With surge suppressor/light		●	●	●	●	●
E3	Without lead wire (with socket/terminal) With surge suppressor/light		●	●	●	●	●
EJ type connector (socket with cover, upward/lateral direction common)							
E01J	Lead wire (1000mm)	Note15	●	●	●	●	●
E02J	Lead wire (2000mm)	Note15	●	●	●	●	●
E03J	Lead wire (3000mm)	Note15	●	●	●	●	●
E21J	Lead wire (1000mm) With surge suppressor/light		●	●	●	●	●
E22J	Lead wire (2000mm) With surge suppressor/light		●	●	●	●	●
E23J	Lead wire (3000mm) With surge suppressor/light		●	●	●	●	●
E Option							
Blank	Non-locking/locking common manual override		●	●	●	●	●
M	Non-locking manual override		●	●	●	●	●
H	With check valve	Note 5	●	●	●	●	●
K	External pilot	Note 6	●	●	●	●	●
A	Ozone/cutting oil proof		●	●	●	●	●
S	Surgeless	Note 7	●	●	●	●	●
E	Low heat and energy saving circuit	Note 7, Note 8	●	●	●	●	●
F	A/B port filter integrated	Note 9	●	●	●	●	●
Z1	Air supply spacer	Note 10	●	●	●	●	●
Z2	In stop valve spacer	Note 10, Note 11	●	●	●	●	●
Z3	Exhaust spacer	Note 10	●	●	●	●	●
F Mount type							
Blank	Direct mount type		●	●	●	●	●
D	DIN rail mount type		●	●	●	●	●
G Station no.							
2	2 stations		●	●	●	●	●
to	to		●	●	●	●	●
20	Refer to page 90 for the max. station no. for each model.		●	●	●	●	●
H Voltage							
1	100 VAC (rectifier integrated)		●	●	●	●	●
2	200 VAC (rectifier integrated)	Note12	●	●	●	●	●
3	24 VDC		●	●	●	●	●
4	12 VDC		●	●	●	●	●
7	3 VDC		○	○	○	○	○
8	5 VDC		○	○	○	○	○

is not available.

○ Contact CKD for price and availability.

Note 5 3-position all ports closed and PAB connection are not provided with check valve (H).

Refer to page 628 for details on check valve.

Note 6 Contact CKD when using a vacuum with the external pilot (K).

Note 7 Only the E2* type, E2* J type connector and 12/24 VDC are supported.

In addition, the surgeless "S" and low heat energy-saving circuit "E" cannot be selected at the same time.

Note 8 This is surgeless specifications.

Note 9 The P port has a filter built inside as a standard.

Note10 Specify the spacer mounting position and quantity in manifold specifications.

Stacking multiple spacers is not supported.

Combination with the masking plate is not supported.

Refer to page 180 to 184 for details.

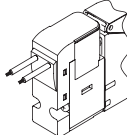
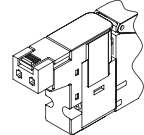
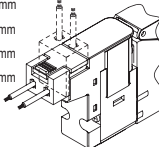
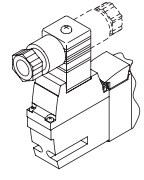
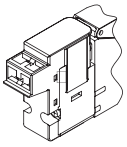
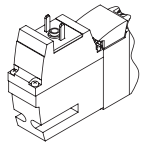
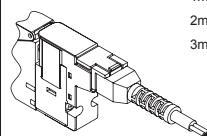
Note 11 Combination with the external pilot (K) is not available.

Note 12 Only the DIN terminal box are supported.

Note 13 Grommet lead wire specifications are only for DC voltage.

Note 14 Supports AC voltage and 12/24 VDC. The light is also attached to the terminal box.

Note 15 AC voltage comes with a rectifier circuit.

Electrical connections		Discrete valve/individual wiring manifold	
Blank	Grommet lead wire	E1 E3	E type connector with socket/terminal
● Lead wire length 300mm			
E0 E2	E type connector	B	DIN terminal box
● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm			
E0N E2N	E type connector without socket	BN	DIN terminal box (without terminal box)
			
E0*J E2*J	EJ type connector		
● Lead wire length 1m 2m 3m			

4GAB

M4GA/B

MN4GA/B

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

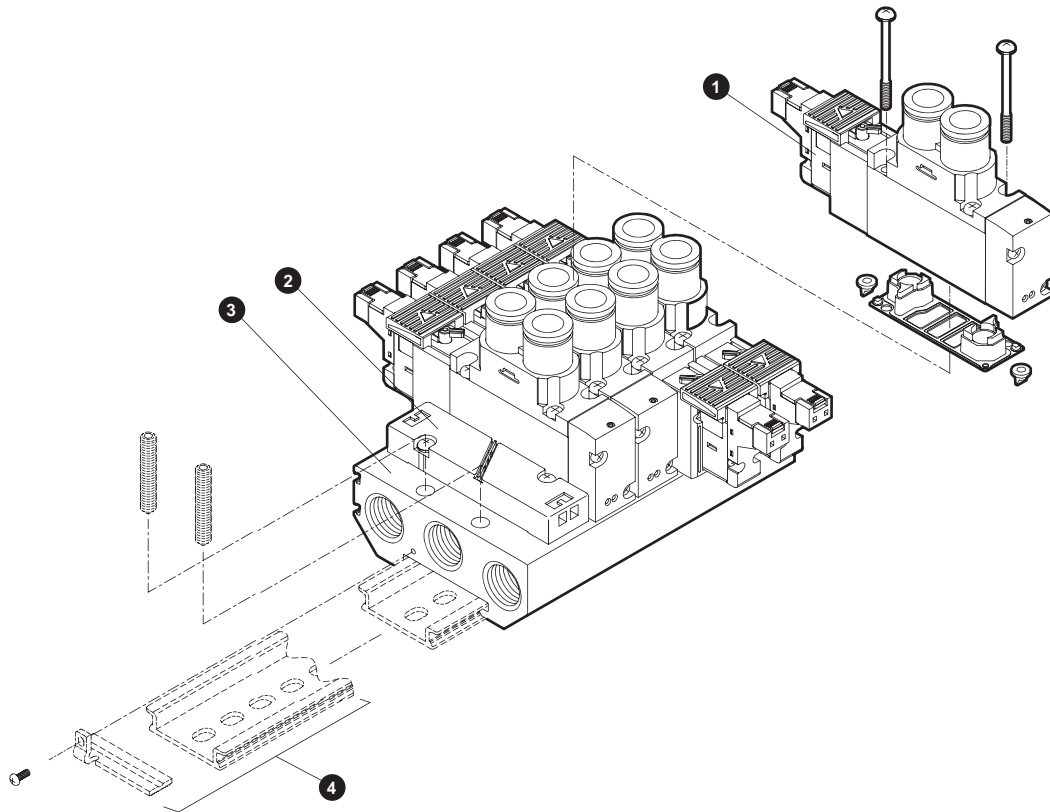
Safety
precautions

Manifold
Specifications

M4GA1/2/3 Series

Individual wiring manifold; body piping

Manifold components explanation and parts list



Main components list

No.	Component name	Model no.	Descriptions	Remarks
1	Discrete valve for mounting base	4GA*9R - Port size - Electrical connections - Option - Voltage Valve Position Series flow rate size	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 92
2	Masking plate	3G1 & 4G1 4G1R-MP 3G2 & 4G2 4G2R-MP 3G3 & 4G3 4G3R-MP	Masking plate Gasket Set screw 2	*3G3 & 4G3 has two PR check valves.
3	Manifold base assembly	M4GA*R - 00 - Option - Station no. Series flow rate size	Manifold base	
4	DIN rail kit			Details on page 191

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.
-	Coil assembly	4GR - Electric wire Connection - * - COIL * Voltage Blank (standard) A: Ozone/cutting oil proof Select from (D) Electrical connections on page79	-	Cartridge type Push-in fitting and related parts	4G1 φ1.8 barbed type 4G1R-JOINT-CF φ1.8 straight type 4G1R-JOINT-C18 φ4 straight type 4G1R-JOINT-C4 φ6 straight type 4G1R-JOINT-C6 φ1/8 straight type 4G1R-JOINT-C6 φ5/32 straight type 4G1R-JOINT-C4N Plug cartridge 4G1R-JOINT-CPG
-	E type connector socket assembly	4GR - SOCKET - ASSY - Electric wire Connection - Voltage			4G2 φ4 straight type 4G2R-JOINT-C4 φ6 straight type 4G2R-JOINT-C6 φ8 straight type 4G2R-JOINT-C6 φ1/4 straight type 4G2R-JOINT-C6N φ5/16 straight type 4G2R-JOINT-C8N Plug cartridge 4G2R-JOINT-CPG
-	EJ type connector socket assembly	4GR - SOCKET - ASSY - Electric wire Connection			4G3 φ6 straight type 4G3R-JOINT-C6 φ8 straight type 4G3R-JOINT-C8 φ10 straight type 4G3R-JOINT-C10 φ5/16 straight type 4G3R-JOINT-C8N φ3/8 straight type 4G3R-JOINT-C10N Plug cartridge 4G3R-JOINT-CPG

MEMO

4GAB	M4GA/B	MN4GA/B	4GAB Master valve	4GD/E	M4GD/E	MN4GD/E	Technical data	Safety precautions	Manifold Specifications
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M4GA1 Series

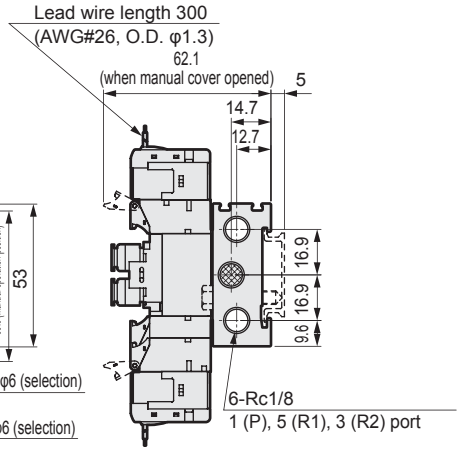
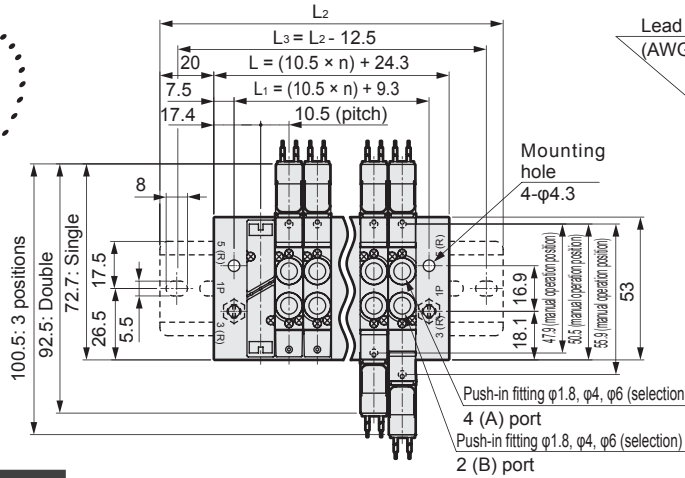
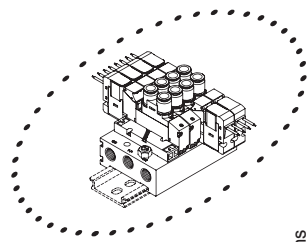
Individual wiring manifold; body piping

Dimensions 

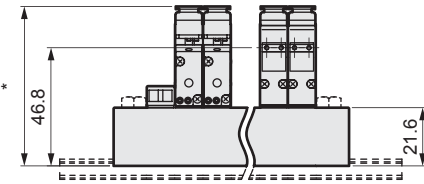
M4GA1

- Grommet lead wire (blank)

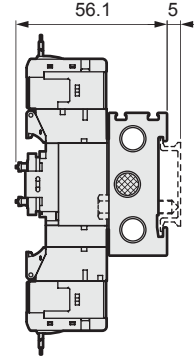
*For 2-position single 3 port valve, the port A or port B is a plug.
The dimension of dual 3 port valve integrated type is the same as that of the double type.



Push-in fitting Port size	* Dimensions
φ1.8	54
φ4	58
φ6	59.2
φ1/8	58.5
φ5/32	58



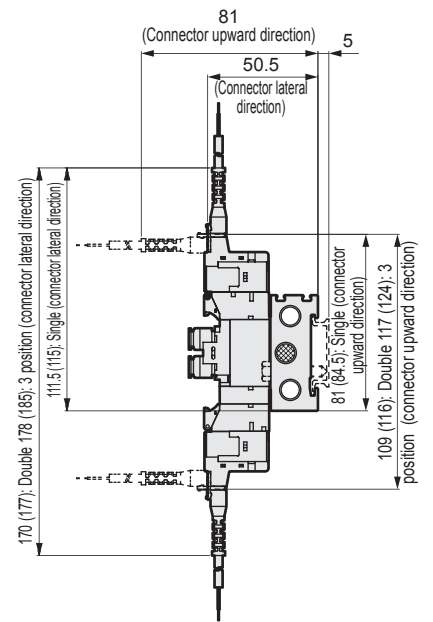
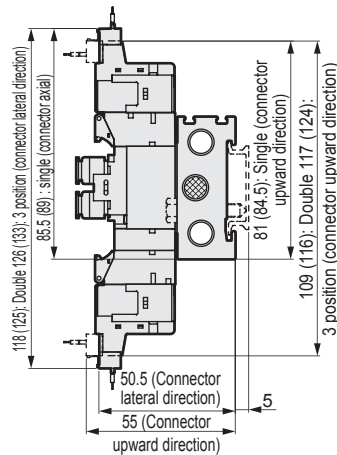
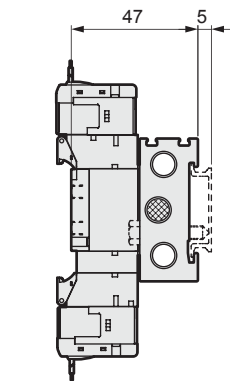
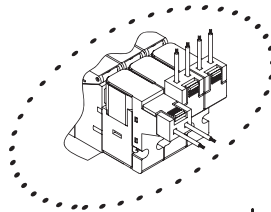
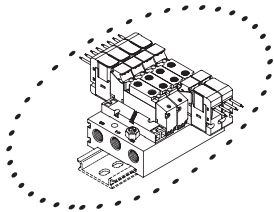
- φ1.8 barbed fitting type (CF)



- M5 female thread type (M5)

- E type connector type (E)

- EJ type connector type (E**J)



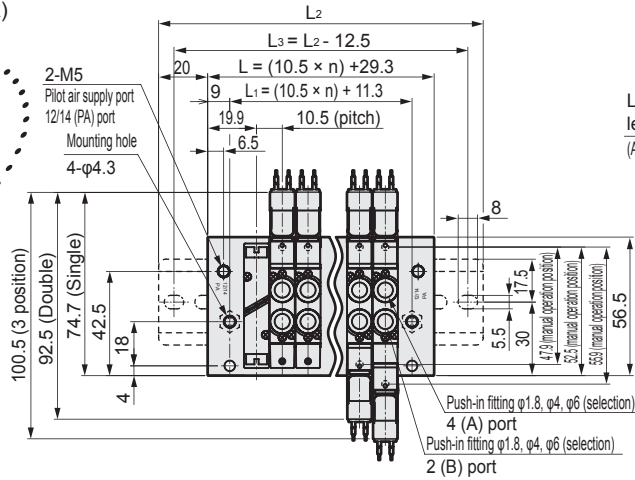
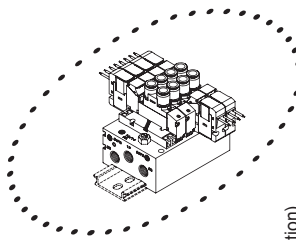
Note: Values in () apply for 100 VAC.

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	45.3	55.8	66.3	76.8	87.3	97.8	108.3	118.8	129.3	139.8	150.3	160.8	171.3	181.8	192.3	202.8	213.3	223.8	234.3
L ₁	30.3	40.8	51.3	61.8	72.3	82.8	93.3	103.8	114.3	124.8	135.3	145.8	156.3	166.8	177.3	187.8	198.3	208.8	219.3
L ₂	87.5	100.0	112.5	125.0	137.5	150.0	150.0	162.5	175.0	187.5	200.0	212.5	212.5	225.0	237.5				
L ₃	75.0	87.5	100.0	112.5	125.0	137.5	137.5	150.0	162.5	175.0	187.5	200.0	200.0	212.5	225.0				

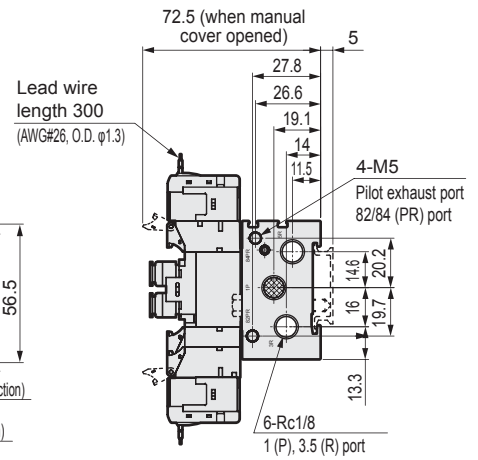
Dimensions

M4GA1

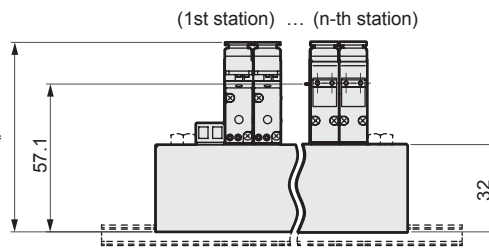
- External pilot (K)
Grommet lead wire (blank)



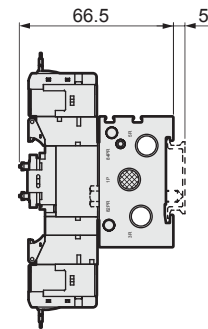
*For 2-position single 3 port valve, the port A or port B is a plug.



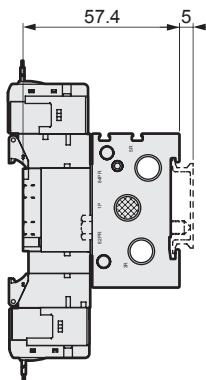
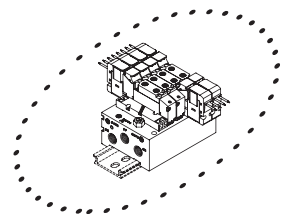
Push-in fitting Port size	* Dimensions
φ1.8	64.4
φ4	68.4
φ6	69.6
φ1/8	68.9
φ5/32	68.4



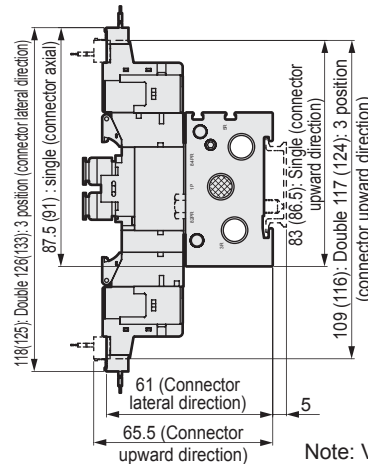
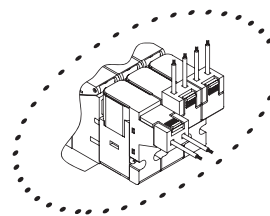
- φ1.8 barbed fitting type (CF)



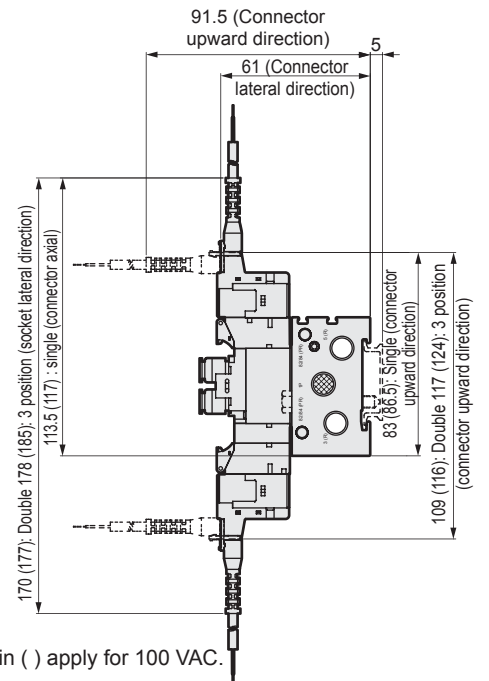
- External pilot (K)
M5 female thread type (M5)



- External pilot (K)
E type connector type (E)



- External pilot (K)
EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.

Station 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 ₁	32.3	42.8	53.3	63.8	74.3	84.8	95.3	105.8	116.3	126.8	137.3
L ₂	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0
L ₃	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5

M4GA2 Series

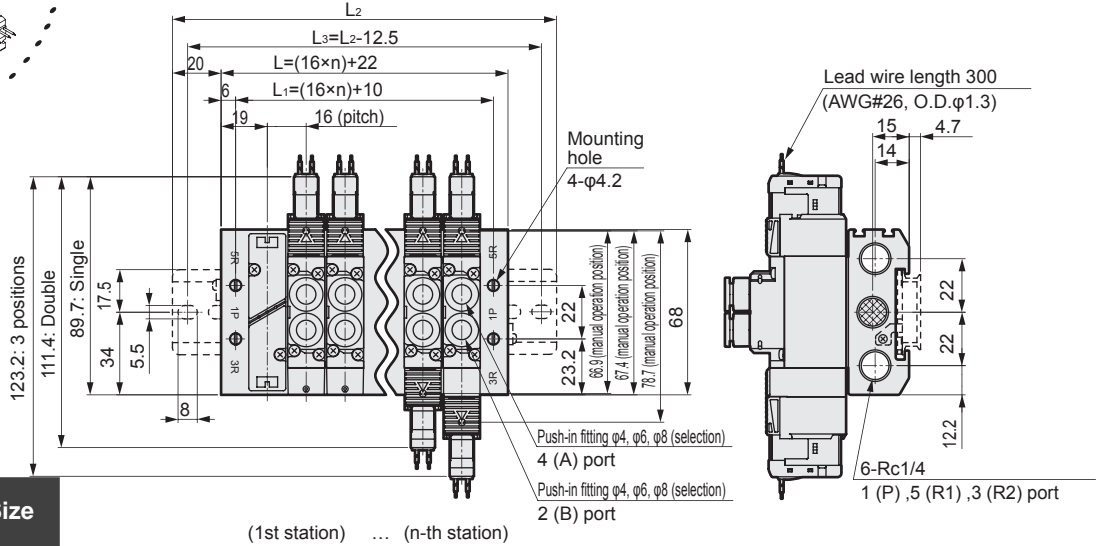
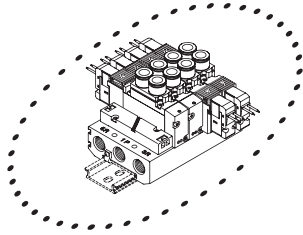
Individual wiring manifold; body piping

Dimensions 

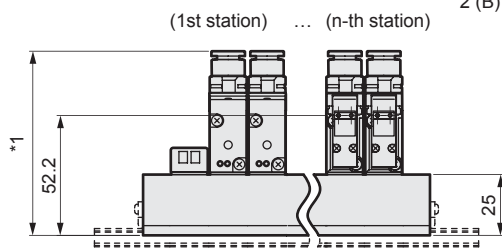
M4GA2

- Grommet lead wire (blank)

*For 2-position single 3 port valve, the port A or port B is a plug.
The dimension of dual 3 port valve integrated type is the same as that of the double type.

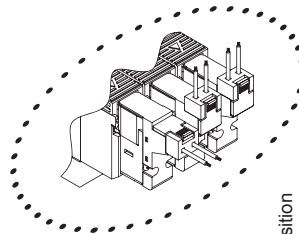
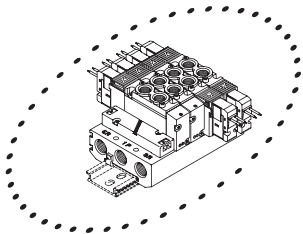


Push-in fitting Port size	*1 Size
φ4	76
φ6	
φ8	
φ1/4	76.9
φ5/16	76.2

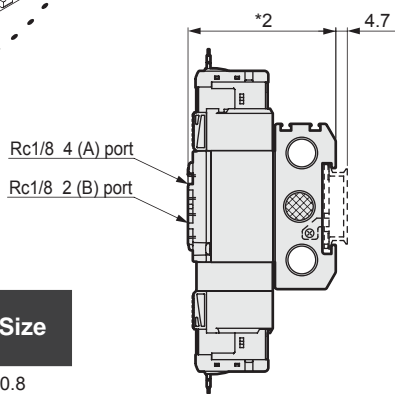


- Rc1/8 female thread type (06)

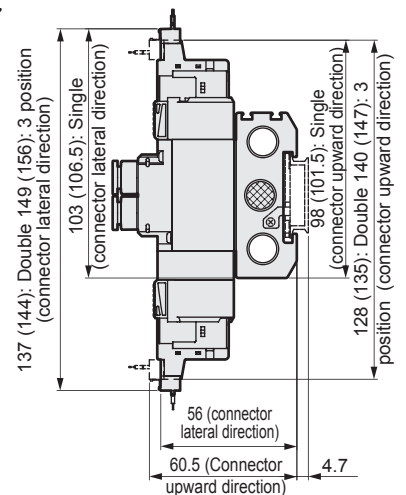
- E type connector type (E)



Note: Values in () apply for 100 VAC



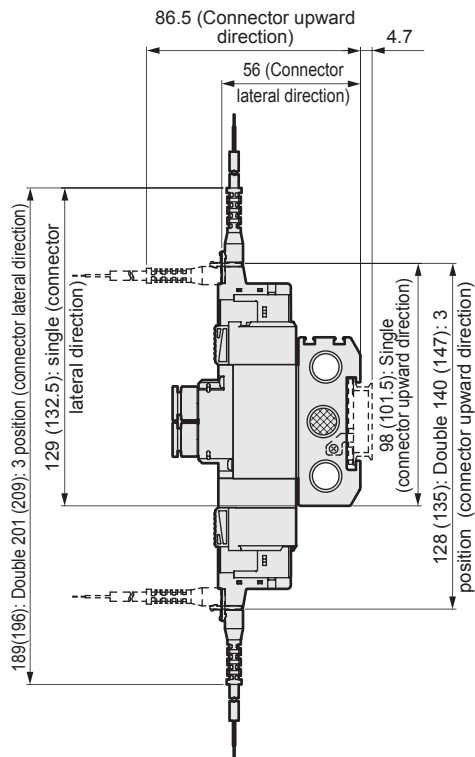
Female thread size	*2 Size
Rc1/8	60.8
1/8NPT	62.1
G1/8	



Station 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 ₁	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 ₂	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 ₃	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				

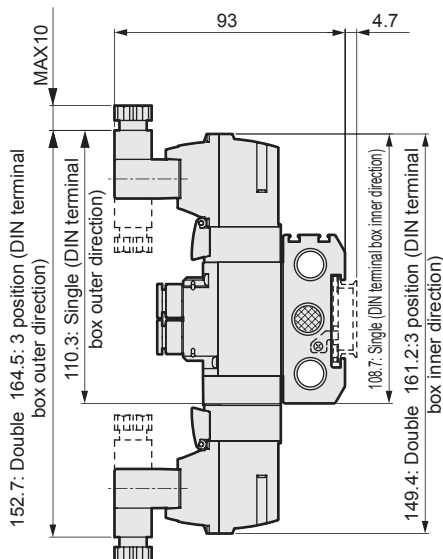
Dimensions

- EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

- DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA2 Series

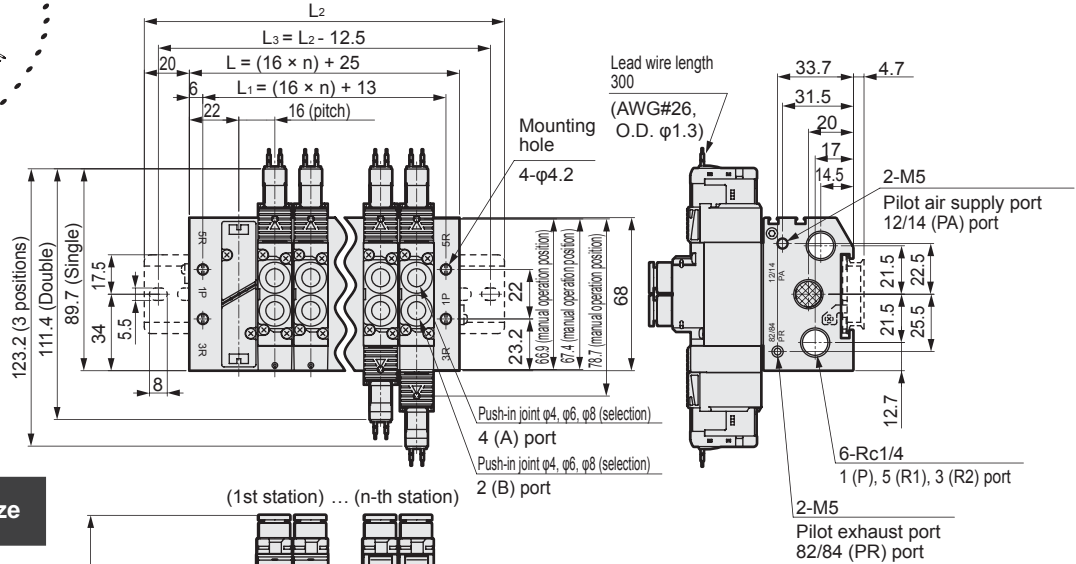
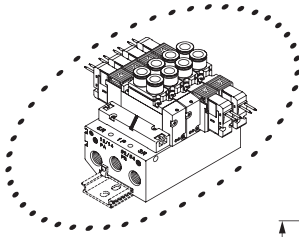
Individual wiring manifold; body piping

Dimensions 

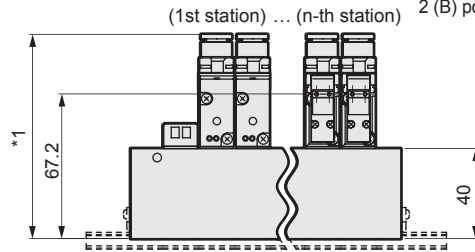
M4GA2

- External pilot (K)
Grommet lead wire (blank)

*For 2-position single 3 port valve, the port A or port B is a plug.

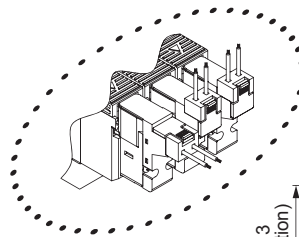
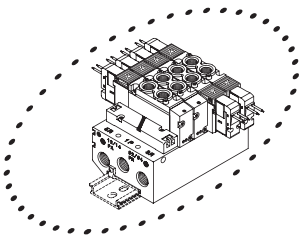


Push-in fitting Port size	*1 Size
$\phi 4$	91
$\phi 6$	
$\phi 8$	
$\phi 1/4$	91.9
$\phi 5/16$	91.2

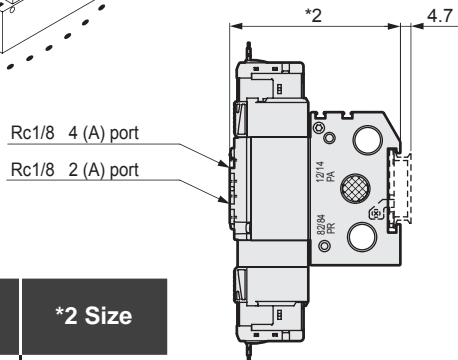


- External pilot (K)
Rc1/8 female thread type (06)

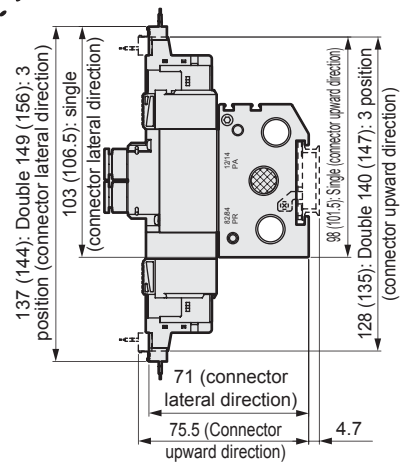
- External pilot (K)
E type connector type (E)



Note: Values in () apply for 100 VAC.



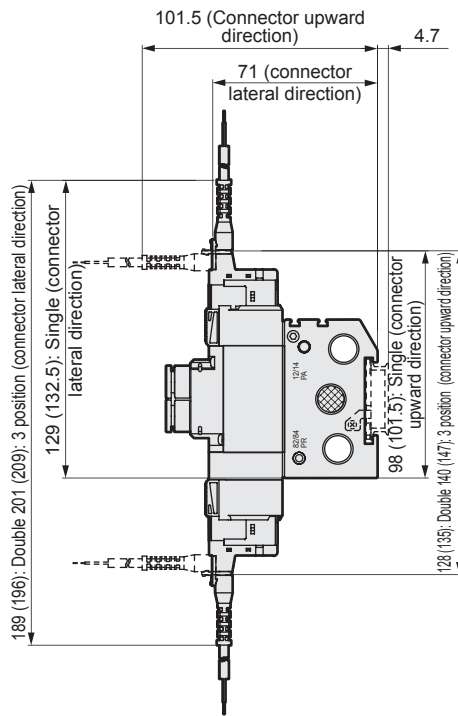
Female thread size	*2 Size
Rc1/8	75.8
1/8NPT	77.1
G1/8	



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	57.0	73.0	89.0	105.0	121.0	137.0	153.0	169.0	185.0	201.0	217.0	233.0	249.0	265.0	281.0	297.0	313.0	329.0	345.0
L ₁	45.0	61.0	77.0	93.0	109.0	125.0	141.0	157.0	173.0	189.0	205.0	221.0	237.0	253.0	269.0	285.0	301.0	317.0	333.0
L ₂	100.0	125.0	137.5	150.0	162.5	187.5	200.0	212.5	225.0	250.0	262.5	275.0	300.0	312.5	325.0				
L ₃	87.5	112.5	125.0	137.5	150.0	175.0	187.5	200.0	212.5	237.5	250.0	262.5	287.5	300.0	312.5				

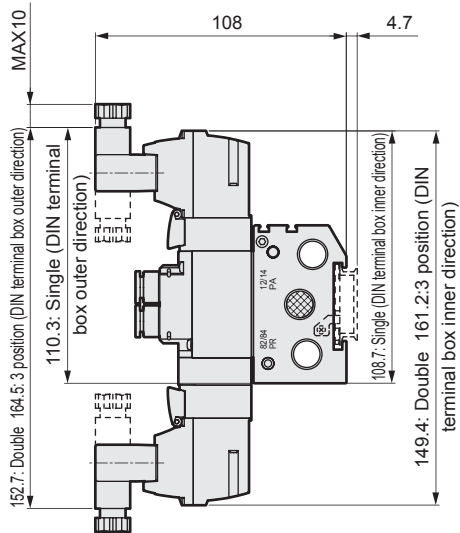
Dimensions

- External pilot (K)
EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

- External pilot (K)
DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA3 Series

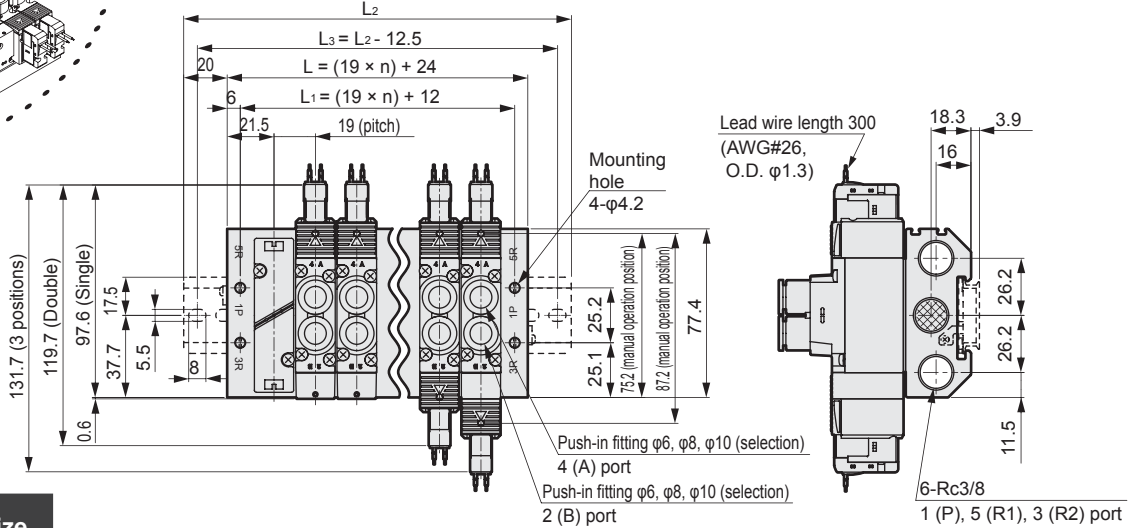
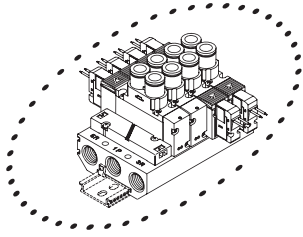
Individual wiring manifold; body piping

Dimensions 

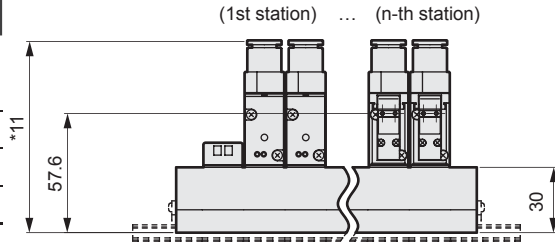
M4GA3

- Grommet lead wire (blank)

*For 2-position single 3 port valve, the port A or port B is a plug.

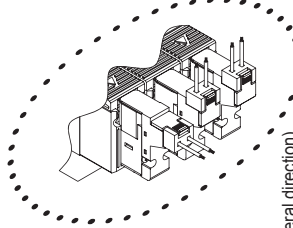
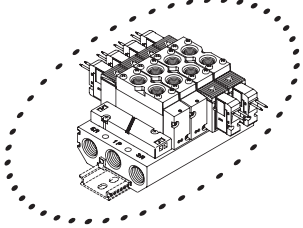


Push-in fitting Port size	*1 Size
$\phi 6$	82.8
$\phi 8$	
$\phi 10$	88.3
$\phi 5/16$	89
$\phi 3/8$	92.2

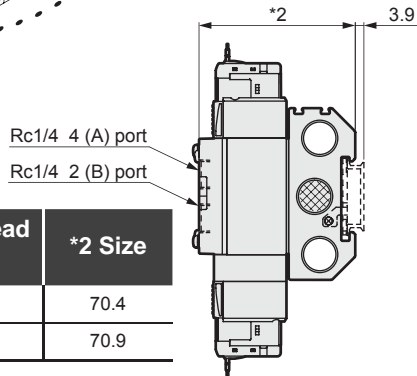


- Rc1/4 female thread type (08)

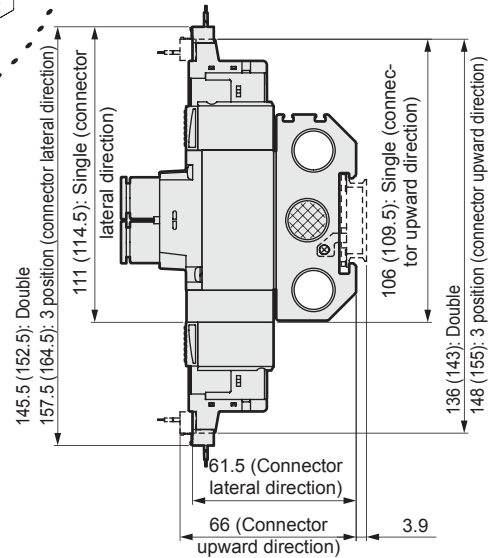
- E type connector type (E)



Note: Values in () apply for 100 VAC.



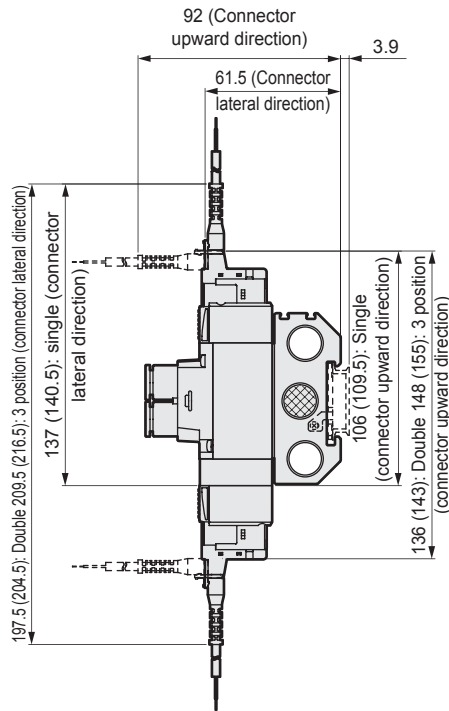
Female thread size	*2 Size
Rc1/4	70.4
1/4NPT	70.9



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	62.0	81.0	100.0	119.0	138.0	157.0	176.0	195.0	214.0	233.0	252.0	271.0	290.0	309.0	328.0	347.0	366.0	385.0	404.0
L ₁	50.0	69.0	88.0	107.0	126.0	145.0	164.0	183.0	202.0	221.0	240.0	259.0	278.0	297.0	316.0	335.0	354.0	373.0	392.0
L ₂	112.5	125.0	150.0	162.5	187.5	200.0	225.0	237.5	262.5	275.0	300.0	312.5	337.5	350.0	375.0				
L ₃	100.0	112.5	137.5	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	300.0	325.0	337.5	362.5				

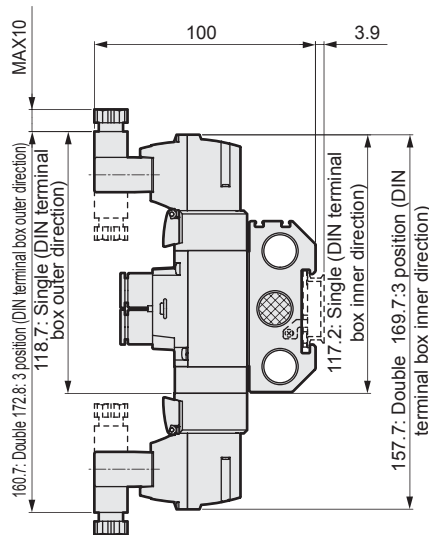
Dimensions

- EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

- DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA3 Series

Individual wiring manifold; body piping

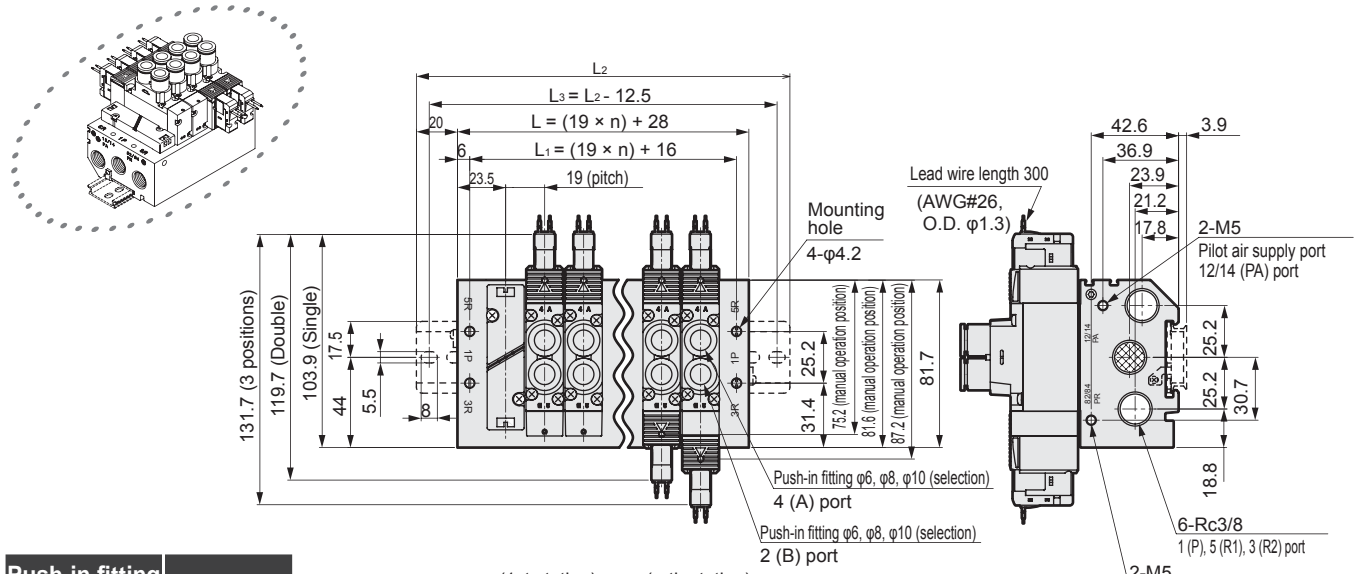
Dimensions



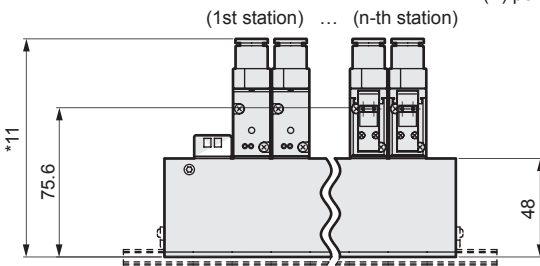
M4GA3

- External pilot (K)
Grommet lead wire (blank)

*For 2-position single 3 port valve, the port A or port B is a plug.

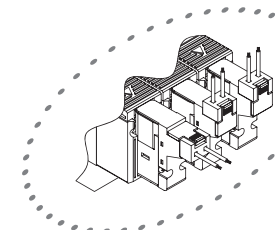
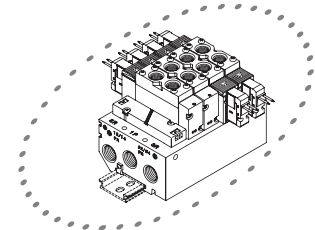


Push-in fitting Port size	*1 Size
φ6	100.8
φ8	106.3
φ10	107
φ5/16	110.2
φ3/8	110.2

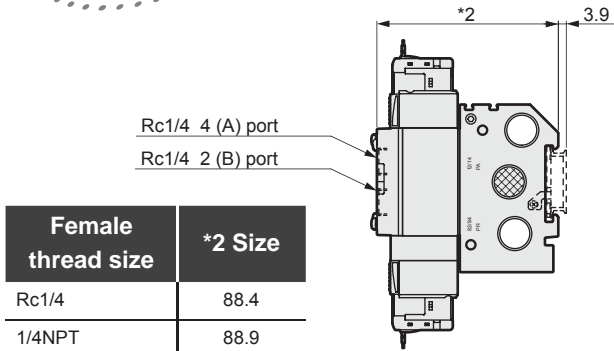


- External pilot (K)
Rc1/4 female thread type (08)

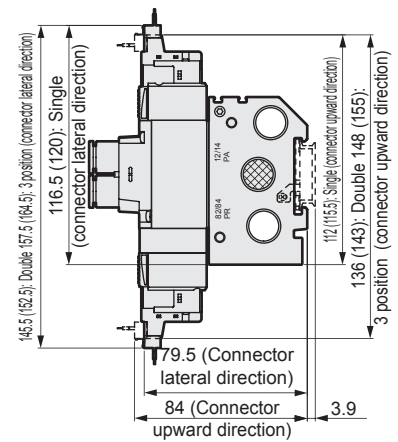
- External pilot (K)
E type connector type (E)



Note: Values in () apply for 100 VAC



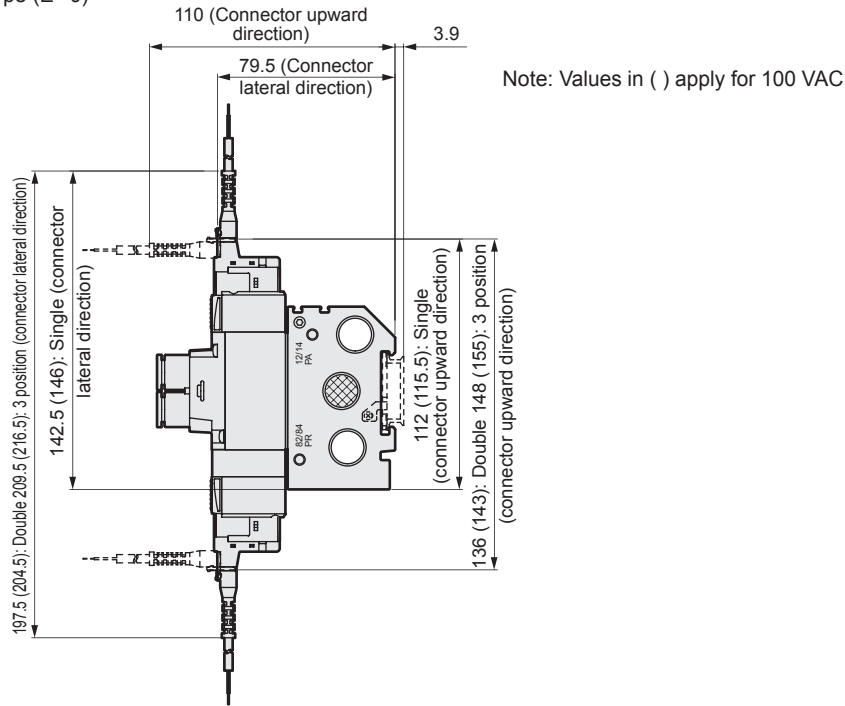
Female thread size	*2 Size
Rc1/4	88.4
1/4NPT	88.9



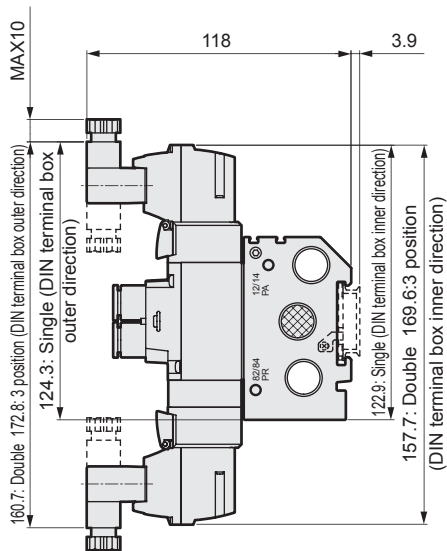
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	66.0	85.0	104.0	123.0	142.0	161.0	180.0	199.0	218.0	237.0	256.0	275.0	294.0	313.0	332.0	351.0	370.0	389.0	408.0
L ₁	54.0	73.0	92.0	111.0	130.0	149.0	168.0	187.0	206.0	225.0	244.0	263.0	282.0	301.0	320.0	339.0	358.0	377.0	396.0
L ₂	112.5	125.0	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	300.0	325.0	337.5	362.5	375.0				
L ₃	100.0	112.5	137.5	162.5	175.0	200.0	212.5	237.5	250.0	275.0	287.5	312.5	325.0	350.0	362.5				

Dimensions

- External pilot (K)
EJ type connector type (E**J)



- External pilot (K)
DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

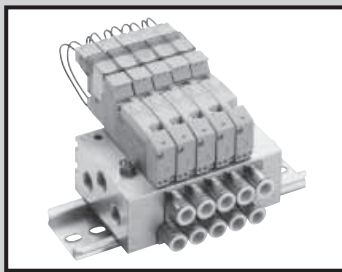
M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications



Individual wiring manifold
Base piping
Direct mount type/DIN rail mount type

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

● Applicable cylinder bore size: $\phi 20$ to $\phi 100$



Refer to Ending for details.



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

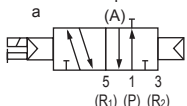
Technical data

Safety
precautions

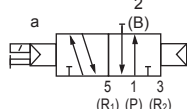
Manifold
Specifications

JIS symbol

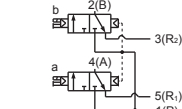
- 3 port valve
2-position single N.C. type



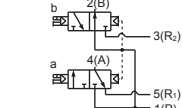
- 2-position single N.O. type



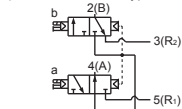
- Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



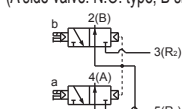
- (A side valve: N.C. type, B side valve: N.O. type)



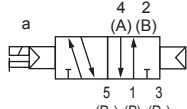
- (A side valve: N.O. type, B side valve: N.C. type)



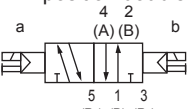
- (A side valve: N.O. type, B side valve: N.O. type)



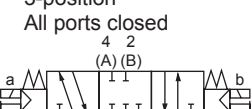
- 5 port valve
2-position single



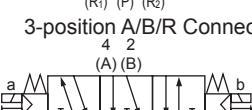
- 2-position double



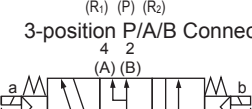
- 3-position
All ports closed



- 3-position A/B/R Connection



- 3-position P/A/B Connection



Manifold common specifications

Descriptions		
Manifold type		Integrated base
Mounting method		Direct mount type/DIN rail mount type
Supply and exhaust method		Common supply/common exhaust (check valve integrated)
Pilot exhaust method	Internal pilot	Main valve/pilot valve common exhaust (Pilot exhaust check valve integrated)
	External pilot	Main valve/pilot valve individual exhaust
Piping direction		Base part lateral direction
Valve type and operation		Pilot operated type soft spool valve
Working fluid		Compressed air
Max. working pressure MPa		0.7
Min. working pressure MPa		0.2 (Note 3)
Proof pressure MPa		1.05
Ambient temperature °C		-5 to 55 (no freezing)
Fluid temperature °C		5 to 55
Manual operating device		Non-locking/locking common type (standard)
Lubrication (Note 1)		Not required
Degree of protection (Note 2)		Dust proof
Vibration resistance m/s ²		50 or less
Shock resistance m/s ²		300 or less
Atmosphere		Containing corrosive gas is impermissible.

- Note 1 Use the turbine oil Class 1 ISO VG32 if lubricated. Excessive or intermittent lubrication results in unstable operation.
- Note 2 Avoid water drops or oil, etc. during use. IP65 (jet-proof type) applies for DIN terminal box specifications. Note that the specified adaptive cord outer diameter and tightening torque must be used for fixing.
- Note 3 The working pressure range is 0 to 0.7 MPa when the external pilot (option symbol: K) is selected. Set the external pilot pressure between 0.2 and 0.7 MPa.

Electric specifications

Descriptions		24 VDC	12 VDC	5 VDC	3 VDC	100 VAC	200 VAC
Rated voltage							
Voltage fluctuation range		±10%					
Holding current A (Note 4)	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)
	With low heat energy-saving circuit	0.005	0.010	-	-	-	-
Power consumption W (Note 4)	Standard	0.35	0.40	0.35	0.40	-	-
	With low heat energy-saving circuit	0.1	-	-	-	-	-
Apparent power VA (Note 4) (Note 5)		-	-	-	-	0.93 (0.98)	1.26
Thermal class		B					
Surge suppressor		Option					
Indicator		Light (option)					

Note 4 Values in () apply when a light is attached. In addition, the low heat energy-saving circuits only have a light attached.

Note 5 200 VAC is the DIN terminal box (with light) value.

Individual specifications

Descriptions		M3GB1/M4GB1		M3GB2/M4GB2		M4GB3	
		Direct mount	DIN rail mount	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	-	-	-	-
Port size	Rc thread, M5	A/B port	$\phi 1.8$ Barbed fitting Push-in fitting $\phi 1.8, \phi 4, \phi 6, \phi 8$ (Note 5) M5	Push-in fitting $\phi 4, \phi 6, \phi 8$ $\phi 10$ (Note 5) Rc1/8	Push-in fitting $\phi 6, \phi 8, \phi 10$ Rc1/4	-	-
		P/R1/R2 port	Rc1/8	Rc1/4	Rc3/8	-	-
	NPT thread, M5	A/B port	Push-in fitting $\phi 1/8$ inch, $\phi 5/32$ inch M5	Push-in fitting $\phi 1/4$ inch, $\phi 5/16$ inch 1/8NPT	Push-in fitting $\phi 5/16$ inch, $\phi 3/8$ inch 1/4NPT (Note 5)	-	-
		P/R1/R2 port	1/8NPT	1/4NPT	3/8NPT (Note 5)	-	-
G thread, M5	A/B port	Push-in fitting $\phi 4, \phi 6$ M5	Push-in fitting $\phi 4, \phi 6, \phi 8$ G1/8	-	-	-	
	P/R1/R2 port	G1/8	G1/4	-	-	-	
Manifold base formula (n: station no.) g	Standard	35n+61	36n+115	71n+106	73n+134	113n+170	115n+119
	External pilot	35n+106	36n+114	76n+135	78n+166	118n+194	120n+223

Refer to "Cautions for Mounting the DIN Rail" (page 631), and select the manifold.

For 10 or over manifold station no. (5 stations for 4G3), use ports on both sides for air supply and exhaust. The manifold base weight is the value for screw specifications.

Note 5: This is a available consult factory order.

M3GB1, 2/M4GB1, 2, 3 Series

Individual wiring manifold; base piping

Flow characteristics

Model no.	Valve Position	P→A/B		A/B→R1/R2		
		C [dm ³ /(s/bar)]	b	C [dm ³ /(s/bar)]	b	
M3GB1 M4GB1	Dual 3 port valve integrated type	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)	
	3-position	All ports closed	0.98	0.22	1.1 -	0.24 -
		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	Dual 3 port valve integrated type	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)	
	3-position	All ports closed	2.2	0.34	2.4 -	0.29 -
		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)	
	3-position	All ports closed	3.1	0.33	3.3 -	0.22 -
		ABR connection	3.0	0.30	3.8 (2.7)	0.11 (0.22)
		PAB connection	3.6	0.36	3.3 -	0.28 -

Note 1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.
 Note 2: Values in () apply when a check valve is attached.

Ozone proof specifications / Cutting oil proof specifications

Select the option "A" of (E) in how to order on page 109.

Clean room specifications (Catalog No. CB-033S)

- Particle generation preventing structure for use in clean rooms

** - Voltage - P7*

Specifications for secondary battery (Catalog No. CC-947A)

- In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section

** - Voltage - P4

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

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 1 0R - C6 - E2 H D - **3**

● Discrete valve for mounting base

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

● Discrete 3 port valve for mounting base

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

B Valve Position

A Model no.

C Port size
Note 3
Note 4

D Electrical connections

E Option

F Mount type

G Station no.

H Voltage

⚠ Note on model no. selection

Note 1 Select M4GB*80R when mixing with 3, 5 port valves.
Select M3GB*80R when mixing with the masking plate.

Note 2 Combination with the external pilot (K) is not available.
Dimensions are the same as the respective 2-position double solenoid.

Note 3 CL* push-in fitting L type is available only for the single solenoid manifold. The port A is a long elbow and the port B is short elbow.

Note 4 A/B port sizes do not differ for the push-in fitting L type (upward) (downward).

Note 5 The 4G1's C8 and 4G2's C10 do not handle the push-in fitting mix.

Note 6 Available consult factory order.

*Always indicate "Manifold specifications" (page 200 to 214).

Symbol	Descriptions	A Model no.				
		3GB1	3GB2	4GB1	4GB2	4GB3
B Valve Position						
1	2-position single			●	●	●
2	2-position double			●	●	●
3	3-position all ports closed			●	●	●
4	3-position A/B/R connection			●	●	●
5	3-position P/A/B connection			●	●	●
66	Dual 3 port valve integrated type	A side valve: Normally closed	●	●		
		B side valve: Normally closed				
67	Note 1, 2	A side valve: Normally closed	●	●		
		B side valve: Normally open				
76		A side valve: Normally open	●	●		
		B side valve: Normally closed				
77		A side valve: Normally open	●	●		
		B side valve: Normally open				
8	Mix manifold (In case of multiple Valve Positions)	●	●	●	●	●
C Port size						
port	4 (A) /2 (B) port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8				
CF	φ1.8 barbed fitting (applicable tube UP-9102-**) (2)			(2)		
C18	φ1.8 push-in fitting (applicable tube UP-9402-**) (2)			(2)		
C4	φ4 push-in fitting (2)	(3)	(2)	(3)		
C6	φ6 push-in fitting (2)	(3)	(2)	(3)	(4)	
C8	φ8 push-in fitting (2)	(3)	(2)	(3)	(4)	
C10	φ10 push-in fitting (3)		(3)	(3)	(4)	
CL18	L type φ1.8 push-in fitting (upward) (applicable tube UP-9402-**) (2)			(2)		
CL4	L type φ4 push-in fitting (upward) (2)			(2)		
CL6	L type φ6 push-in fitting (upward) (2)			(2)	(3)	
CL8	L type φ8 push-in fitting (upward) (3)			(3)	(4)	
CL10	L type φ10 push-in fitting (upward) (3)				(4)	
CD18	L type φ1.8 push-in fitting (downward) (applicable tube UP-9402-**) (2)			(2)		
CD4	L type φ4 push-in fitting (downward) (2)			(2)		
CD6	L type φ6 push-in fitting (downward) (2)	(3)	(2)	(3)		
CD8	L type φ8 push-in fitting (downward) (3)			(3)	(4)	
CD10	L type φ10 push-in fitting (downward) (3)				(4)	
CX	Push-in fitting mix (2)	(3)	(2)	(3)	(4)	
M5	M5 (2)			(2)		
06	Rc1/8 (3)			(3)		
08	Rc1/4 (3)				(4)	
Port	4 (A) /2 (B) port	P/R1/R2 port (5) = 1/8NPT (6) = 1/4NPT (7) = 3/8NPT				
C3N	φ1/8 inch push-in fitting (5)			(5)		
C4N	φ5/32 inch push-in fitting (5)			(5)		
C6N	φ1/4 inch push-in fitting (6)			(6)		
C8N	φ5/16 inch push-in fitting (6)			(6)	(7)	
C10N	φ3/8 inch push-in fitting (6)				(7)	
CL3N	L type φ1/8 inch push-in fitting (upward) (5)			(5)		
CL4N	L type φ5/32 inch push-in fitting (upward) (5)			(5)		
CL6N	L type φ1/4 inch push-in fitting (upward) (6)			(6)		
CL8N	L type φ5/16 inch push-in fitting (upward) (6)			(6)		
CXN	Push-in fitting mix (5)	(6)	(5)	(6)	(7)	
M5N	M5 (5)			(5)		
06N	1/8NPT (6)			(6)		
08N	1/4NPT (6)				(7)	
Port	4 (A) /2 (B) port	P/R1/R2 port (8) = G1/8 (9) = G1/4				
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	L type φ4 push-in fitting (upward) (8)			(8)		
CL6G	L type φ6 push-in fitting (upward) (8)			(8)	(9)	
CL8G	L type φ8 push-in fitting (upward) (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	●	●	●	●	●

M4GB1/2/3 Series

Individual wiring manifold; base piping

		A Model no.				
		3GB1	3GB2	4GB1	4GB2	4GB3
D Electrical connections						
Blank	Grommet lead wire (300 mm)	Note17	●	●	●	●
B	DIN terminal box (Pg7)	With surge suppressor/light Note18	●	●	●	●
BN	DIN terminal box (Pg7) (without terminal box)	with surge suppressor Note 18	●	●	●	●
E type connector (upward/lateral direction common)						
E0	Lead wire (300 mm)	Note19	●	●	●	●
E00	Lead wire (500mm)	Note19	●	●	●	●
E01	Lead wire (1000 mm)	Note19	●	●	●	●
E02	Lead wire (2000mm)	Note19	●	●	●	●
E03	Lead wire (3000mm)	Note19	●	●	●	●
E0N	Without lead wire (without socket)	Note19	●	●	●	●
E1	Without lead wire (with socket/terminal)	Note19	●	●	●	●
E2	Lead wire (300 mm)	With surge suppressor/light	●	●	●	●
E20	Lead wire (500mm)	With surge suppressor/light	●	●	●	●
E21	Lead wire (1000 mm)	With surge suppressor/light	●	●	●	●
E22	Lead wire (2000mm)	With surge suppressor/light	●	●	●	●
E23	Lead wire (3000mm)	With surge suppressor/light	●	●	●	●
E2N	Without lead wire (without socket)	With surge suppressor/light	●	●	●	●
E3	Without lead wire (with socket/terminal)	With surge suppressor/light	●	●	●	●
EJ type connector (socket with cover, upward/lateral direction common)						
E01J	Lead wire (1000 mm)	Note19	●	●	●	●
E02J	Lead wire (2000mm)	Note19	●	●	●	●
E03J	Lead wire (3000mm)	Note19	●	●	●	●
E21J	Lead wire (1000 mm)	With surge suppressor/light	●	●	●	●
E22J	Lead wire (2000mm)	With surge suppressor/light	●	●	●	●
E23J	Lead wire (3000mm)	With surge suppressor/light	●	●	●	●
E Option						
Blank	Non-locking/locking common manual override		●	●	●	●
M	Non-locking manual override		●	●	●	●
H	With check valve	Note 7	●	●	●	●
K	External pilot	Note 8	●	●	●	●
A	Ozone/cutting oil proof		●	●	●	●
S	surgeless	Note 9	●	●	●	●
E	Low heat energy-saving circuit	Note 9, Note 10	●	●	●	●
F	A/B port filter integrated	Note 11	●	●	●	●
Z1	Air supply spacer	Note 12	●	●	●	●
Z2	In stop valve spacer	Note 12, Note 13	●	●	●	●
Z3	Exhaust spacer	Note 12	●	●	●	●
Z6	Spacer type pilot check valve	Note 12, Note 14	●	●	●	●
F Mount type						
Blank	Direct mount type	Note 15	●	●	●	●
D	DIN rail mount type		●	●	●	●
G Station no.						
2	2 stations		●	●	●	●
to	to		●	●	●	●
20	Refer to page 106 for the max. station no. for each model.		●	●	●	●
H Voltage						
1	100 VAC (rectifier integrated)		●	●	●	●
2	200 VAC (rectifier integrated)	Note 16	●	●	●	●
3	24 VDC		●	●	●	●
4	12 VDC		●	●	●	●
7	3 VDC		○	○	○	○
8	5 VDC		○	○	○	○

is not available.

○ Contact CKD for price and availability.

Note 7 3-position all ports closed and PAB connection are not provided with check valve (H). Refer to page 628 for details on check valve.

Note 8 Consult with CKD when using a vacuum with the external pilot (K).

Note 9 Only the E2* type, E2* J type connector and 12/24 VDC are supported.

In addition, the surgeless "S" and low heat energy-saving circuit "E" cannot be selected at the same time.

Note 10 This is surgeless specifications.

Note 11 The P port has a filter built inside as a standard.

Note 12 Specify the spacer mounting location and quantity in manifold specifications.

Stacking multiple spacers is not supported.

Combination with the masking plate is not supported.

Refer to page 180 to 184 for details.

Note 13 Combination with the external pilot (K) is not available.

Note 14 Combination with the push-in fitting L type (upward) is not available.

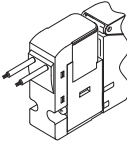
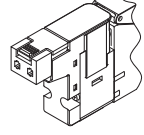
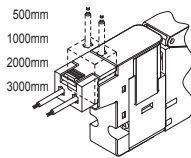
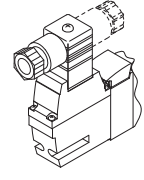
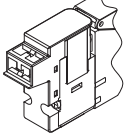
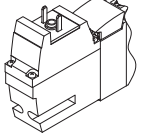
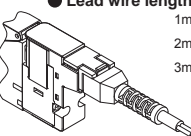
Note 15 The direct mount type of M4GB1 cannot be changed to the DIN rail mount type after purchase.

Note 16 Only the DIN terminal box are supported.

Note 17 Grommet lead wire specifications are only for DC voltage.

Note 18 Supports AC voltage and 12/24 VDC. The light is also attached to the terminal box.

Note 19 AC voltage comes with a rectifier circuit.

Electrical connections		Discrete valve/individual wiring manifold	
Blank	Grommet lead wire	E1 E3	E type connector with socket/terminal
● Lead wire length 300mm			
E0 E2	E type connector	B	DIN terminal box
● Lead wire length 300mm 500mm 1000mm 2000mm 3000mm			
E0N E2N	E type connector without socket	BN	DIN terminal box (Without terminal box)
			
E0*J E2*J	EJ-connector		
● Lead wire length 1m 2m 3m			

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

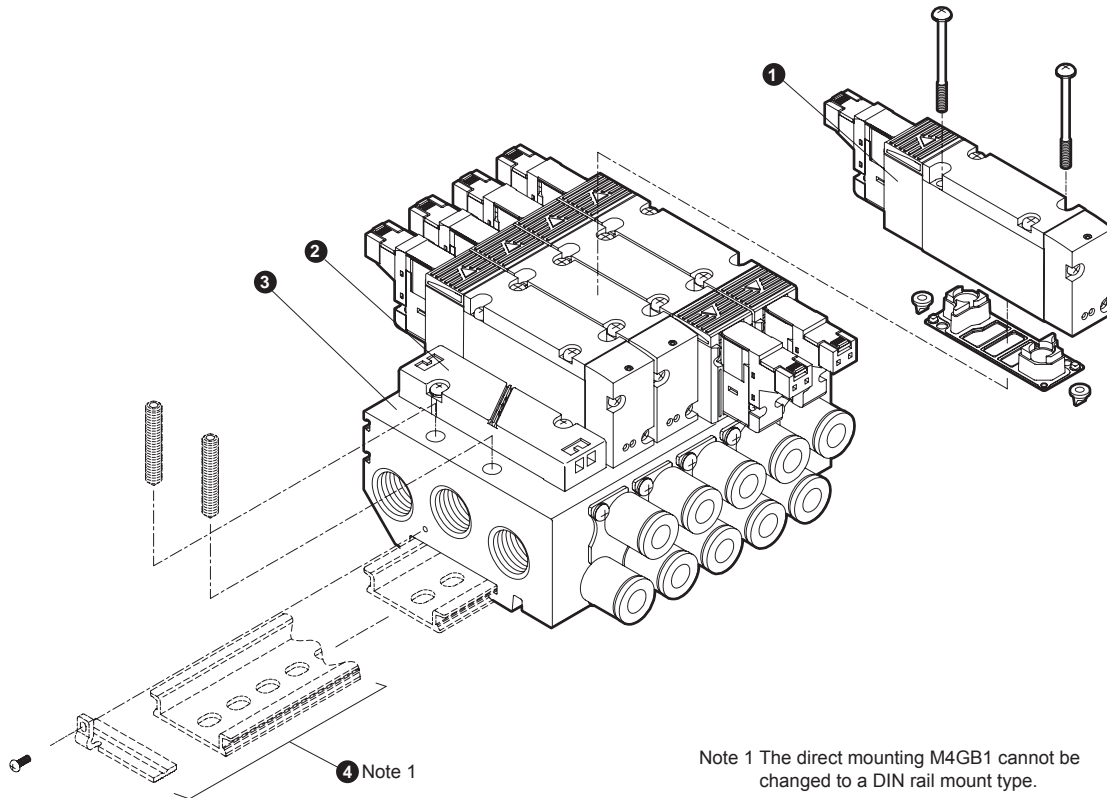
Safety
precautions

Manifold
Specifications

M4GB1/2/3 Series

Individual wiring manifold; base piping

Manifold components explanation and parts list



Note 1 The direct mounting M4GB1 cannot be changed to a DIN rail mount type.

Main components list

No.	Component name	Model no.	Descriptions	Remarks
1	Discrete valve for mounting base	4GB ** 9R -00 - <input type="text"/> Electrical connections <input type="text"/> Option - <input type="text"/> Voltage <input type="text"/> Valve Position <input type="text"/> Series flow rate size	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 108
2	Masking plate	3G1 & 4G1 4G1R-MP 3G2 & 4G2 4G2R-MP 3G3 & 4G3 4G3R-MP	Masking plate Gasket Set screw 2	* 3G3 and 4G3 have two PR check valves.
3	Manifold base assembly	M4GB * R - <input type="text"/> Electrical connections <input type="text"/> Option - <input type="text"/> D <input type="text"/> Station no. <input type="text"/> Series flow rate size <input type="text"/> Mount type	Manifold base	The mount type selection is only 4G1. Even if the mount type "D" is selected, the DIN rail kit shall be prepared separately.
4	DIN rail kit			Details on page 191

4GAB
M4GA/B
MN4GA/B
4GAB
Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.	
-	Coil assembly	4GR - Electric connection * - COIL - Voltage Blank: Standard A: Ozone/cutting oil proof Select from Electrical connections on page 95 (D)	-	Cartridge type push-in fitting and related parts	φ1.8 barbed type 4G1R-JOINT-CF	
-	E type connector Socket assembly	4GR-SOCKET-ASSY- Electric wire Connection - Voltage	-		4G1	φ1.8 straight type 4G1R-JOINT-C18
-	E type connector Socket assembly	4GR-SOCKET-ASSY- Electric wire Connection	-		4G1	φ4 straight type 4G1R-JOINT-C4
-			-		4G1	φ6 straight type 4G1R-JOINT-C6
			-		4G1	φ8 straight type 4G1R-JOINT-C8
			-		4G1	φ1.8 elbow type 4G1R-JOINT-CL18, CLL18
			-		4G1	φ4 elbow type 4G1R-JOINT-CL4, CLL4
			-		4G1	φ6 elbow type 4G1R-JOINT-CL6, CLL6
			-		4G1	φ1/8 inch Straight type 4G1R-JOINT-C3N
			-		4G1	φ5/32 inch Straight type 4G1R-JOINT-C4N
			-		4G1	φ1/8 inch elbow type Note 1 4G1R-JOINT-CL3N
			-		4G1	φ5/32 inch elbow type Note 1 4G1R-JOINT-CL4N
			-		4G1	Plug cartridge 4G1R-JOINT-CPG
			-		4G2	φ4 straight type 4G2R-JOINT-C4
			-		4G2	φ6 straight type 4G2R-JOINT-C6
			-		4G2	φ8 straight type 4G2R-JOINT-C8
			-		4G2	φ10 straight type Note 2 4G2R-JOINT-C10
			-		4G2	φ6 elbow type 4G2R-JOINT-CL6, CLL6
			-		4G2	φ8 elbow type 4G2R-JOINT-CL8, CLL8
			-		4G2	φ1/4 inch straight type 4G2R-JOINT-C6N
			-		4G2	φ5/16 inch straight type 4G2R-JOINT-C8N
			-		4G2	φ1/4 inch elbow type Note 1 4G2R-JOINT-CL6N
			-		4G2	φ5/16 inch elbow type Note 1 4G2R-JOINT-CL8N
			-		4G2	Plug cartridge 4G2R-JOINT-CPG
			-		4G3	φ6 straight type 4G3R-JOINT-C6
			-		4G3	φ8 straight type 4G3R-JOINT-C8
			-		4G3	φ10 straight type 4G3R-JOINT-C10
			-		4G3	φ8 elbow type 4G3R-JOINT-CL8, CLL8
			-		4G3	φ10 elbow type 4G3R-JOINT-CL10, CLL10
			-		4G3	φ5/16 inch straight type 4G3R-JOINT-C8N
			-		4G3	φ3/8 inch straight type 4G3R-JOINT-C10N

Note 1: Available consult factory order.

Note 2: These are common parts with the φ10 straight type for the 4G3.

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E


Technical data

Safety
precautions

Manifold
Specifications

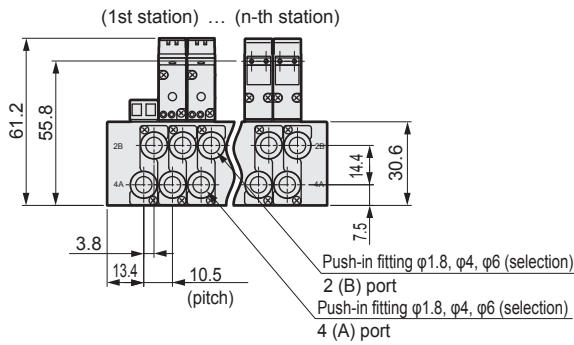
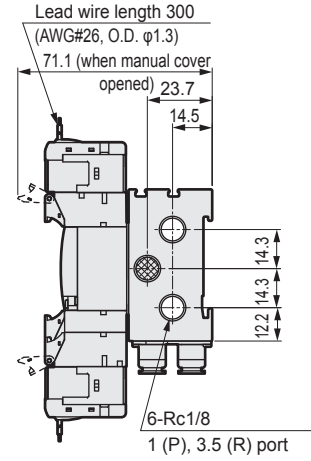
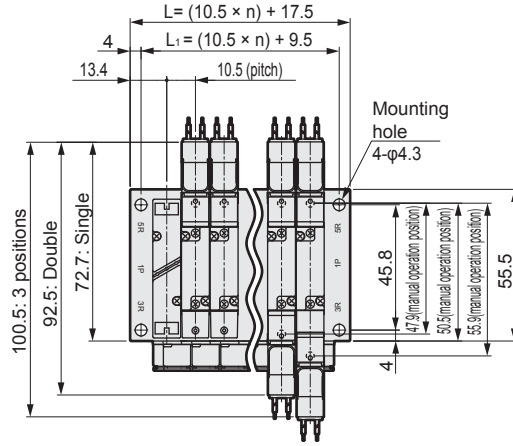
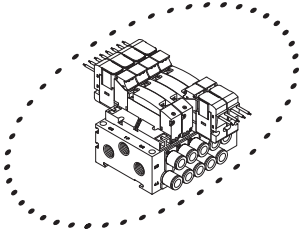
M4GB1 Series

Individual wiring manifold; base piping

Dimensions 

M4GB1

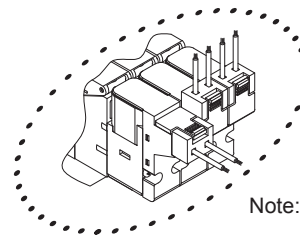
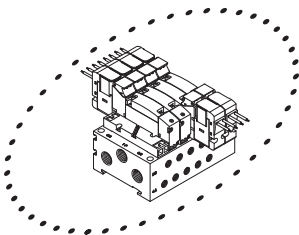
- Direct mount installation
- Grommet lead wire (blank)



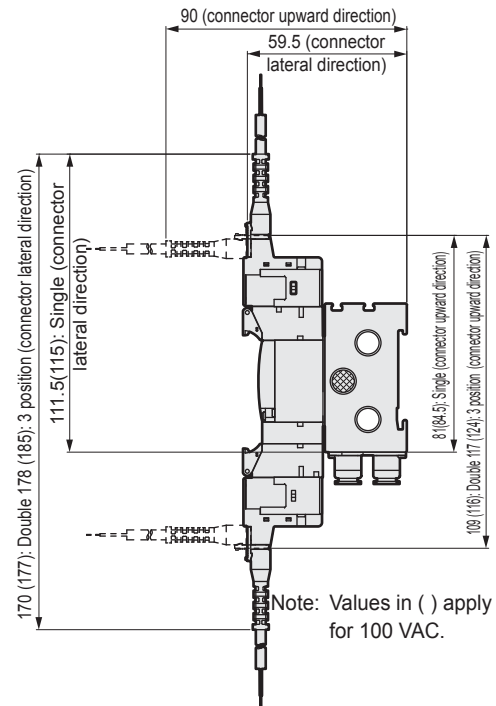
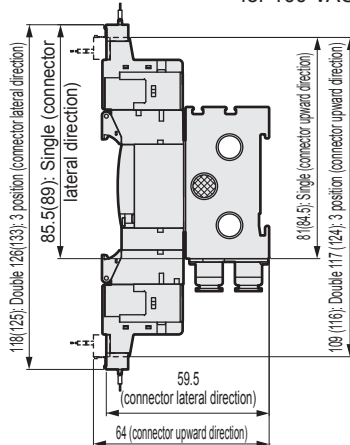
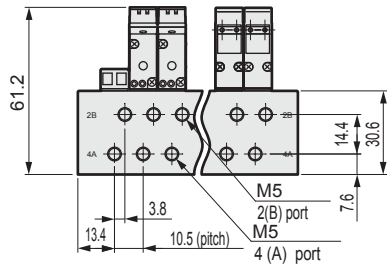
- M5 female thread type (M5)

- E type connector type (E)

- EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.



Station 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 ₁	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

M4GB1-D Series

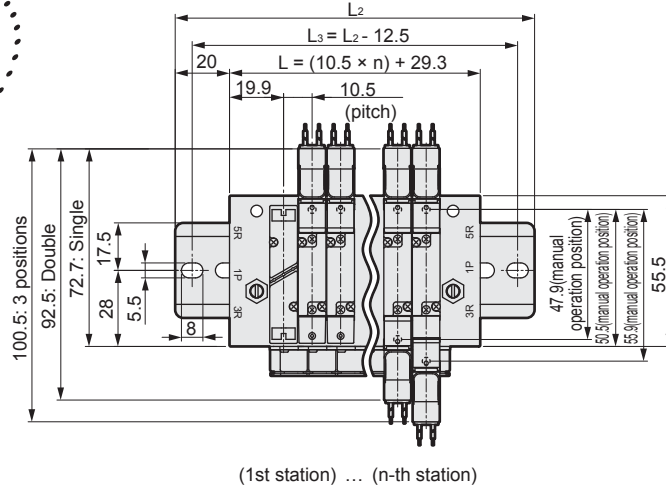
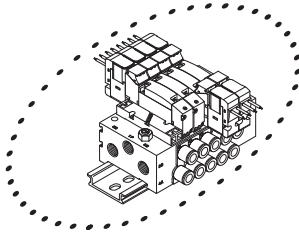
Individual wiring manifold; base piping

Dimensions

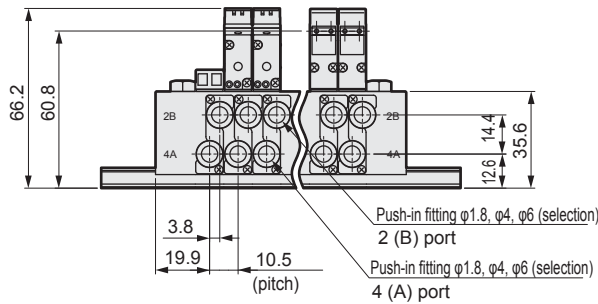
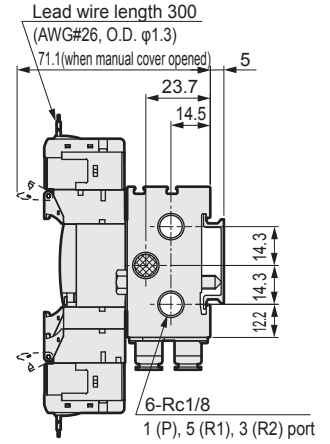


M4GB1

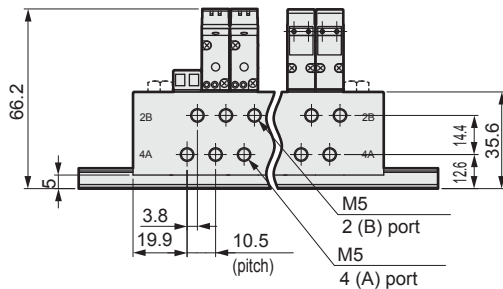
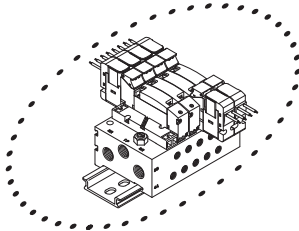
- DIN rail installation (D)
Grommet lead wire (blank)



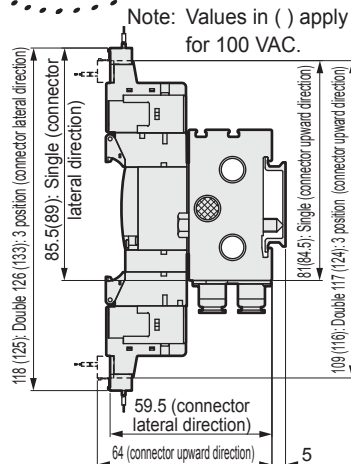
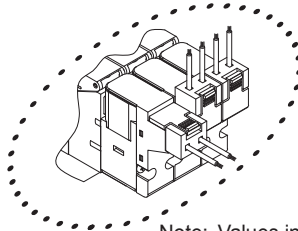
- Note 1 Can be changed to direct mounting.
- Note 2 The dimension of dual 3 port valve integrated type is the same as that of the double type.



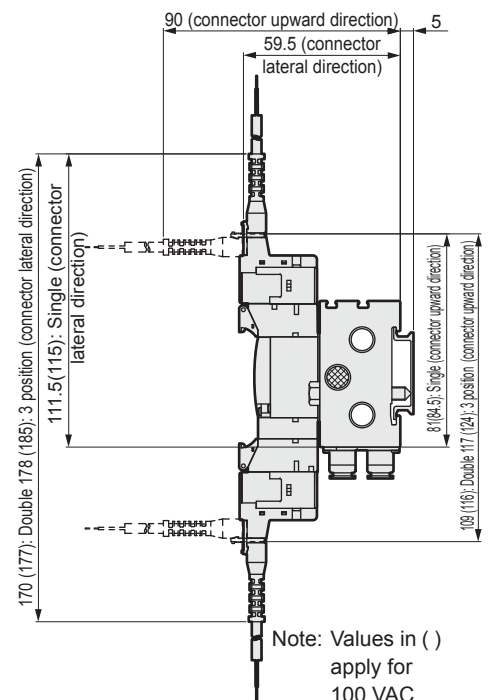
- DIN rail installation (D)
M5 female thread type (M5)



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



- EJ type connector type (E**J)



Station 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 ₂	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 ₃	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

M4GB1 Series

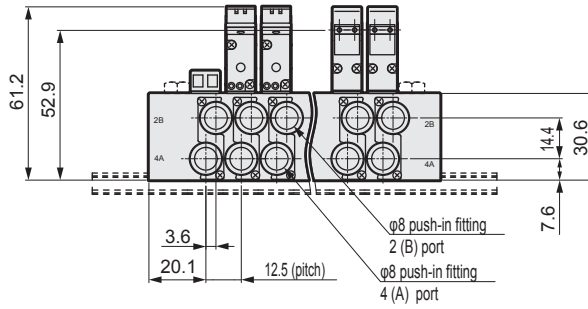
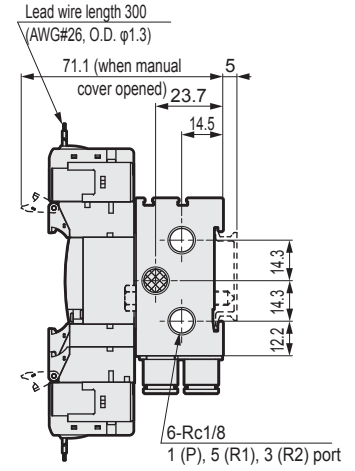
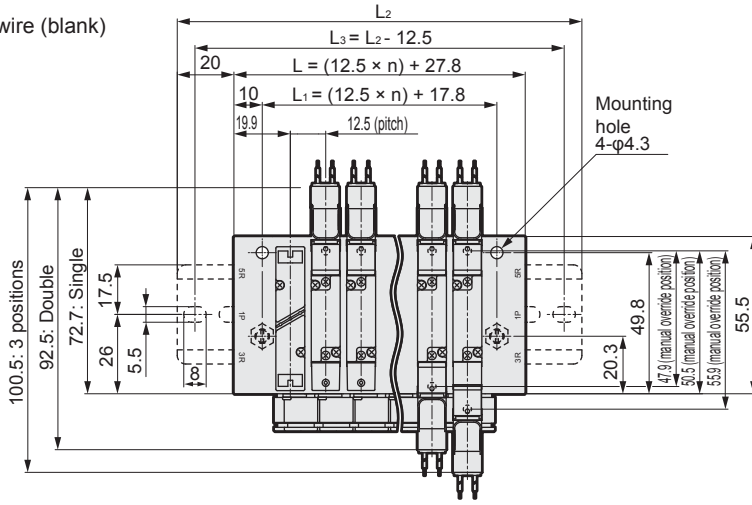
Individual wiring manifold; base piping

Dimensions



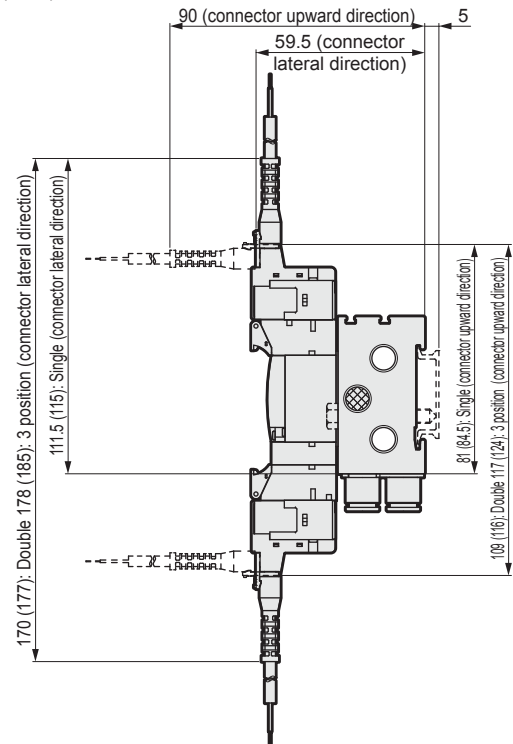
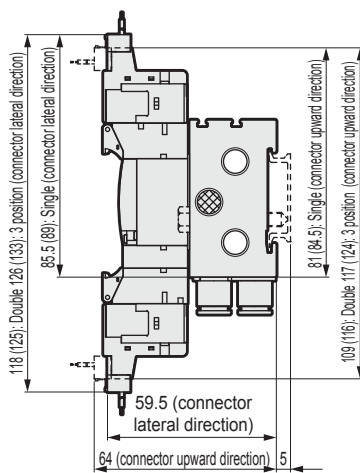
M4GB1-C8

- Grommet lead wire (blank)



- E type connector type (E)

EJ type connector type (E**J)



Station 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 ₁	42.8	55.3	67.8	80.3	92.8	105.3	117.8	130.3	142.8	155.3	167.8	180.3	192.8	205.3	217.8	230.3	242.8	255.3	267.8
L ₂	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 ₃	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				

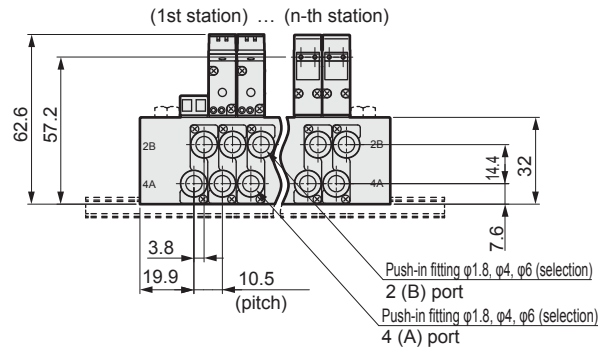
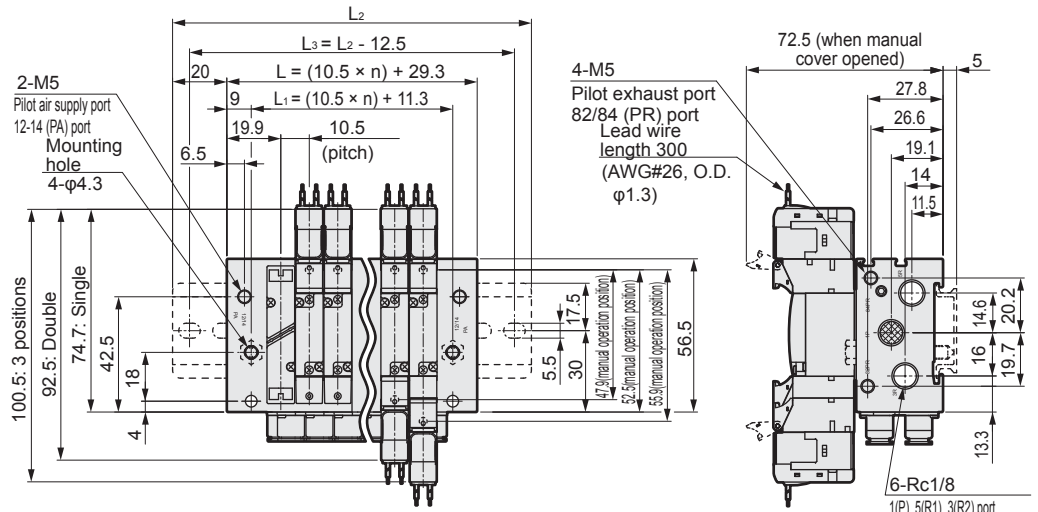
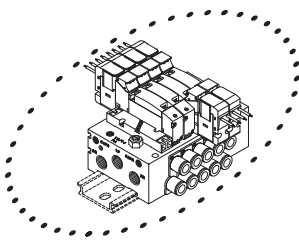
4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

Dimensions

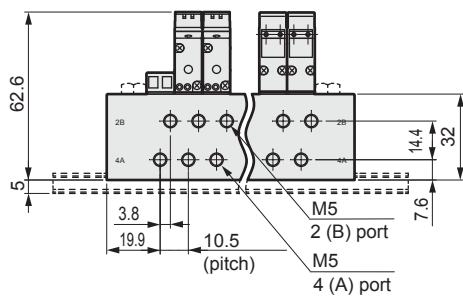
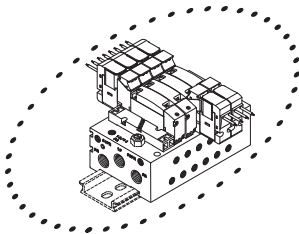


M4GB1

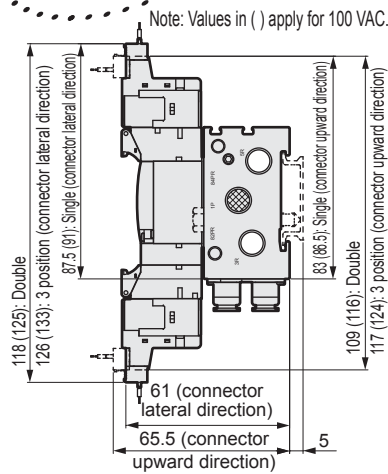
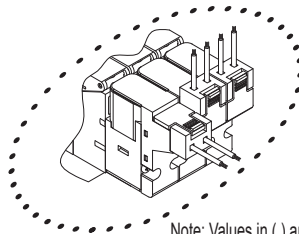
- External pilot (K)
Grommet lead wire (blank)



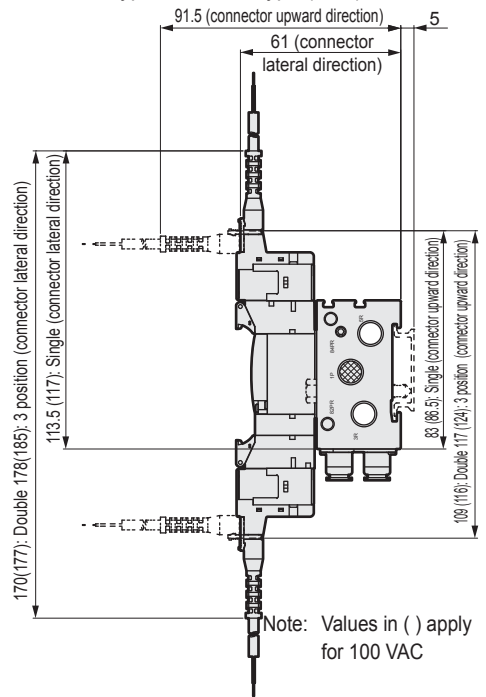
- External pilot (K)
M5 female thread type (M5)



- External pilot (K)
E type connector type (E)



- External pilot (K)
EJ type connector type (E**J)



Station 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 ₁	32.3	42.8	53.3	63.8	74.3	84.8	95.3	105.8	116.3	126.8	137.3
L ₂	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0
L ₃	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GB1 Series

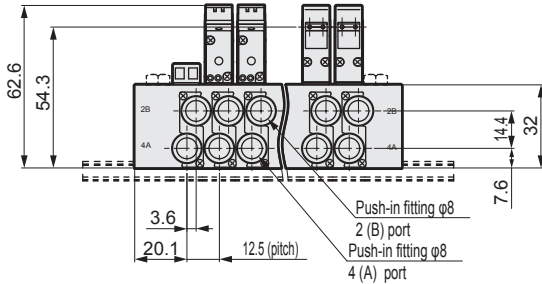
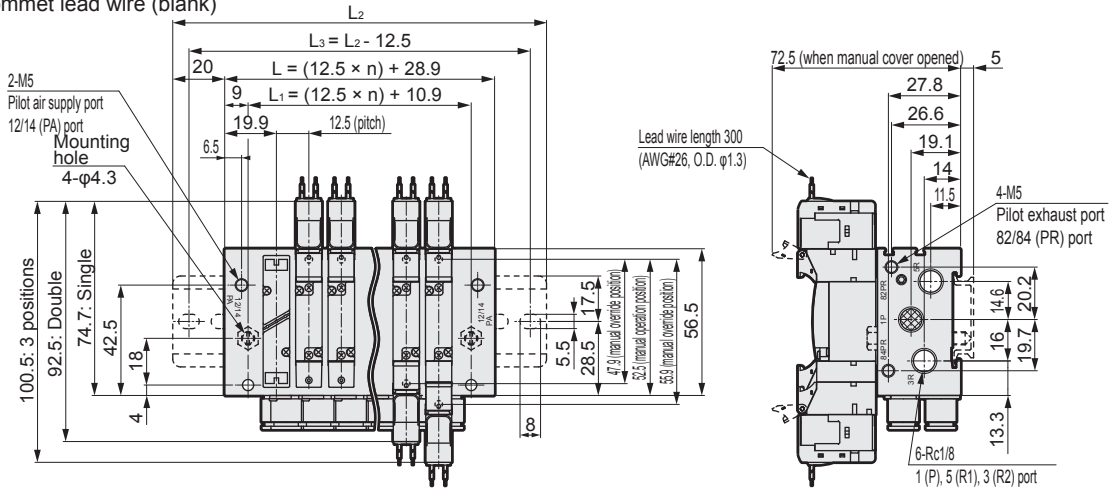
Individual air supply wiring manifold; base piping

Dimensions

M4GB1-C8-K

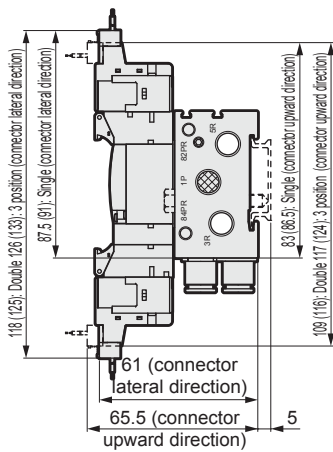
- External pilot (K)

Grommet lead wire (blank)



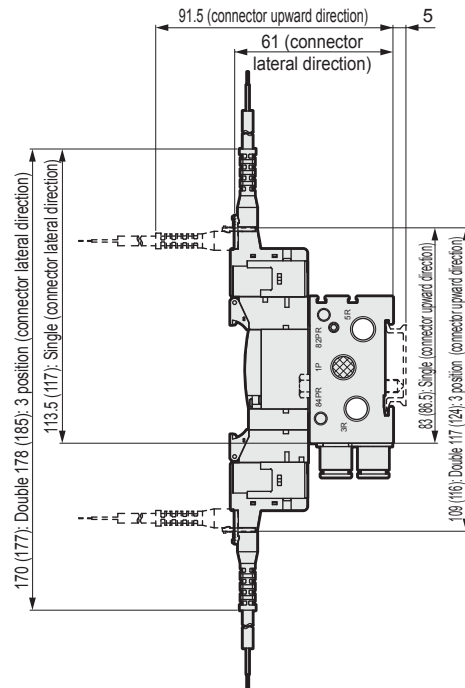
- External pilot (K)

E type connector type (E)



- External pilot (K)

EJ type connector type (E**J)



Station 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 ₁	35.9	48.4	60.9	73.4	85.9	98.4	110.9	123.4	135.9	148.4	160.9
L ₂	100.0	112.5	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0
L ₃	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

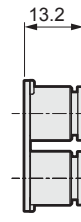
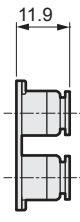
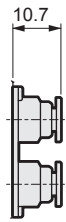
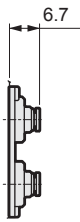
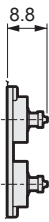
● $\phi 1.8$ (CF)

● $\phi 1.8$ (C18)

● $\phi 4$ (C4)

● $\phi 6$ (C6)

● $\phi 8$ (C8)



● Fitting straight, single plug

● $\phi 1.8$ (CFNC)

● $\phi 1.8$ (C18NC)

● $\phi 4$ (C4NC)

● $\phi 6$ (C6NC)

● $\phi 8$ (C8NC)

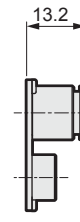
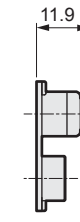
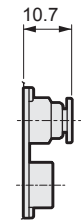
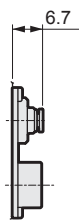
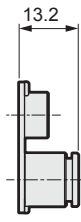
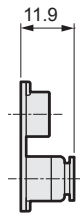
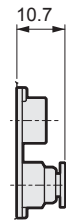
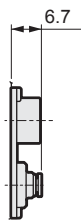
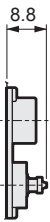
● $\phi 1.8$ (CFNO)

● $\phi 1.8$ (C18NO)

● $\phi 4$ (C4NO)

● $\phi 6$ (C6NO)

● $\phi 8$ (C8NO)



● Fitting L type (upward)

● $\phi 1.8$ (CL18)

● $\phi 4$ (CL4)

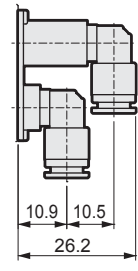
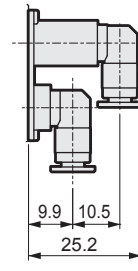
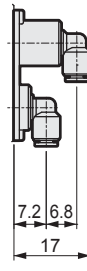
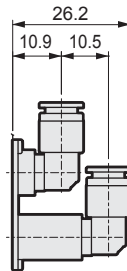
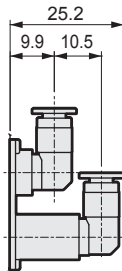
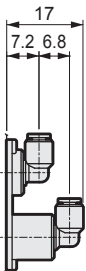
● $\phi 6$ (CL6)

● Fitting L type (downward)

● $\phi 1.8$ (CD18)

● $\phi 4$ (CD4)

● $\phi 6$ (CD6)



● Fitting L type (upward), single plug

● $\phi 1.8$ (CL18NC)

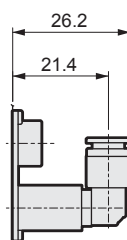
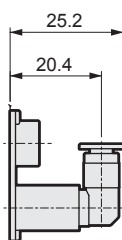
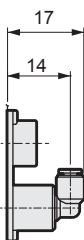
● $\phi 4$ (CL4NC)

● $\phi 6$ (CL6NC)

● $\phi 1.8$ (CL18NO)

● $\phi 4$ (CL4NO)

● $\phi 6$ (CL6NO)



● Push-in fitting L (downward), single plug

● $\phi 1.8$ (CD18NC)

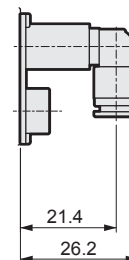
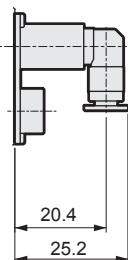
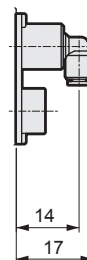
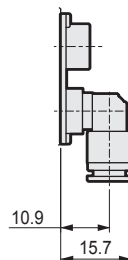
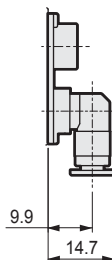
● $\phi 4$ (CD4NC)

● $\phi 6$ (CD6NC)

● $\phi 1.8$ (CD18NO)

● $\phi 4$ (CD4NO)

● $\phi 6$ (CD6NO)



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

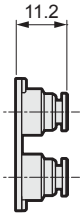
M4GB1 Series

Individual wiring manifold; base piping

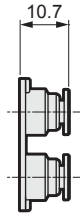
Dimensions

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

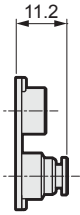
- Fitting straight
- $\phi 1/8$ inch (C3N)



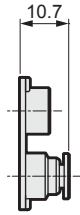
- $\phi 5/32$ inch (C4N)



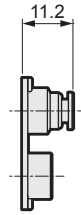
- Fitting straight, single plug
- $\phi 1/8$ inch (C3NCN)



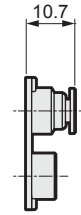
- $\phi 5/32$ inch (C4NCN)



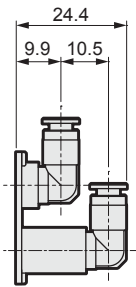
- $\phi 1/8$ inch (C3NON)



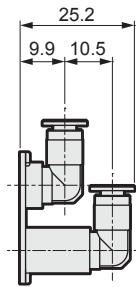
- $\phi 5/32$ inch (C4NON)



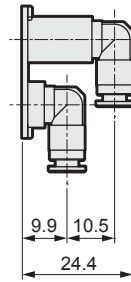
- Fitting L type (upward)
- $\phi 1/8$ inch (CL3N)



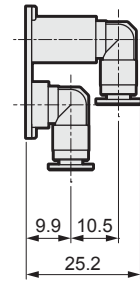
- $\phi 5/32$ inch (CL4N)



- $\phi 1/8$ inch (CD3N)

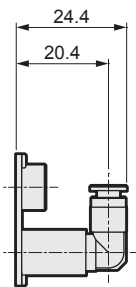


- $\phi 5/32$ inch (CD4N)

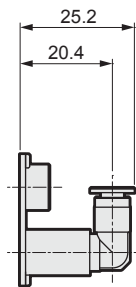


- Fitting L type (upward), single plug

- $\phi 1/8$ inch (CL3NCN)



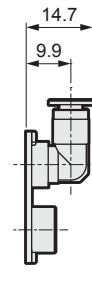
- $\phi 5/32$ inch (CL4NCN)



- $\phi 1/8$ inch (CL3NON)

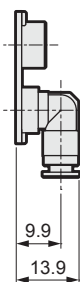


- $\phi 5/32$ inch (CL4NON)

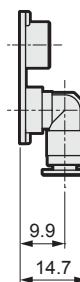


- Push-in fitting L (downward), single plug

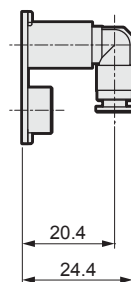
- $\phi 1/8$ inch (CD3NCN)



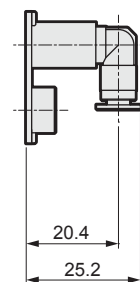
- $\phi 5/32$ inch (CD4NCN)



- $\phi 1/8$ inch (CD3NON)



- $\phi 5/32$ inch (CD4NON)



MEMO

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

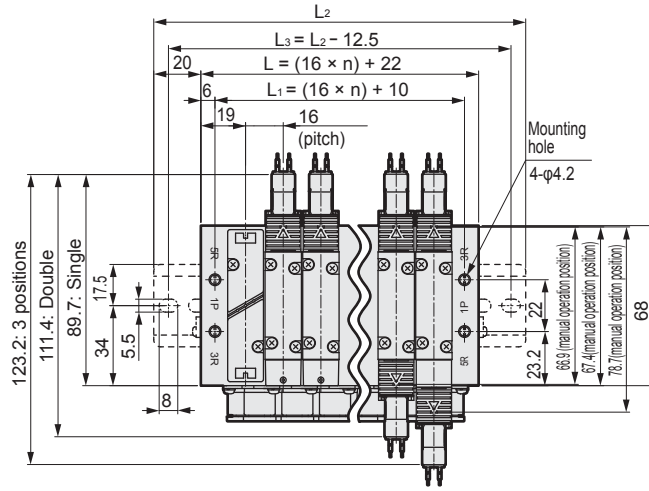
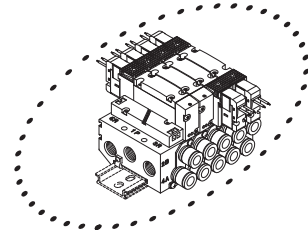
M4GB2 Series

Individual wiring manifold; base piping

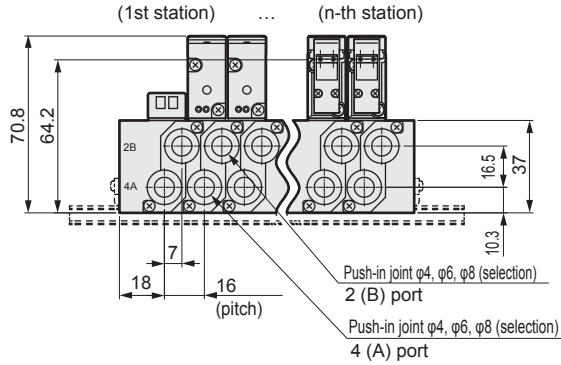
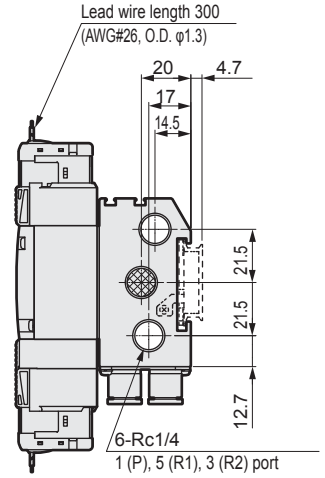
Dimensions 

M4GB2

- Grommet lead wire (blank)



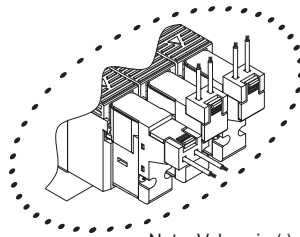
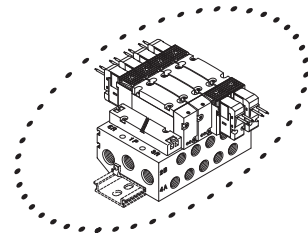
Note The dimension of dual 3 port valve integrated type is the same as that of the double type.



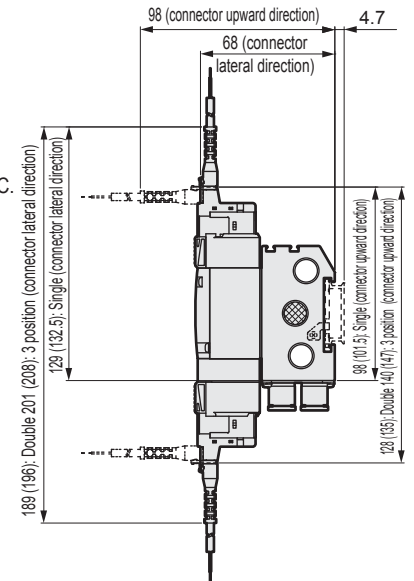
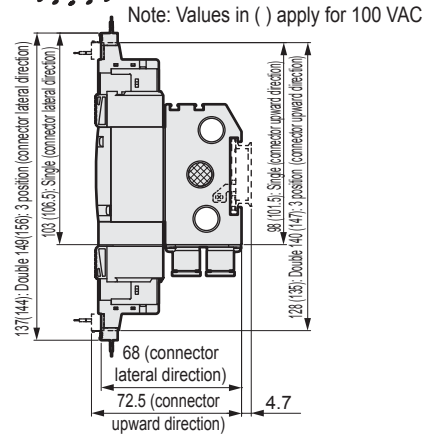
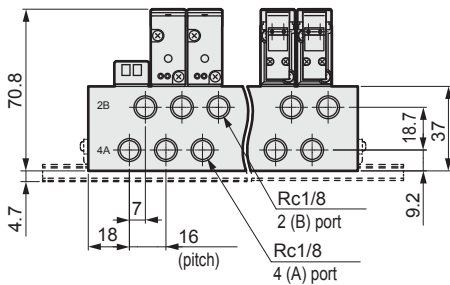
- Rc1/8 Female thread type (06)

- E type connector type (E)

- EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.



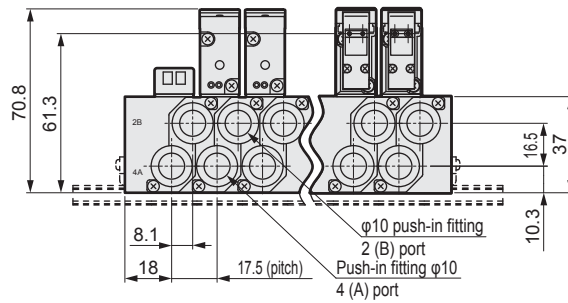
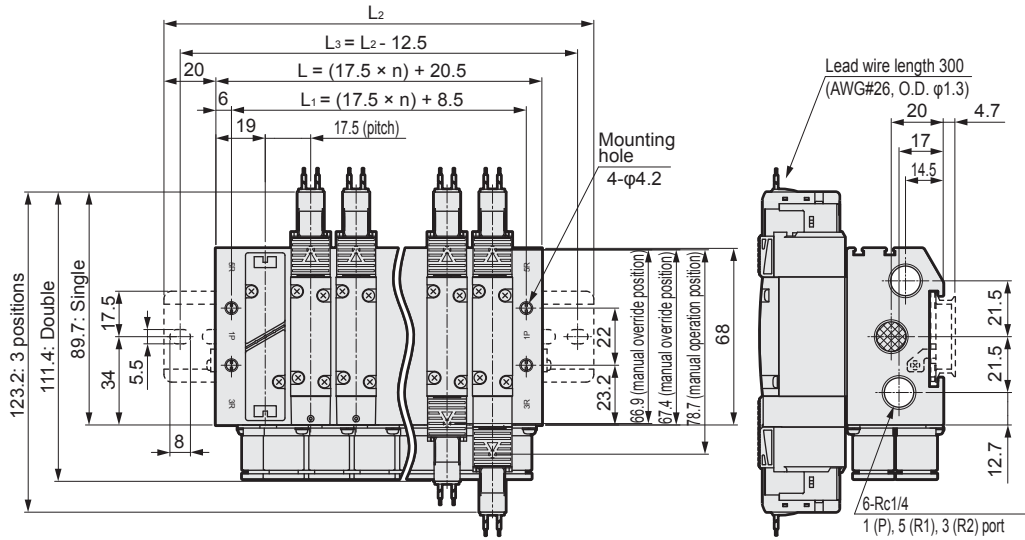
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	54.0	70.0	86.0	102.0	118.0	134.0	150.0	166.0	182.0	198.0	214.0	230.0	246.0	262.0	278.0	294.0	310.0	326.0	342.0
L ₁	42.0	58.0	74.0	90.0	106.0	122.0	138.0	154.0	170.0	186.0	202.0	218.0	234.0	250.0	266.0	282.0	298.0	314.0	330.0
L ₂	100.0	112.5	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 ₃	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				

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

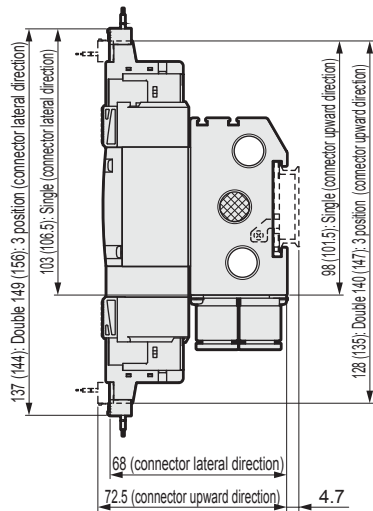
Dimensions

M4GB2-C10

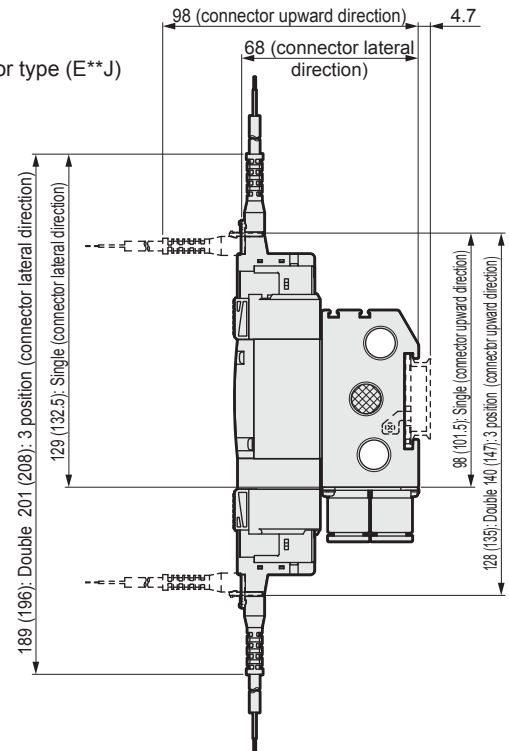
- Grommet lead wire (blank)



- E type connector type (E)



- EJ type connector type (E**J)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	55.5	73.0	90.5	108.0	125.5	143.0	160.5	178.0	195.5	213.0	230.5	248.0	265.5	283.0	300.5	318.0	335.5	353.0	370.5
L ₁	43.5	61.0	78.5	96.0	113.5	131.0	148.5	166.0	183.5	201.0	218.5	236.0	253.5	271.0	288.5	306.0	323.5	341.0	358.5
L ₂	100.0	125.0	137.5	150.0	175.0	187.5	212.5	225.0	237.5	262.5	275.0	300.0	312.5	325.0					
L ₃	87.5	112.5	125.0	137.5	162.5	175.0	200.0	212.5	225.0	250.0	262.5	287.5	300.0	312.5					

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

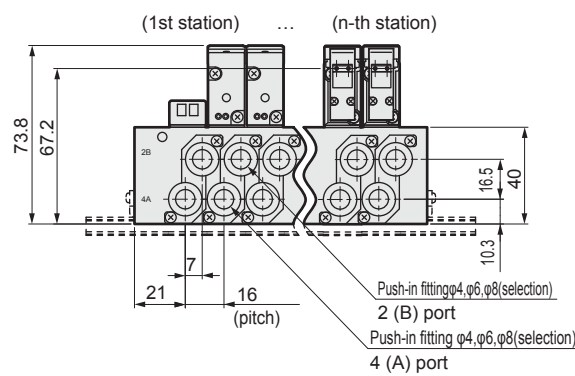
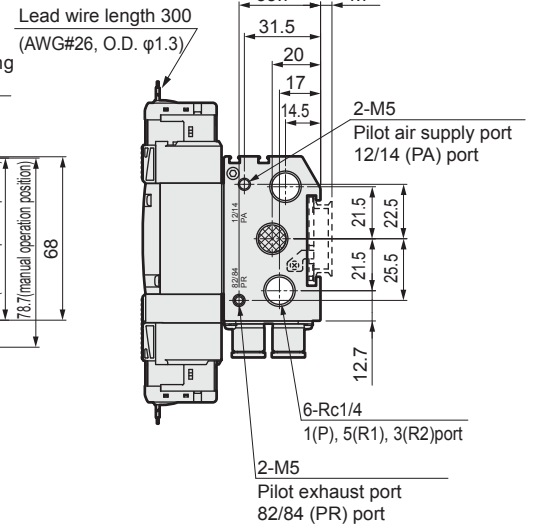
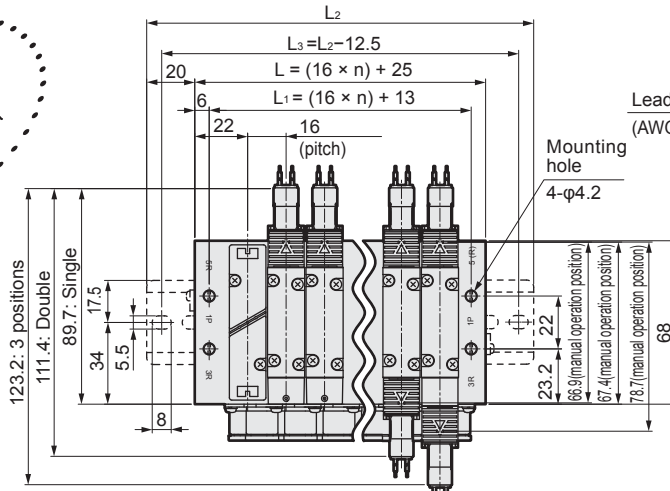
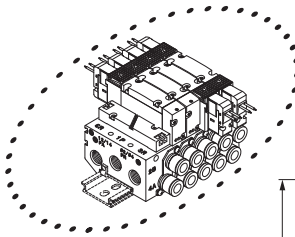
M4GB2 Series

Individual wiring manifold; base piping

Dimensions 

M4GB2

- External pilot (K)
Grommet lead wire (blank)

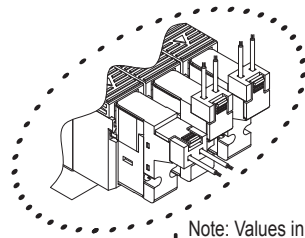
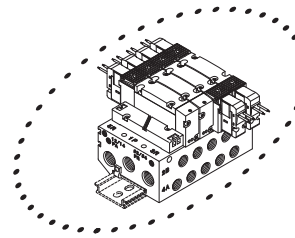


- External pilot (K)
Rc1/8 female thread type (06)

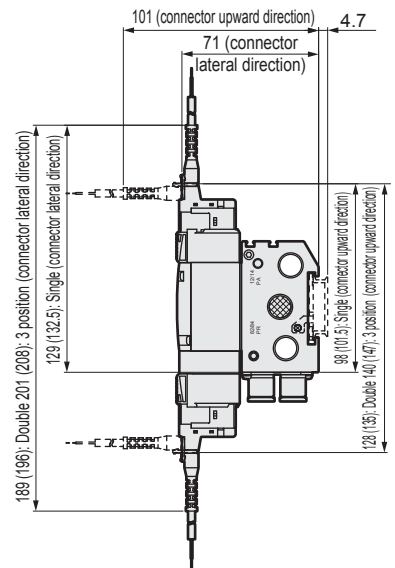
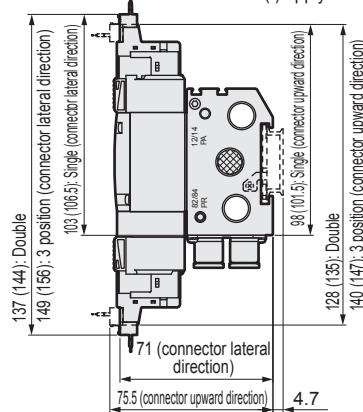
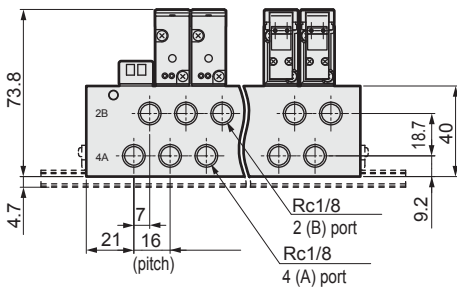
- External pilot (K)
E type connector type (E)

- External pilot type (K)
EJ type connector type (E**J)

Note: Values in () apply for 100 VAC



Note: Values in () apply for 100 VAC.



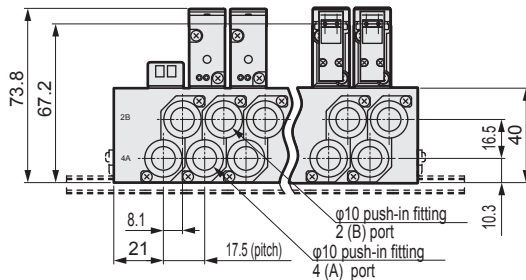
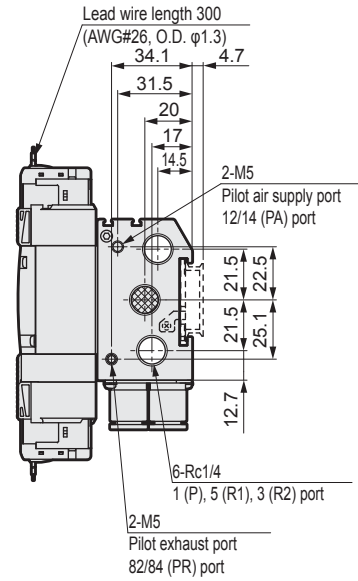
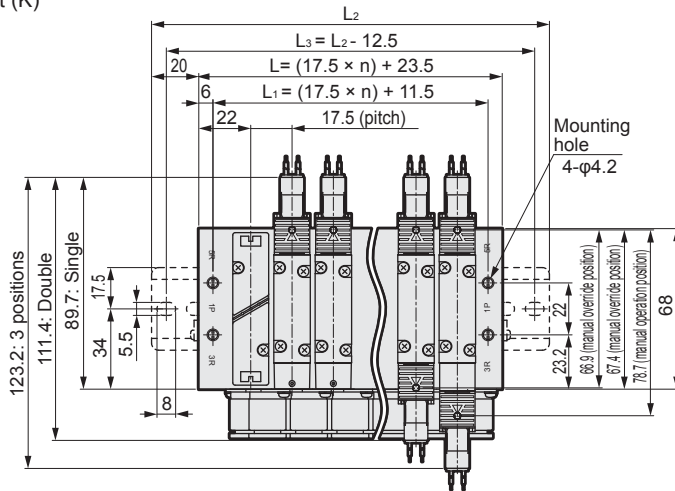
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	57.0	73.0	89.0	105.0	121.0	137.0	153.0	169.0	185.0	201.0	217.0	233.0	249.0	265.0	281.0	297.0	313.0	329.0	345.0
L ₁	45.0	61.0	77.0	93.0	109.0	125.0	141.0	157.0	173.0	189.0	205.0	221.0	237.0	253.0	269.0	285.0	301.0	317.0	333.0
L ₂	100.0	125.0	137.5	150.0	162.5	187.5	200.0	212.5	225.0	250.0	262.5	275.0	300.0	312.5	325.0				
L ₃	87.5	112.5	125.0	137.5	150.0	175.0	187.5	200.0	212.5	237.5	250.0	262.5	287.5	300.0	312.5				

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

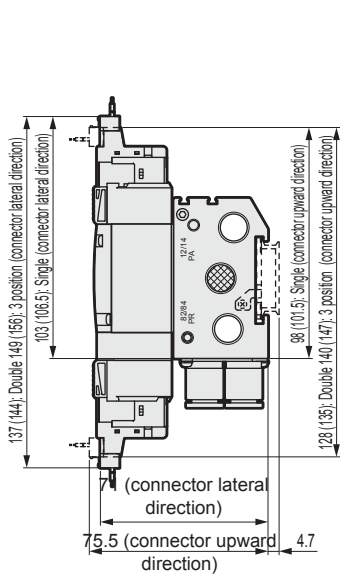
Dimensions

M4GB2-C10-K

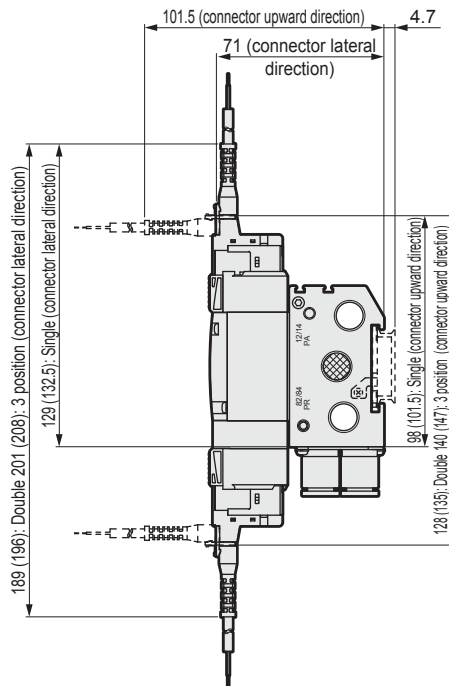
- Grommet lead wire (blank)
External pilot (K)



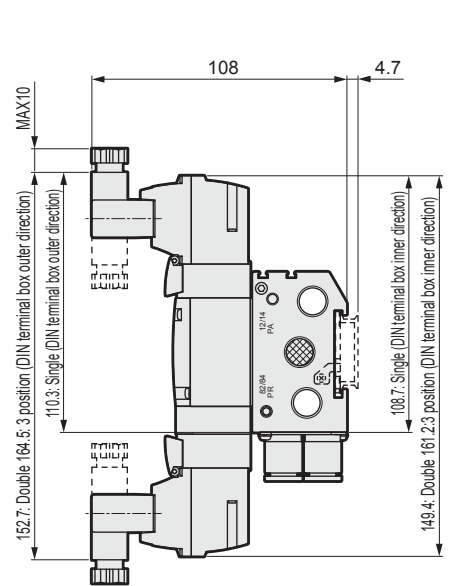
- External pilot (K)
E type connector type (E)



- External pilot (K)
EJ type connector type (E**J)



- External pilot (K)
DIN terminal box type (B)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	58.5	76.0	93.5	111.0	128.5	146.0	163.5	181.0	198.5	216.0	233.5	251.0	268.5	286.0	303.5	321.0	338.5	356.0	373.5
L ₁	46.5	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5
L ₂	100.0	125.0	137.5	162.5	175.0	187.5	212.5	225.0	250.0	262.5	275.0	300.0	312.5	337.5	350.0				
L ₃	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				

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

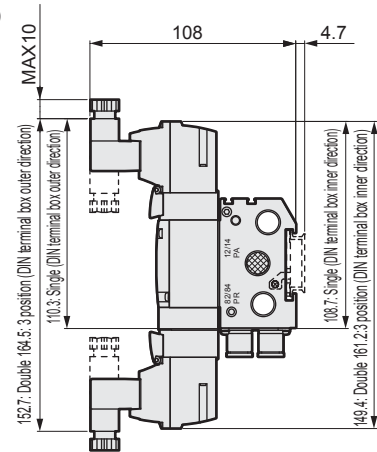
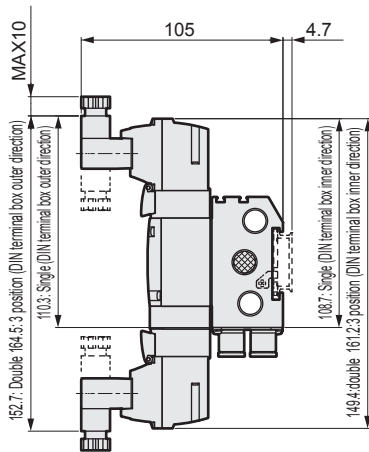
M4GB2 Series

Individual wiring manifold; base piping

Dimensions

● DIN terminal box type (B)

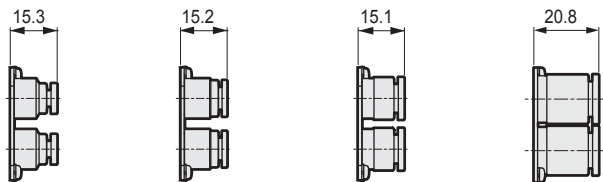
● External pilot
DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

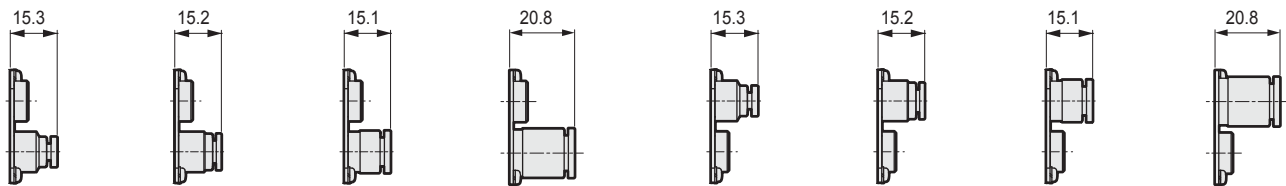
● Fitting straight

● $\phi 4$ (C4) ● $\phi 6$ (C6) ● $\phi 8$ (C8) ● $\phi 10$ (C10)



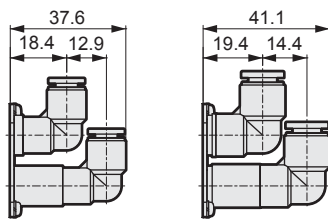
● Fitting straight, single plug

● $\phi 4$ (C4NC) ● $\phi 6$ (C6NC) ● $\phi 8$ (C8NC) ● $\phi 10$ (C10NC) ● $\phi 4$ (C4NO) ● $\phi 6$ (C6NO) ● $\phi 8$ (C8NO) ● $\phi 10$ (C10NO)



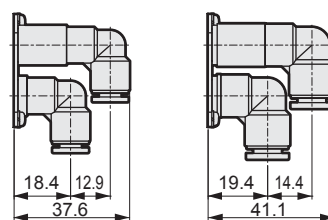
● Fitting L type (upward)

● $\phi 6$ (CL6) ● $\phi 8$ (CL8)



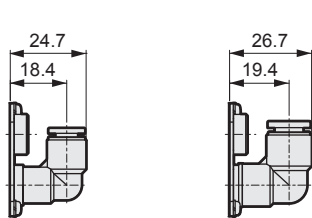
● Fitting L type (downward)

● $\phi 6$ (CD6) ● $\phi 8$ (CD8)

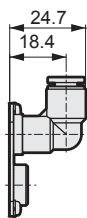


● Fitting L type (upward), single plug

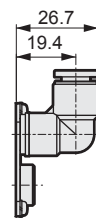
● $\phi 6$ (CL6NC) ● $\phi 8$ (CL8NC)



● $\phi 6$ (CL6NO)

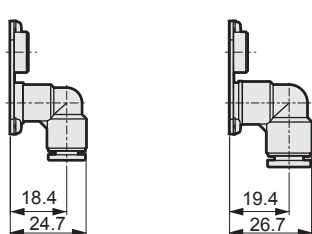


● $\phi 8$ (CL8NO)

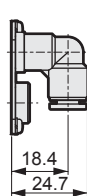


● Fitting L type (downward), single plug

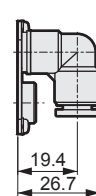
● $\phi 6$ (CD6NC) ● $\phi 8$ (CD8NC)



● $\phi 6$ (CD6NO)



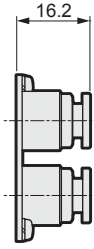
● $\phi 8$ (CD8NO)



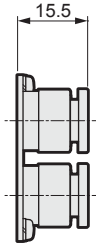
Dimensions

● Fitting straight

● $\phi 1/4$ inch (C6N)

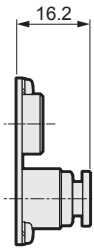


● $\phi 5/16$ inch (C8N)

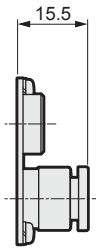


● Fitting straight, single plug

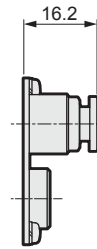
● $\phi 1/4$ inch (C6NCN)



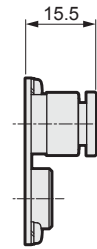
● $\phi 5/16$ inch (C8NCN)



● $\phi 1/4$ inch (C6NON)

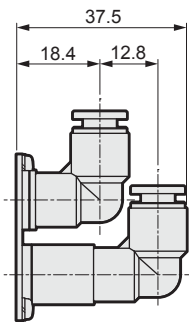


● $\phi 5/16$ inch (C8NON)

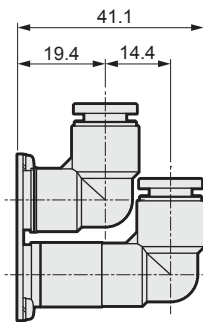


● Fitting L type (upward)

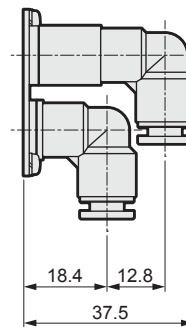
● $\phi 1/4$ inch (CL6N)



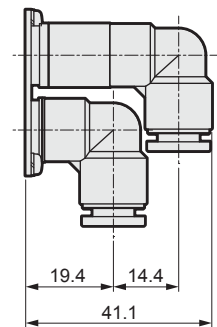
● $\phi 5/16$ inch (CL8N)



● $\phi 1/8$ inch (CD6N)

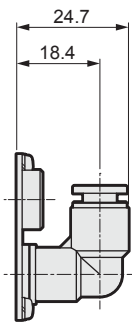


● $\phi 5/32$ inch (CD8N)

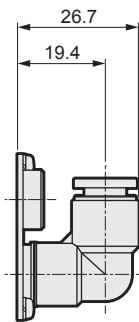


● Fitting L type (upward), single plug

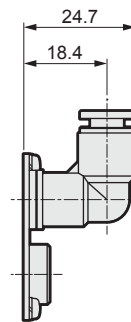
● $\phi 1/4$ inch (CL6NCN)



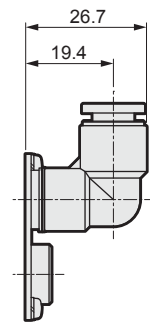
● $\phi 5/16$ inch (CL8NCN)



● $\phi 1/4$ inch (CL6NON)

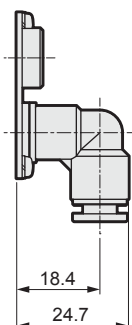


● $\phi 5/16$ inch (CL8NON)

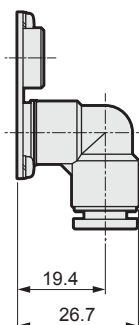


● Fitting L type (downward), single plug

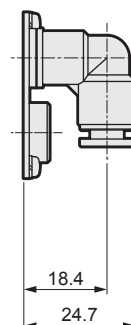
● $\phi 1/4$ inch (CD6NCN)



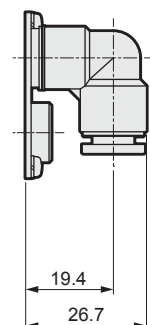
● $\phi 5/16$ inch (CD8NCN)



● $\phi 1/4$ inch (CD6NON)



● $\phi 5/16$ inch (CD8NON)



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GB3 Series

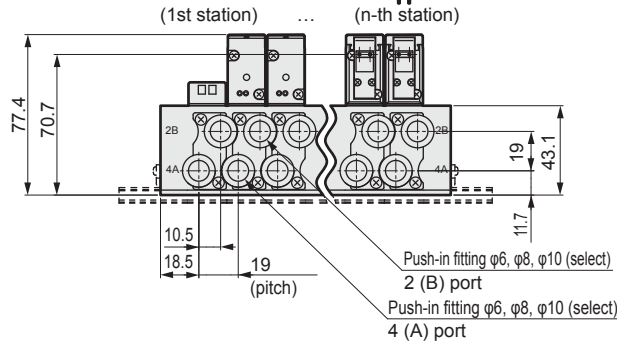
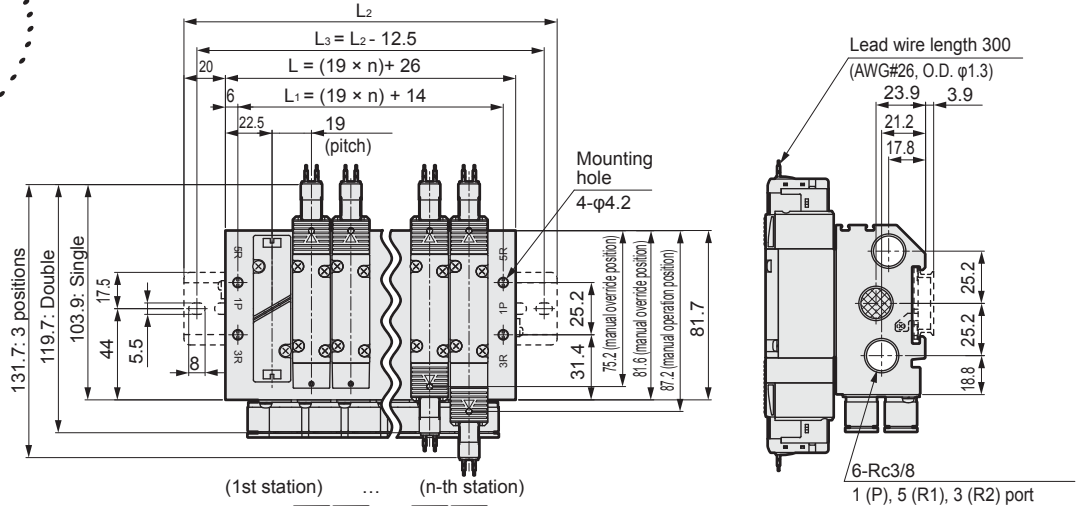
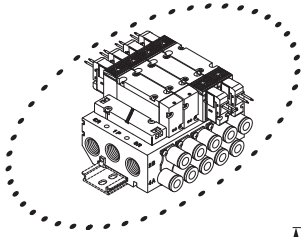
Individual wiring manifold; base piping

Dimensions



M4GB3

- Grommet lead wire (blank)

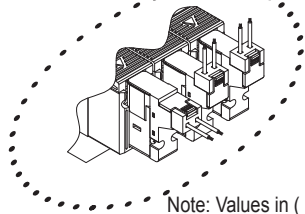
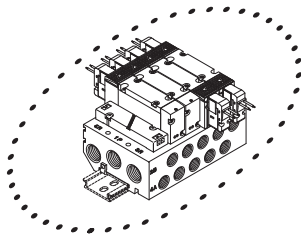


- Rc1/4 Female thread type (08)

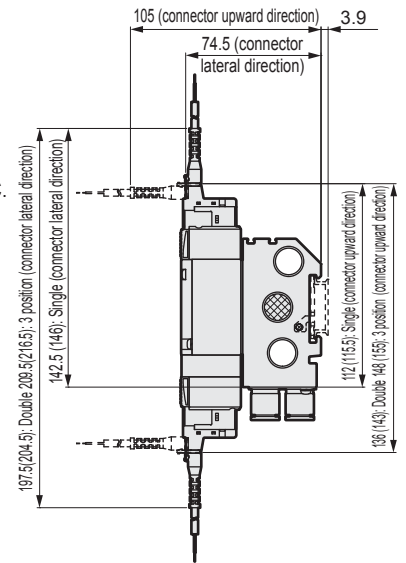
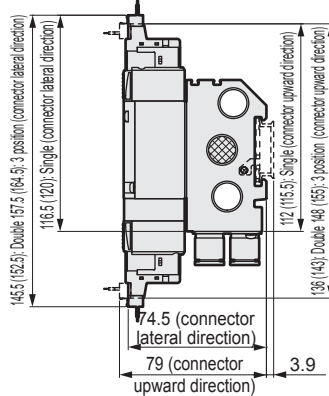
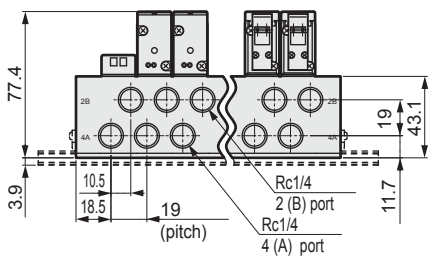
- E type connector type (E)

- EJ type connector type (E**J)

Note: Values in () apply for 100 VAC.



Note: Values in () apply for 100 VAC.



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	83.0	102.0	121.0	140.0	159.0	178.0	197.0	216.0	235.0	254.0	273.0	292.0	311.0	330.0	349.0	368.0	387.0	406.0
L ₁	52.0	71.0	90.0	109.0	128.0	147.0	166.0	185.0	204.0	223.0	242.0	261.0	280.0	299.0	318.0	337.0	356.0	375.0	394.0
L ₂	112.5	125.0	150.0	162.5	187.5	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	375.0				
L ₃	100.0	112.5	137.5	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	312.5	325.0	350.0	362.5				

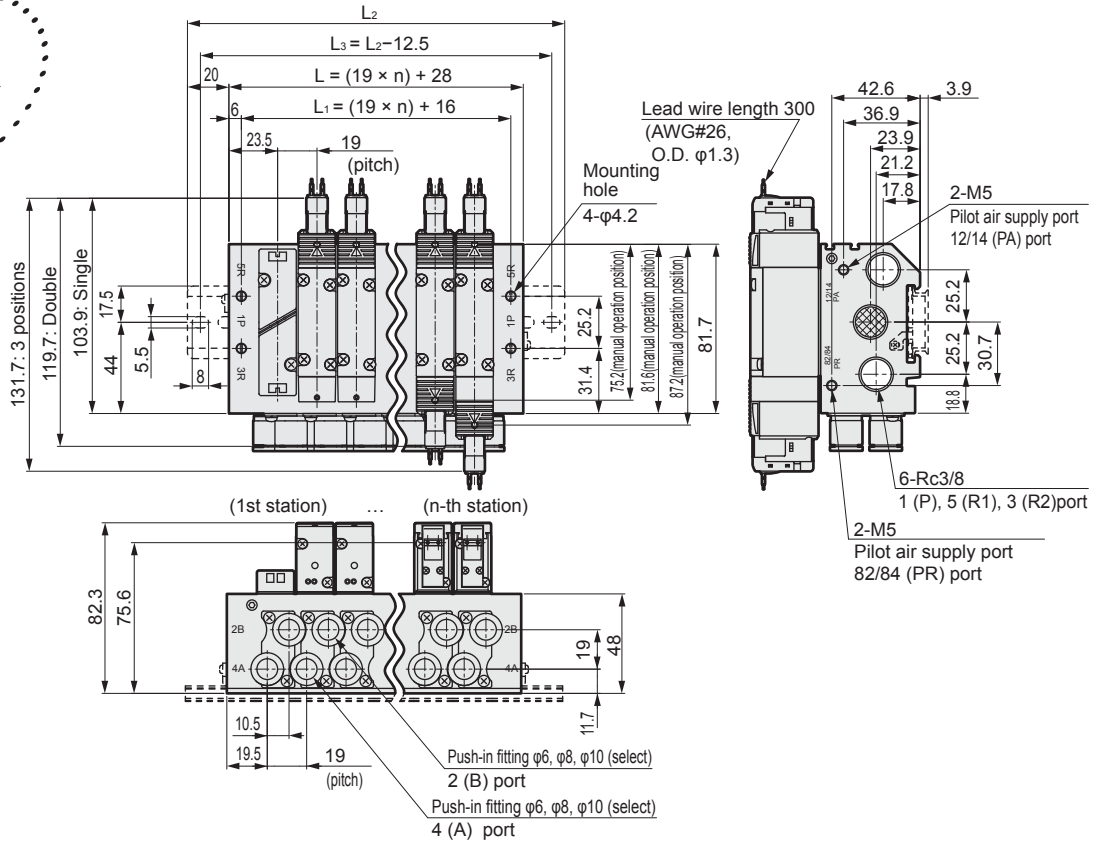
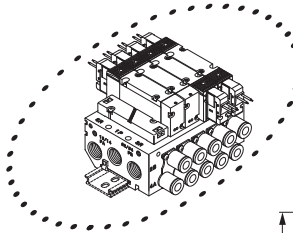
4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

Dimensions

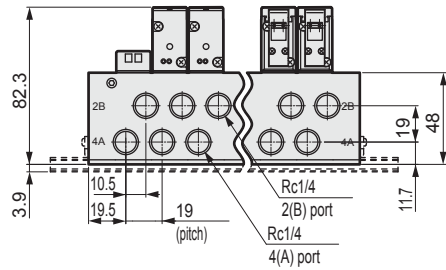
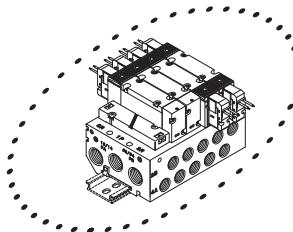


M4GB3

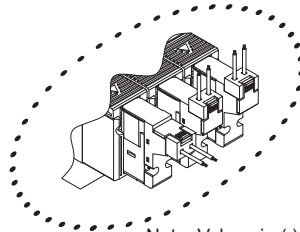
- External pilot (K)
Grommet lead wire (blank)



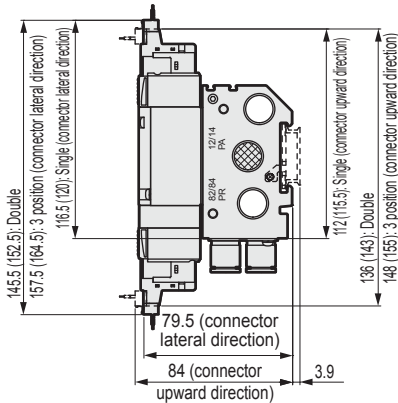
- External pilot (K)
Rc1/4 female thread type (08)



- External pilot (K)
E type connector type (E)

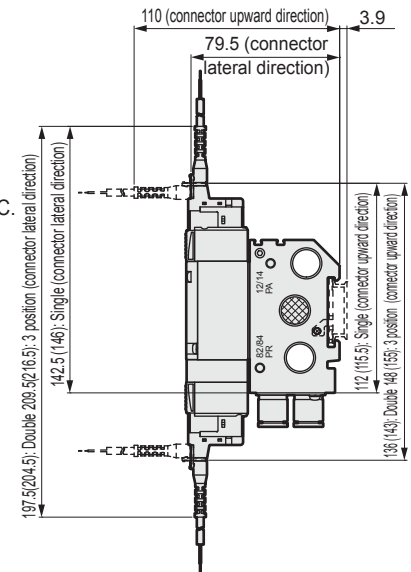


Note: Values in () apply for 100 VAC.



- External pilot (K)
EJ type connector type (E**J)

Note: Values in () apply for 100 VAC.



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	66.0	85.0	104.0	123.0	142.0	161.0	180.0	199.0	218.0	237.0	256.0	275.0	294.0	313.0	332.0	351.0	370.0	389.0	408.0
L ₁	54.0	73.0	92.0	111.0	130.0	149.0	168.0	187.0	206.0	225.0	244.0	263.0	282.0	301.0	320.0	339.0	358.0	377.0	396.0
L ₂	112.5	125.0	150.0	175.0	187.5	212.5	225.0	250.0	262.5	287.5	300.0	325.0	337.5	362.5	375.0				
L ₃	100.0	112.5	137.5	162.5	175.0	200.0	212.5	237.5	250.0	275.0	287.5	312.5	325.0	350.0	362.5				

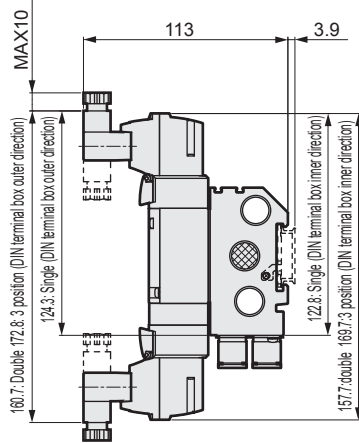
4GAB
M4GAB/B
MN4GAB/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4GB3 Series

Individual wiring manifold; base piping

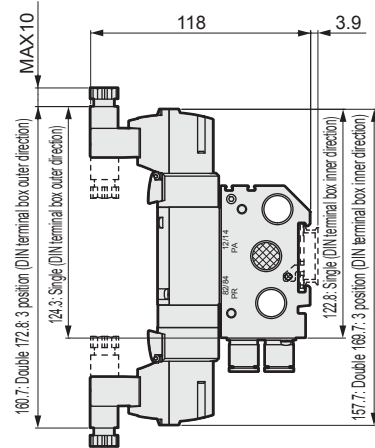
Dimensions

● DIN terminal box type (B)



● External pilot (K)

DIN terminal box type (B)



Note: The DIN terminal box assembly is shipped facing inward.

● Fitting straight

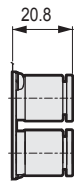
● $\phi 6$ (C6)



● $\phi 8$ (C8)



● $\phi 10$ (C10)



● Fitting straight, single plug

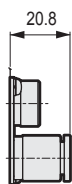
● $\phi 6$ (C6NC)



● $\phi 8$ (C8NC)



● $\phi 10$ (C10NC)



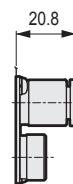
● $\phi 6$ (C6NO)



● $\phi 8$ (C8NO)

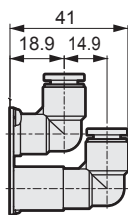


● $\phi 10$ (C10NO)

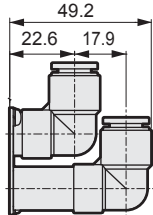


● Fitting L type (upward)

● $\phi 8$ (CL8)

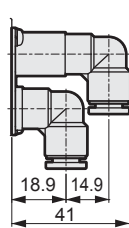


● $\phi 10$ (CL10)

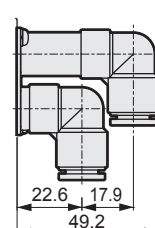


● Fitting L type (downward)

● $\phi 8$ (CD8)

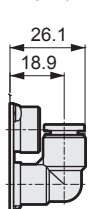


● $\phi 10$ (CD10)

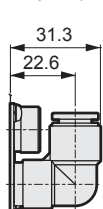


● Fitting L type (upward), single plug

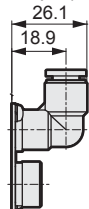
● $\phi 8$ (CL8NC)



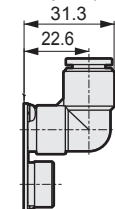
● $\phi 10$ (CL10NC)



● $\phi 8$ (CL8NO)

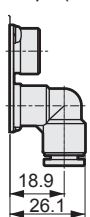


● $\phi 10$ (CL10NO)

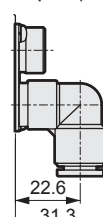


● Fitting L type (downward), single plug

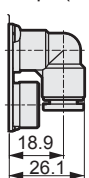
● $\phi 8$ (CD8NC)



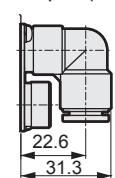
● $\phi 10$ (CD10NC)



● $\phi 8$ (CD8NO)



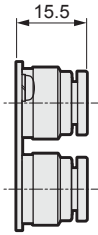
● $\phi 10$ (CD10NO)



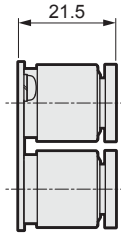
Dimensions

● Fitting straight

● $\phi 5/16$ inch (C8N)

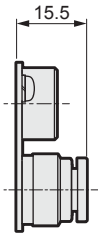


● $\phi 3/8$ inch (C10N)

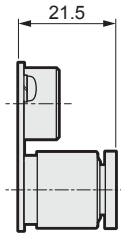


● Fitting straight, single plug

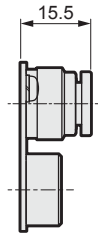
● $\phi 5/16$ inch (C8NCN)



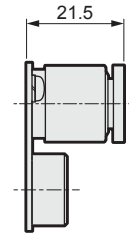
● $\phi 3/8$ inch (C10NCN)



● $\phi 5/16$ inch (C8NON)

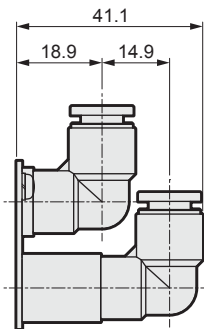


● $\phi 3/8$ inch (C10NON)

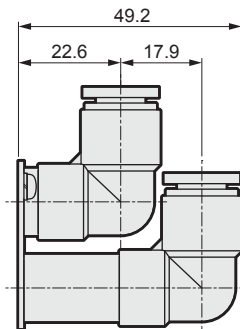


● Fitting L type (upward)

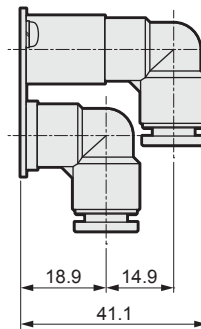
● $\phi 5/16$ inch (CL8N)



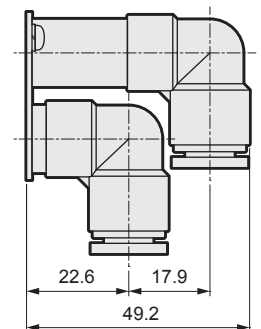
● $\phi 3/8$ inch (CL10N)



● $\phi 5/16$ inch (CD8N)

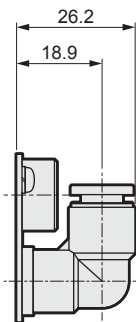


● $\phi 3/8$ inch (CD10N)

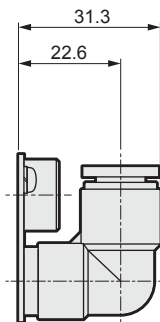


● Fitting L type (upward), single plug

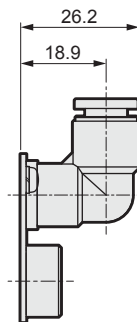
● $\phi 5/16$ inch (CL8NCN)



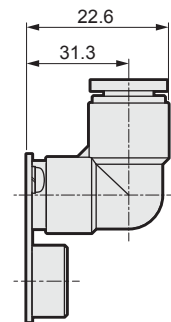
● $\phi 3/8$ inch (CL10NCN)



● $\phi 5/16$ inch (CL8NON)

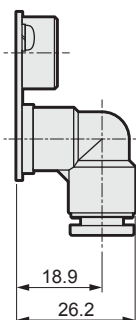


● $\phi 3/8$ inch (CL10NON)

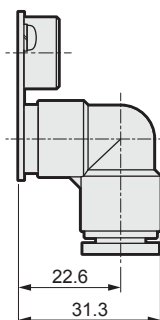


● Fitting L type (downward), single plug

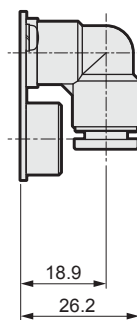
● $\phi 5/16$ inch (CD8NCN)



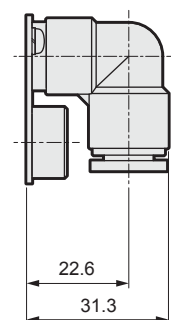
● $\phi 3/8$ inch (CD10NCN)

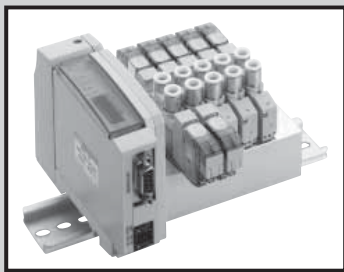


● $\phi 5/16$ inch (CD8NON)



● $\phi 3/8$ inch (CD10NON)





Reduced wiring manifold
Body porting
Direct mount type/DIN rail mount type

M3GA1, 2, 3-T* (D) Series M4GA1, 2, 3-T* (D) Series

● Applicable cylinder bore size: $\phi 20$ to $\phi 100$



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

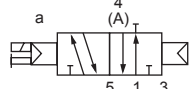
Technical data

Safety
precautions

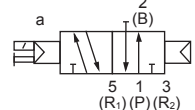
Manifold
Specifications

JIS symbol

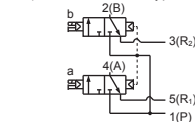
- 3 port valve
2-position single N.C. type



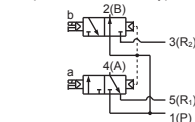
- 2-position single solenoid NO type



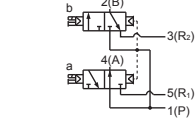
- Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



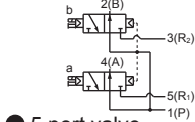
- (A side valve: N.C. type, B side valve: N.O. type)



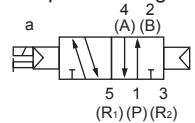
- (A side valve: N.O. type, B side valve: N.C. type)



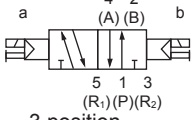
- (A side valve: N.O. type, B side valve: N.O. type)



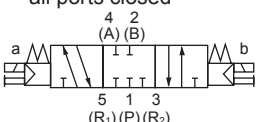
- 5 port valve
2-position single



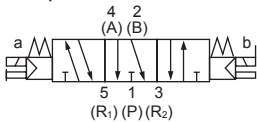
- 2-position double



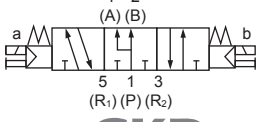
- 3 position
all ports closed



- 3-position A/B/R connection



- 3-position P/A/B connection



Manifold common specifications

Descriptions		Reduced wiring integrated base
Manifold type		Direct mount type/DIN rail mount type
Mounting method		Common supply/common exhaust (check valve integrated)
Supply and exhaust method		Main valve/pilot valve common exhaust (Pilot exhaust check valve integrated)
Pilot exhaust method	Internal pilot	Main valve/pilot valve individual exhaust
	External pilot	
Piping direction		Valve top direction
Valve type and operation method		Pilot-operated soft spool valve
Working fluid		Compressed air
Max. working pressure	MPa	0.7
Min. working pressure	MPa	0.2 (Note 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 type (standard)
Lubrication (Note 1)		Not required
Degree of protection (Note 2)		Dust proof
Vibration resistance		m/s ² 50 or less
Shock resistance		m/s ² 300 or less
Atmosphere		Containing corrosive gas is impermissible.

Note 1 Use the turbine oil Class 1 ISO VG32 if lubricated. Excessive or intermittent lubrication results in unstable operation.

Note 2 Check that water drops or oil, etc., do not come into contact.

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

Electrical specification

Descriptions		T1*, T30*, T5*	T6*, T8*
Rated voltage		24 VDC	12 VDC
Voltage fluctuation range		±10%	+10%, -5%
Holding current A	Standard	0.017	0.034
	With low heat energy-saving circuit	0.005	0.010
Power consumption W	Standard	0.4	
	With low heat energy-saving circuit	0.1	
Thermal class		B	
Surge suppressor (Note 5)		Zener diode	
Indicator		LED	

Note 4 Please note the voltage fluctuation range since the T6* and T8* (Serial transmission type) have a voltage drop due to the internal circuit.

Note 5 If you select the low heat energy-saving circuit or surgeless, it will become a diode.

Common specifications

Descriptions		M3GA1/M4GA1	M3GA2/M4GA2	M3GA3/M4GA3
		Port size	A/B port Barbed fitting $\phi 1.8$ Push-in fitting $\phi 1.8, \phi 4, \phi 6$ M5	Push-in fitting $\phi 4, \phi 6, \phi 8$ Rc1/8
	P/R1/R2 port	Rc1/8	Rc1/4	Rc3/8

T1*, T30*, T5*

Descriptions		M3GA1/M4GA1		M3GA2/M4GA2		M3GA3/M4GA3	
		Direct mount	DIN rail Mount	Direct mount	DIN rail Mount	Direct mount	DIN rail Mount
Max. station no.	Standard (Internal pilot)	20 stations	16 stations	20 stations	16 stations	16 stations	
	External pilot	12 stations					
Manifold base weight calculation formula (n: station no.) g	Standard	29n+215	31n+228	54n+264	56n+297	84n+320	86n+354
	External pilot	44n+334	46n+347	96n+433	96n+468	149n+554	151n+583

T6*

Descriptions		M3GA1/M4GA1	M3GA2/M4GA2	M3GA3/M4GA3
		DIN rail Mount	DIN rail Mount	DIN rail Mount
Max. station no.	Standard (Internal pilot)	16 stations	16 stations	16 stations
	External pilot	12 stations		
Manifold base weight calculation formula (n: station no.) g	Standard	31n+375	56n+444	86n+501
	External pilot	46n+494	98n+615	151n+731

T8*

Descriptions		M3GA1/M4GA1		M3GA2/M4GA2		M3GA3/M4GA3	
		Direct mount	DIN rail Mount	Direct mount	DIN rail Mount	Direct mount	DIN rail Mount
Max. station no.	Standard (Internal pilot)	20 stations	16 stations	20 stations	16 stations	16 stations	
	External pilot	12 stations					
Manifold base weight calculation formula (n: station no.) g	Standard	50n+305	52n+332	57n+259	60n+290	150n+384	153n+416
	External pilot	51n+313	54n+340	102n+336	105n+368	169n+417	173n+449

The manifold base weight is the value for screw connection specifications with the DIN rail and electrical block.

The max. station no. of the manifold is limited by the max. number of solenoid for each of the following wiring specifications.

M₄GA1, 2, 3-T* (D) Series

Reduced wiring manifold; base piping

Flow characteristics

Model no.	Valve Position	P→A/B		A/B→R1/R2		
		C [dm ³ /(s/bar)]	b	C [dm ³ /(s/bar)]	b	
M3GA1 M4GA1	Dual 3 port valve integrated type	0.86	0.31	1.1 (0.66)	0.19 (0.22)	
	2-position	0.99	0.20	1.2 (0.70)	0.20 (0.12)	
	3-position	All ports closed	0.94	0.23	1.1 -	0.20 -
		ABR connection PAB connection	0.93 1.1	0.18 0.28	1.3 (0.70) 1.1 -	0.23 (0.02) 0.23 -
M3GA2 M4GA2	Dual 3 port valve integrated type	1.7	0.40	2.3 (1.7)	0.29 (0.32)	
	2-position	2.3	0.36	2.9 (1.7)	0.24(0.33)	
	3-position	All ports closed	2.1	0.35	2.5 -	0.32 -
		ABR connection PAB connection	2.2 2.4	0.37 0.34	2.9 (1.8) 2.5 -	0.32 (0.29) 0.33 -
2-position		3.2	0.37	3.8 (2.5)	0.13 (0.28)	
M3GA3 M4GA3	Dual 3 port valve integrated type	1.7	0.40	2.3 (1.7)	0.29 (0.32)	
	2-position	2.3	0.36	2.9 (1.7)	0.24(0.33)	
	3-position	All ports closed	2.1	0.35	2.5 -	0.32 -
		ABR connection PAB connection	2.2 2.4	0.37 0.34	2.9 (1.8) 2.5 -	0.32 (0.29) 0.33 -
2-position		3.2	0.37	3.8 (2.5)	0.13 (0.28)	
M3GA3 M4GA3	Dual 3 port valve integrated type	1.7	0.40	2.3 (1.7)	0.29 (0.32)	
	2-position	2.3	0.36	2.9 (1.7)	0.24(0.33)	
	3-position	All ports closed	2.1	0.35	2.5 -	0.32 -
		ABR connection PAB connection	2.2 2.4	0.37 0.34	2.9 (1.8) 2.5 -	0.32 (0.29) 0.33 -
2-position		3.2	0.37	3.8 (2.5)	0.13 (0.28)	

Note 1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.
 Note 2: Values in () apply when a check valve is attached.

Wiring specifications

Descriptions	T10* Common terminal block type	T11* Common terminal block type	T30* D sub-connector	T50* Flat cable 20 pin type	T51* Flat cable 20 pin type	T52* Flat cable 10 pin type	T53* Flat cable 26 pin type																																												
Connector and Terminal block specifications	M3 thread tightening type 18 terminals	Push tightening type 26 terminals	D sub connector 25 pin	MIL-C-83503 standards conformed Pressure welding socket 20 pin	MIL-C-83503 standards conformed Pressure welding socket 20 pin	MIL-C-83503 standards conformed Pressure welding socket 10 pin	MIL-C-83503 standards conformed Pressure welding socket 26 pin																																												
Maximum solenoid number	16 points	24 points	24 points	16 points	18 points	8 points	24 points																																												
Manifold internal wiring	Details on page 594 to 601																																																		
Electrical block position Blank: Left side R : Right side	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p>Left side: T*</p> </div> <div style="text-align: center;"> <p>Right side: T*R</p> </div> </div>																																																		
Arrangement type Blank: standard sequential W: Double wiring	<p>(Example) T50*</p> <p>Manifold specifications</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <tr><td>1a</td><td>2a</td><td>3a</td><td>4a</td></tr> <tr><td>S</td><td>D</td><td>S</td><td>D</td></tr> <tr><td>2b</td><td>4b</td><td></td><td></td></tr> </table> <p>1st station 3rd station 2nd station 4th station</p> <p>Standard wiring (sequential): Blank</p> <table border="1" style="display: inline-table; margin-right: 20px;"> <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> <p>Double wiring: W</p> <table border="1" style="display: inline-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>Void</td><td>2a</td><td>2b</td><td>3a</td><td>Void</td><td>4a</td><td>4b</td></tr> </table>							1a	2a	3a	4a	S	D	S	D	2b	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	Void	2a	2b	3a	Void	4a	4b
1a	2a	3a	4a																																																
S	D	S	D																																																
2b	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	Void	2a	2b	3a	Void	4a	4b																																											

Serial transmission slave unit specifications

Descriptions	T6G1 ^{Note 1}	T6C0 T6C1 ^{Note 2}	T6A0 T6A1 ^{Note 3}	T6E0 T6E1	T6J0 T6J1 ^{Note 3}
Network name	CC-Link	CompoBus/S	UNIWIRESYSTEM	S-LINK	UNIWIRESYSTEM
Power voltage	Unit side: 24 VDC ±10% Valve side: 24 VDC +10% ± -5%	24 VDC +10% ± -5% (Unit power supply/valve power supply common terminal)			
Current consumption	Unit side: 100 mA or less (when all output points are ON) Valve side: 15mA or less (when all output points are OFF)	100 mA or less (when all output points are ON) Load current is not included			
Output points	16 points	T6*0: 8 points T6*1: 16 points			
Occupation number	1 station	T6C0: 1 node address (8-point mode) T6C1: 2 node address (8-point mode)	T6A0: Output 8 points T6A1: Output 16 points	T6E0: FAN-in: 3 T6E1: FAN-in: 3	T6J0: Output 8 points T6J1: Output 16 points
Operating indication	LED (power supply and communication state)				

Note 1: CC-Link is ver1.10.

Note 2: Long-distance communication mode is not supported. Contact CKD for details on its support.

Note 3: The number of transmission points of 128 points and the transmission distance of 200 m are supported. Contact CKD for other specifications.

Serial transmission slave unit specifications

Descriptions	T8G1	T8GP1	T8P1	T8PP1	T8EC1	T8ECP1	T8EN1	T8ENP1
	T8G2	T8GP2	T8P2	T8PP2	T8EC2	T8ECP2	T8EN2	T8ENP2
Network name	CC-Link ver1.10		PROFIBUS-DP(V0)		EtherCAT		EtherNet/IP	
Power voltage	Unit side: 24 VDC ± 10% Valve side: 24 VDC + 10%, -5%							
Current consumption	Unit side: 60 mA or less (when all output points are ON)	60 mA or less (when all output points are ON)	110 mA or less (when all output points are ON)	120 mA or less (when all output points are ON)				
Output points	T8*1: 15 mA or less T8*2: 20 mA or less (when all output points are ON) Load current is not included							
Occupied number	T8*1: 16 points T8*2: 32 points							
Operation display	1 station							
Output type	LED (power supply and communication state)							
Output type	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output

M³GA1, 2, 3-T* (D) Series

Reduced wiring manifold; base piping

How to order

Manifold model no.

M **4GA1** **1** **0R** - **C6** - **T30** **W** **H** **D** - **3**

3 port manifold model no.

M **3GA1** **1** **0R** - **C6** - **T30** **W** **H** **D** - **3**

● Discrete valve for mounting base

4GA1 **1** **9R** - **C6** - **A2N** **H** - **3**

● 3 port discrete valve for mounting base

3GA1 **1** **9R** - **C6** - **A2N** **H** - **3**

B Valve Position

A Model no.

"A2N" indicates A type (downward) connector, with surge suppressor/light and no lead wire.

C Port size

D Reduced wiring

Zener diode is used for a surge suppressor.

E Terminal/connector pin Arrangement type

F Option

G Mount Type

H Station no.

I Voltage

* Always indicate "Manifold specifications" (page200to214).

A Model No.

Symbol	Descriptions	3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Valve Position							
1	2-position single				●	●	●
2	2-position double				●	●	●
3	3-position all ports closed				●	●	●
4	3-position ABR connection				●	●	●
5	3-position PAB connection				●	●	●
1	2-position single normally closed	●	●	●			
11	2-position single normally open	●	●	●			
66	Dual 3 port valve integrated type	●	●				
67		●	●				
76		●	●				
77	Note 1, 2	●	●				
8	Mix manifold (In case of multiple Valve Positions)	●	●	●	●	●	●

C Port size		P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8			
Port	4(A) /2(B) port				
CF	φ1.8 barbed fitting (applicable tube UP-9102-**)	②		②	
C18	φ1.8 push-in fitting (applicable tube UP-9402-**)	②		②	
C4	φ4 push-in fitting	②	③	②	③
C6	φ6 push-in fitting	②	③	④	②
C8	φ8 push-in fitting		③	④	③
C10	φ10 push-in fitting			④	④
CX	Push-in fitting mix	②	③	④	②
M5	M5	①		①	
06	Rc1/8		②		②
08	Rc1/4		③		④

D Reduced wiring connection (light and surge suppressor provided as standard)	
Refer to the next page for wire connections.	

E Terminal and connector pin array								
Blank	Standard wiring	Note 4	●	●	●	●	●	●
W	Double wiring	Note 4	●	●	●	●	●	●
W1	Double wiring (With single reduced wiring)	Note 4, Note 5	●	●	●	●	●	●

F Option							
Blank	Non-locking/locking common manual override	●	●	●	●	●	●
M	Non-locking manual override	●	●	●	●	●	●
H	With check valve	Note 6	●	●	●	●	●
K	External pilot	Note 7	●	●	●	●	●
A	Ozone/cutting oil proof		●	●	●	●	●
S	Surgeless	Note 8	●	●	●	●	●
E	Low heat and energy saving circuit	Note 8, Note 9	●	●	●	●	●
F	A/B port filter integrated	Note 10	●	●	●	●	●
Z1	Air supply spacer	Note 11	●	●	●	●	●
Z2	In stop valve spacer	Note 11, Note 12	●	●	●	●	●
Z3	Exhaust spacer	Note 11	●	●	●	●	●

G Mount type							
Blank	Direct mount type	●	●	●	●	●	●
D	DIN rail mount type	●	●	●	●	●	●

H Station no.							
2	2 stations						
to	to	●	●	●	●	●	●
20	Refer to page 130 for the max. station no. for each model.						

I Voltage							
3	24 VDC	●	●	●	●	●	●
4	12 VDC	●	●	●	●	●	●

- Refer to page 597 for cable model no. with D-sub connector.
- Refer to page 593 for cable model no. for flat cable connector.

⚠ Note on model no. selection

- Note 1 Select M4GA*80R when mixing with 3, 5 port valves. Select M3GA*80R when mixing with the masking plate.
- Note 2 Combination with the external pilot (K) is not available. Dimensions are the same as the respective 2-position double.
- Note 3 The push-in fitting cannot be mixed with the discrete valve's 4 (A) or 2 (B) port.
- Note 4 Blank.....Wired based on the type of valve used.
W*.....Wired for the double solenoid regardless of the type of valve used.
- Note 5 Reduced wiring (A type socket assembly) is attached to the cap side. The discrete valve (A2N) comes with a holder for holding the socket assembly.
- Note 6 3-position all ports closed and PAB connection are not provided with check valve (H). Refer to Page 628 for details on the check valve.
- Note 7 Consult with CKD when using a vacuum with the external pilot (K). In addition, the surgeless "S" and low heat energy-saving circuit "E" cannot be selected at the same time.
- Note 9 This is surgeless specifications.
- Note 10 The P port has a filter built inside as a standard.
- Note 11 Specify the spacer mounting position and quantity in manifold specifications. Stacking multiple spacers is not supported. Combination with the masking plate is not supported. Refer to page 180 to 184 for details.
- Note 12 Combination with the external pilot (K) is not available.

is not available.

A Model No.					
3GA1	3GA2	3GA3	4GA1	4GA2	4GA3

D Reduced wiring connection (light and surge suppressor provided as standard) 12/24 VDC								
T10	Common terminal block (M3 thread)	Left side specifications	●	●	●	●	●	●
T10R		Right side specifications	●	●	●	●	●	●
T11	Common terminal block (push tightening)	Left side specifications	●	●	●	●	●	●
T11R		Right side specifications	●	●	●	●	●	●
T30	D sub-connector	Left side specifications	●	●	●	●	●	●
T30R		Right side specifications	●	●	●	●	●	●
T50	20 pin flat cable connector (with power supply terminal)	Left side specifications	●	●	●	●	●	●
T50R		Right side specifications	●	●	●	●	●	●
T51	20 pin flat cable connector (without power supply terminal)	Left side specifications	●	●	●	●	●	●
T51R		Right side specifications	●	●	●	●	●	●
T52	10 pin flat cable connector (without power supply terminal)	Left side specifications	●	●	●	●	●	●
T52R		Right side specifications	●	●	●	●	●	●
T53	26 pin flat cable connector (without power supply terminal)	Left side specifications	●	●	●	●	●	●
T53R		Right side specifications	●	●	●	●	●	●
D Serial transmission (light and surge suppressor provided as standard) 24 VDC								
T6A0	UNIWIRES SYSTEM	NPN 8 points	●	●	●	●	●	●
T6A1		NPN 16 points	●	●	●	●	●	●
T6C0	CompoBus/S	NPN 8 points	●	●	●	●	●	●
T6C1		NPN 16 points	●	●	●	●	●	●
T6E0	S-LINK	NPN 8 points	●	●	●	●	●	●
T6E1		NPN 16 points	●	●	●	●	●	●
T6G1	CC-Link	NPN 16 points	●	●	●	●	●	●
T6J0	UNIWIRES H SYSTEM	NPN 8 points	●	●	●	●	●	●
T6J1		NPN 16 points	●	●	●	●	●	●
T8G1	CC-Link (Thin type)	NPN 16 points	●	●	●	●	●	●
T8G2		NPN 32 points	●	●	●	●	●	●
T8GP1		PNP 16 points	●	●	●	●	●	●
T8GP2		PNP 32 points	●	●	●	●	●	●
T8P1	PROFIBUS-DP (Thin type)	NPN 16 points	●	●	●	●	●	●
T8P2		NPN 32 points	●	●	●	●	●	●
T8PP1		PNP 16 points	●	●	●	●	●	●
T8PP2		PNP 32 points	●	●	●	●	●	●
T8EC1	EtherCAT (Thin type)	NPN 16 points	●	●	●	●	●	●
T8EC2		NPN 32 points	●	●	●	●	●	●
T8ECP1		PNP 16 points	●	●	●	●	●	●
T8ECP2		PNP 32 points	●	●	●	●	●	●
T8EN1	EtherNet/IP (Thin type)	NPN 16 points	●	●	●	●	●	●
T8EN2		NPN 32 points	●	●	●	●	●	●
T8ENP1		PNP 16 points	●	●	●	●	●	●
T8ENP2		PNP 32 points	●	●	●	●	●	●
A2N	Without lead wire (without socket)	with surge suppressor/light	●	●	●	●	●	●

Ozone specifications / Coolant proof specifications

Select the option "A" of (F) in how to order on page 132

Clean room specifications (Catalog No. CB-033SA)

Specification for secondary battery production (Catalog No. CC-947A)

● Dust generation preventing structure for use in clean rooms

● In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section

** - Voltage - P7*

** - Voltage - P4

4GAB
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

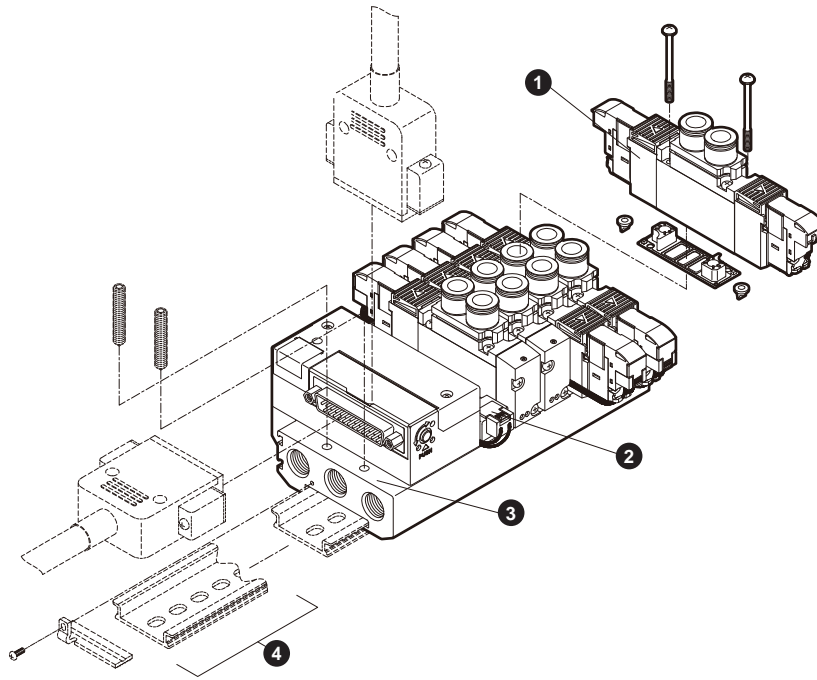
M4GA1, 2, 3-T* (D) Series

Reduced wiring manifold; base piping

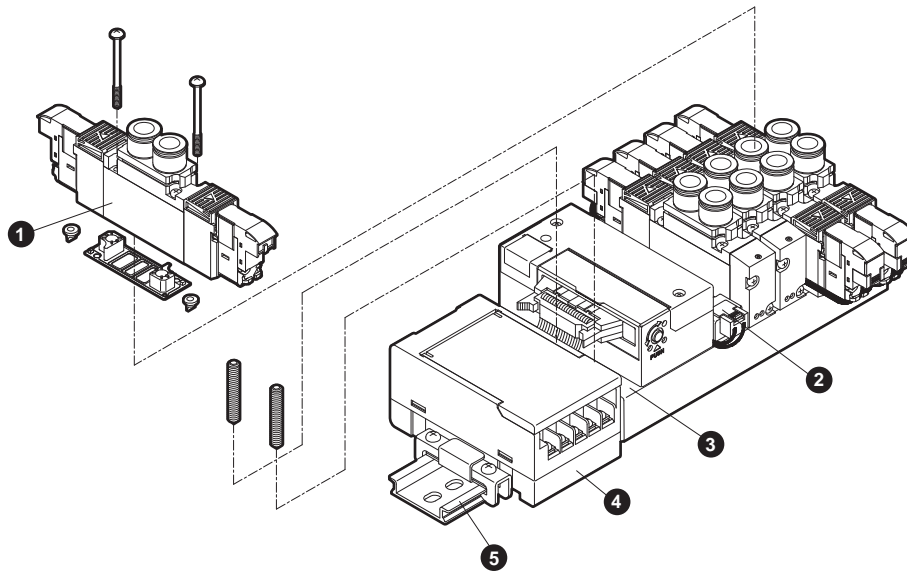
Manifold components explanation and parts list

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

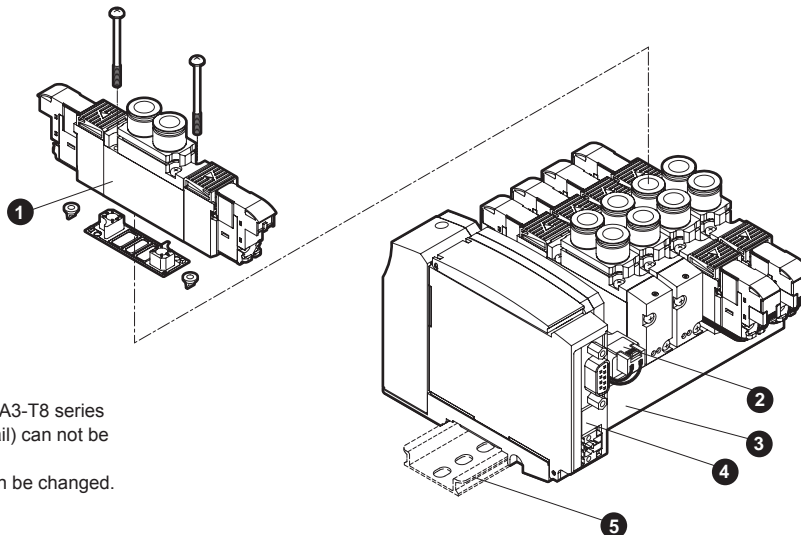
● T30



● T6D



● T8*



* The M4GA2-T8 and M4GA3-T8 series mount type (direct, DIN rail) can not be changed after purchase.
The M4GB1-T8 series can be changed.

M³₄GA1, 2, 3-T* (D) Series

Reduced wiring manifold; body piping; serial transmission

Main components list

No.	Component name	Model no.	Descriptions	Remarks
1	Discrete valve for mounting base	4GA ** 9R - Port size - A2N Option - Voltage <div style="margin-left: 20px;"> Valve Position Series flow rate size </div>	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 132
2	Masking plate	3G1 & 4G1 4G1R-MP 3G2 & 4G2 4G2R-MP 3G3 & 4G3 4G3R-MP	Masking plate Gasket Set screw 2	*3G3 & 4G3 has two PR check valves.
3	Manifold base assembly	M4GA * R-00- T56 - Option - Station no. <div style="margin-left: 20px;"> Series flow rate size </div>	Manifold base Wiring block	
4	Serial transmission slave unit	4GR-OPP3 - Wiring method 4GR-OPP7 - Wiring method	Serial transmission slave unit	Details on page 150
5	DIN rail kit			Details on page 191

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.																																							
-	Coil assembly	4GR-A2N- * - COIL - Voltage Blank: standard A: Ozone/cutting oil proof	-	Cartridge type Push-in fitting and related parts	<table border="1"> <tr><td>4G1</td><td>φ1.8 barbed type</td><td>4G1R-JOINT-CF</td></tr> <tr><td></td><td>φ8 straight type</td><td>4G1R-JOINT-C18</td></tr> <tr><td></td><td>φ4 straight type</td><td>4G1R-JOINT-C4</td></tr> <tr><td></td><td>φ6 straight type</td><td>4G1R-JOINT-C6</td></tr> <tr><td></td><td>Plug cartridge</td><td>4G1R-JOINT-CPG</td></tr> <tr><td>4G2</td><td>φ4 straight type</td><td>4G2R-JOINT-C4</td></tr> <tr><td></td><td>φ6 straight type</td><td>4G2R-JOINT-C6</td></tr> <tr><td></td><td>φ8 straight</td><td>4G2R-JOINT-C8</td></tr> <tr><td></td><td>Plug cartridge</td><td>4G2R-JOINT-CPG</td></tr> <tr><td>4G3</td><td>φ6 straight type</td><td>4G3R-JOINT-C6</td></tr> <tr><td></td><td>φ8 straight</td><td>4G3R-JOINT-C8</td></tr> <tr><td></td><td>φ10 straight type</td><td>4G3R-JOINT-C10</td></tr> <tr><td></td><td>Plug cartridge</td><td>4G3R-JOINT-CPG</td></tr> </table>	4G1	φ1.8 barbed type	4G1R-JOINT-CF		φ8 straight type	4G1R-JOINT-C18		φ4 straight type	4G1R-JOINT-C4		φ6 straight type	4G1R-JOINT-C6		Plug cartridge	4G1R-JOINT-CPG	4G2	φ4 straight type	4G2R-JOINT-C4		φ6 straight type	4G2R-JOINT-C6		φ8 straight	4G2R-JOINT-C8		Plug cartridge	4G2R-JOINT-CPG	4G3	φ6 straight type	4G3R-JOINT-C6		φ8 straight	4G3R-JOINT-C8		φ10 straight type	4G3R-JOINT-C10		Plug cartridge	4G3R-JOINT-CPG
4G1	φ1.8 barbed type	4G1R-JOINT-CF																																										
	φ8 straight type	4G1R-JOINT-C18																																										
	φ4 straight type	4G1R-JOINT-C4																																										
	φ6 straight type	4G1R-JOINT-C6																																										
	Plug cartridge	4G1R-JOINT-CPG																																										
4G2	φ4 straight type	4G2R-JOINT-C4																																										
	φ6 straight type	4G2R-JOINT-C6																																										
	φ8 straight	4G2R-JOINT-C8																																										
	Plug cartridge	4G2R-JOINT-CPG																																										
4G3	φ6 straight type	4G3R-JOINT-C6																																										
	φ8 straight	4G3R-JOINT-C8																																										
	φ10 straight type	4G3R-JOINT-C10																																										
	Plug cartridge	4G3R-JOINT-CPG																																										
-	A type connector socket assembly Details on page Page 613	4G * R- SOCKET-ASSY-A ** - Row no. Blank: Left side, R: Right side A: aSOL side, B: bSOLside n: Specify the position of the valve to be connected																																										

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautionsManifold
Specifications

M4GA1-T* Series

Reduced wiring manifold; base piping

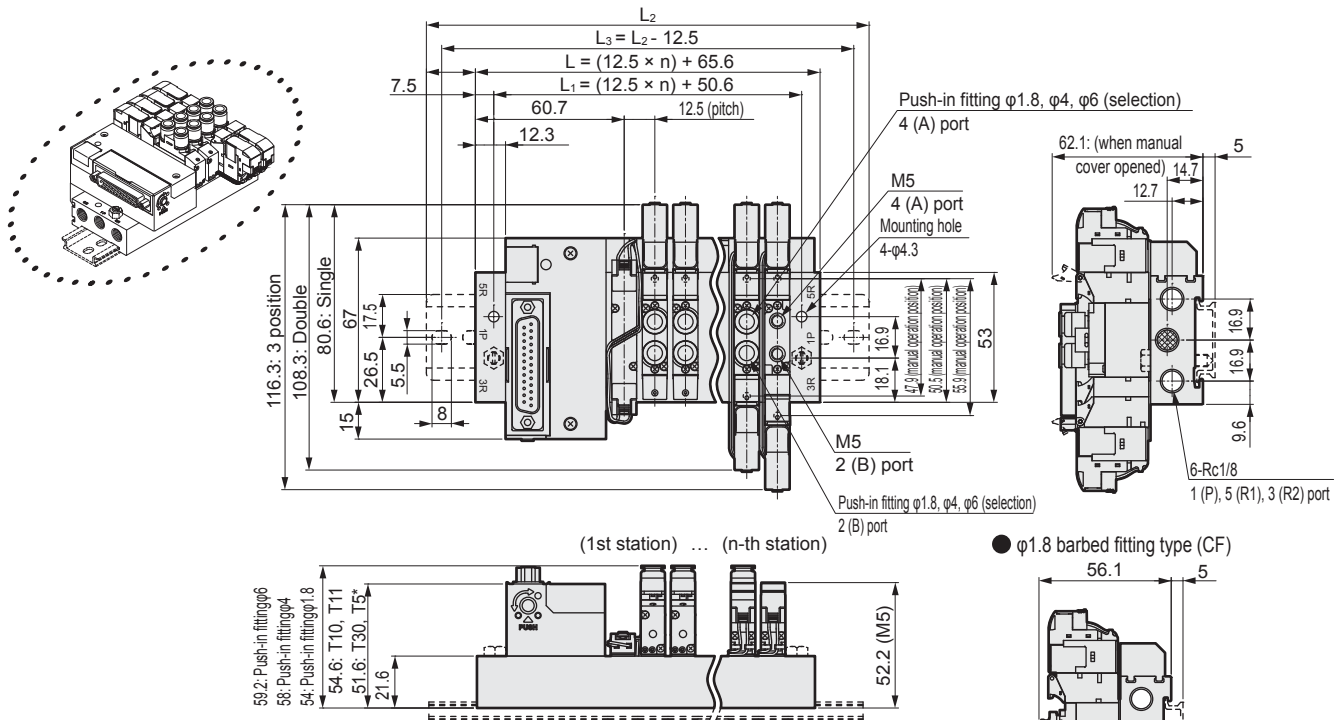
Dimensions 

M4GA1

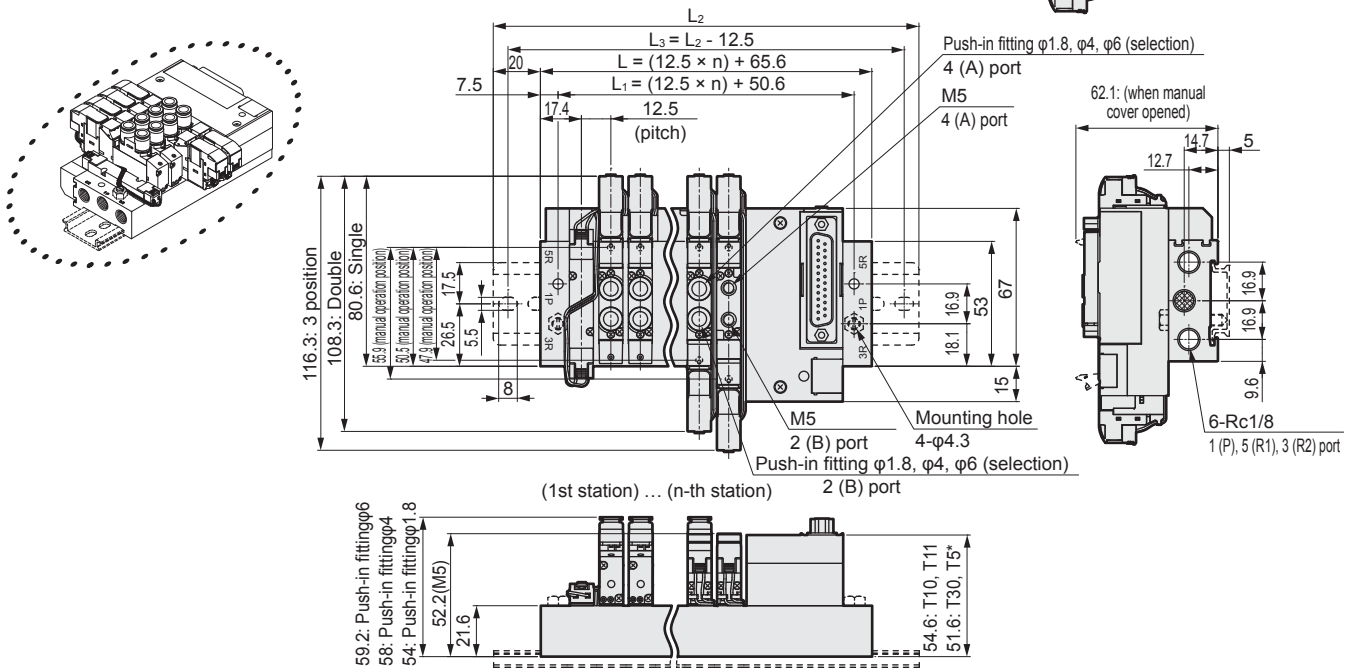
● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

*This drawing shows T30. Refer to page 148 to 149 for detailed dimensions of the electrical block.

*For 2-position single 3 port valve, the port A or port B is a plug. The dimension of dual 3 port valve integrated type is the same as that of the double type.



● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	90.6	103.1	115.6	128.1	140.6	153.1	165.6	178.1	190.6	203.1	215.6	228.1	240.6	253.1	265.6	278.1	290.6	303.1	315.6
L ₁	75.6	88.1	100.6	113.1	125.6	138.1	150.6	163.1	175.6	188.1	200.6	213.1	225.6	238.1	250.6	263.1	275.6	288.1	300.6
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	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	287.5	300.0				

Dimensions

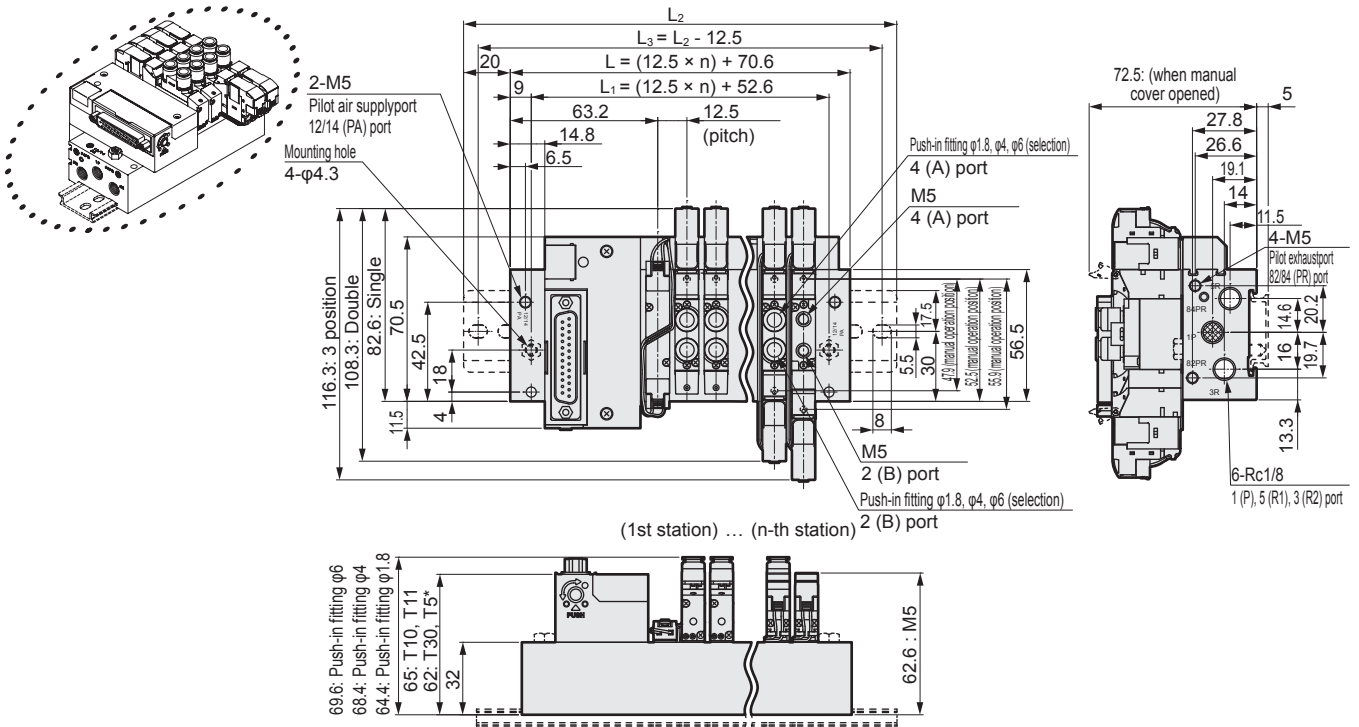


M4GA1

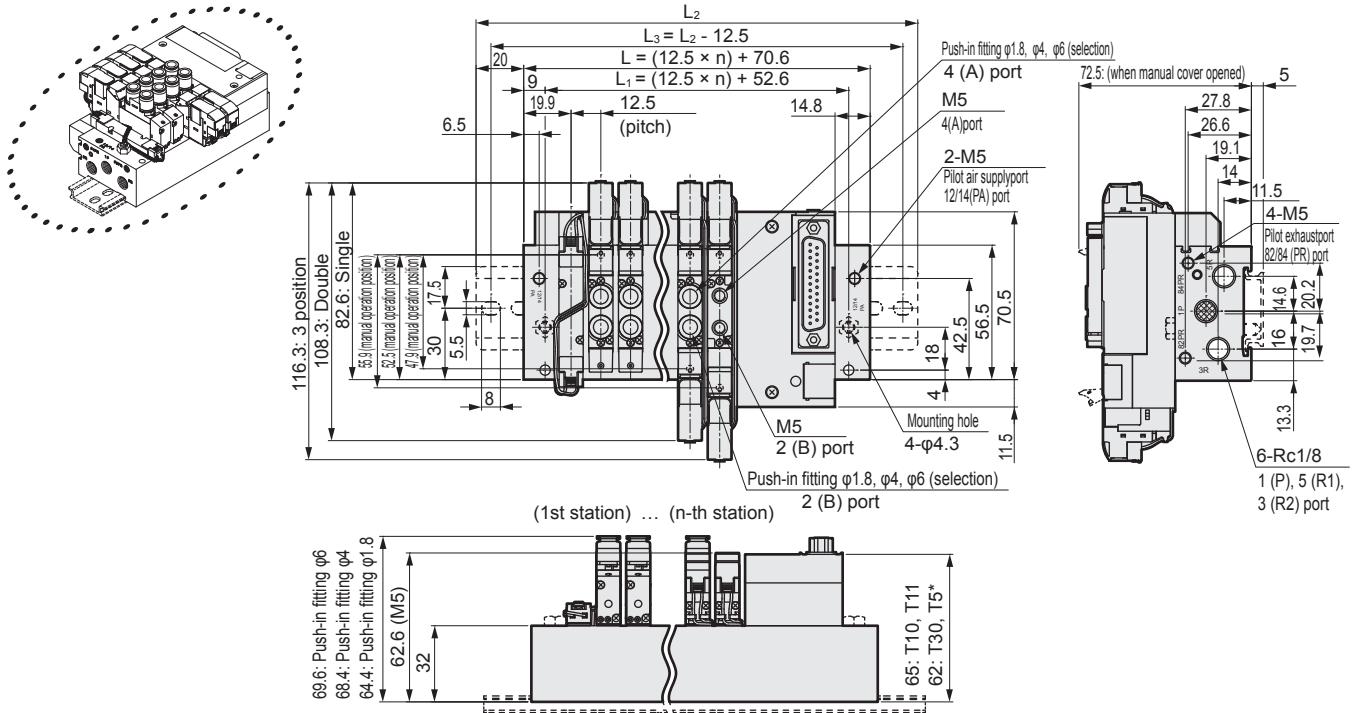
- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)

*This drawing shows T30. Refer to page 148 to 149 for detailed dimensions of the electrical block.

*For 2-position single 3 port valve, the port A or port B is a plug.



- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12
L	95.6	108.1	120.6	133.1	145.6	158.1	170.6	183.1	195.6	208.1	220.6
L ₁	77.6	90.1	102.6	115.1	127.6	140.1	152.6	165.1	177.6	190.1	202.6
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

4GAB
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

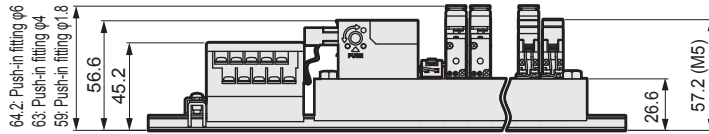
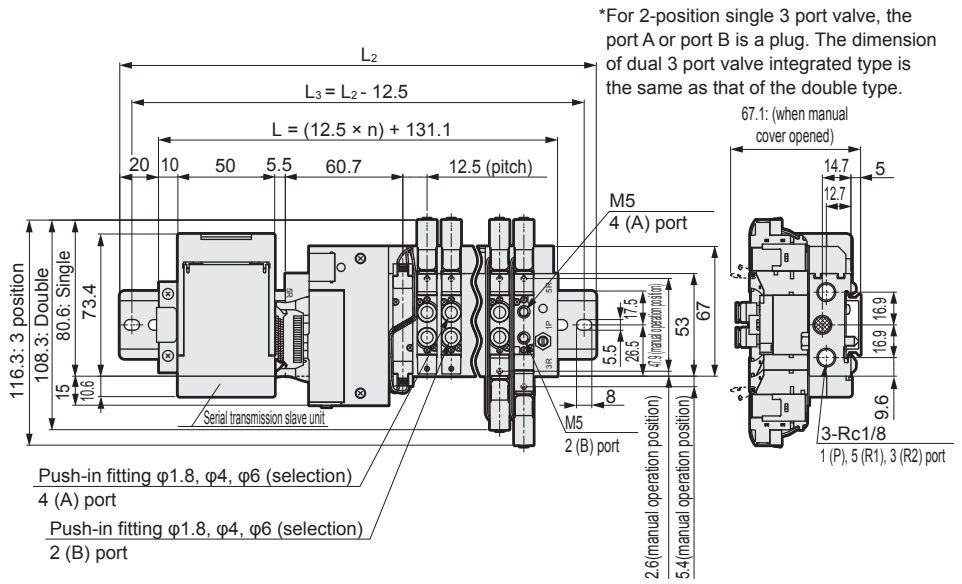
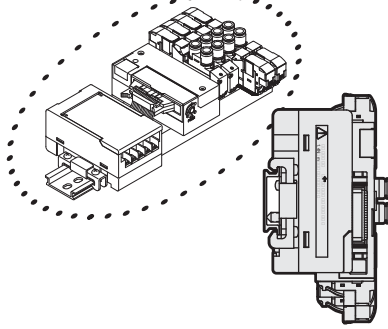
M4GA1-T6D Series

Reduced wiring manifold; base piping

Dimensions 

M4GA1

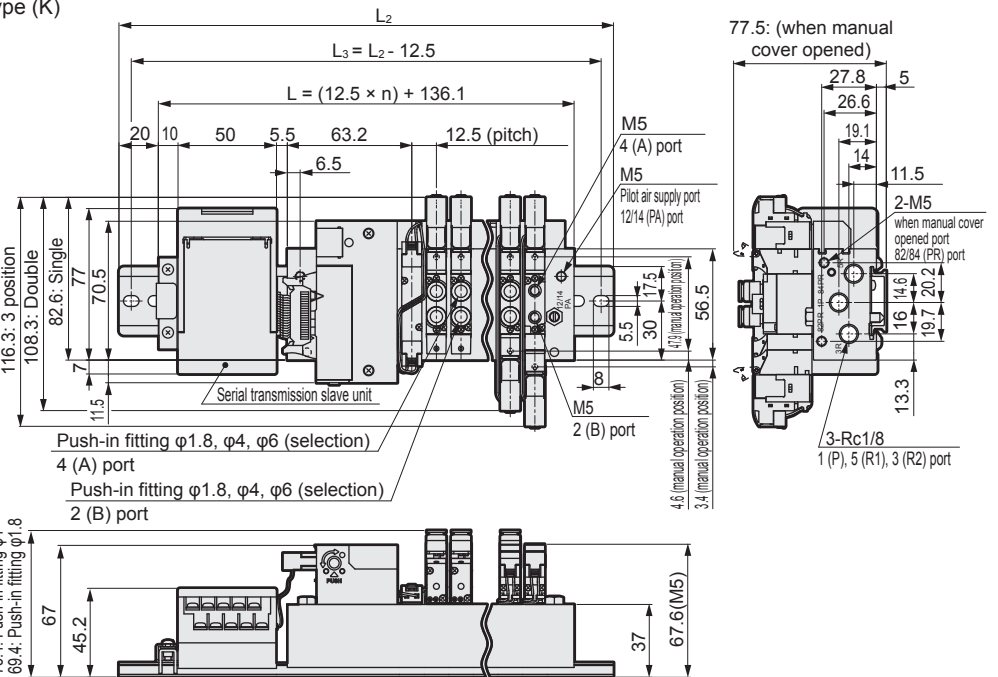
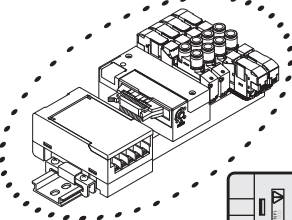
- Serial transmission (T6*)
DIN rail mounting type (D)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	156.1	168.6	181.1	193.6	206.1	218.6	231.1	243.6	256.1	268.6	281.1	293.6	306.1	318.6	331.1
L ₂	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5	375.0
L ₃	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5

M4GA1

- Serial transmission (T6*)
DIN rail mounting (D); External pilot type (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12
L	161.1	173.6	186.1	198.6	211.1	223.6	236.1	248.6	261.1	273.6	286.1
L ₂	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5
L ₃	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0

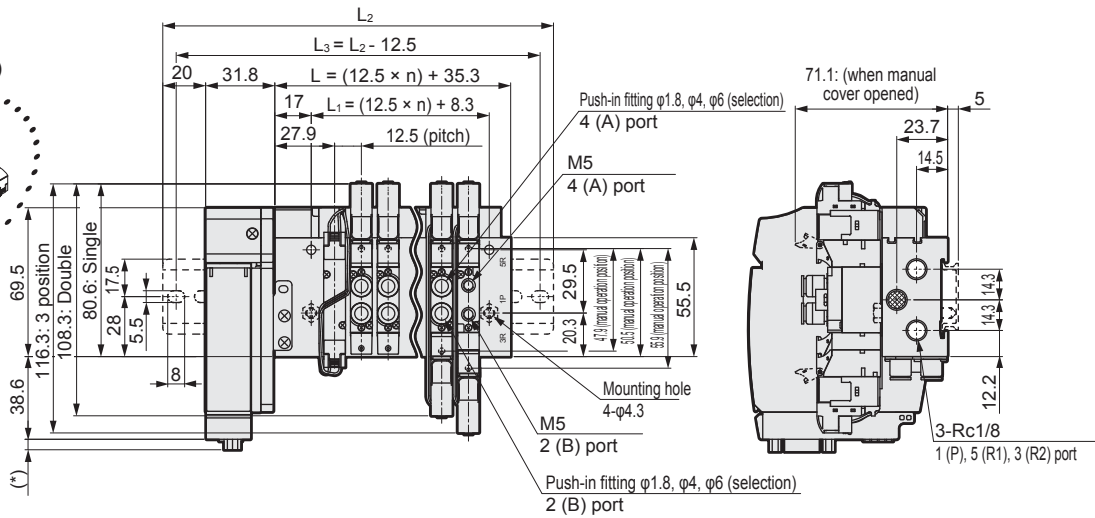
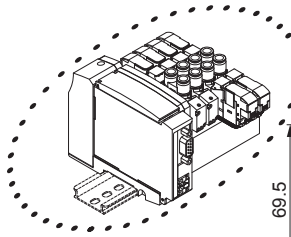
M4GA1-T8* Series

Reduced wiring manifold; body piping; serial transmission

Dimensions

M4GA1

- Serial transmission (T8*)
DIN rail mounting type (D)

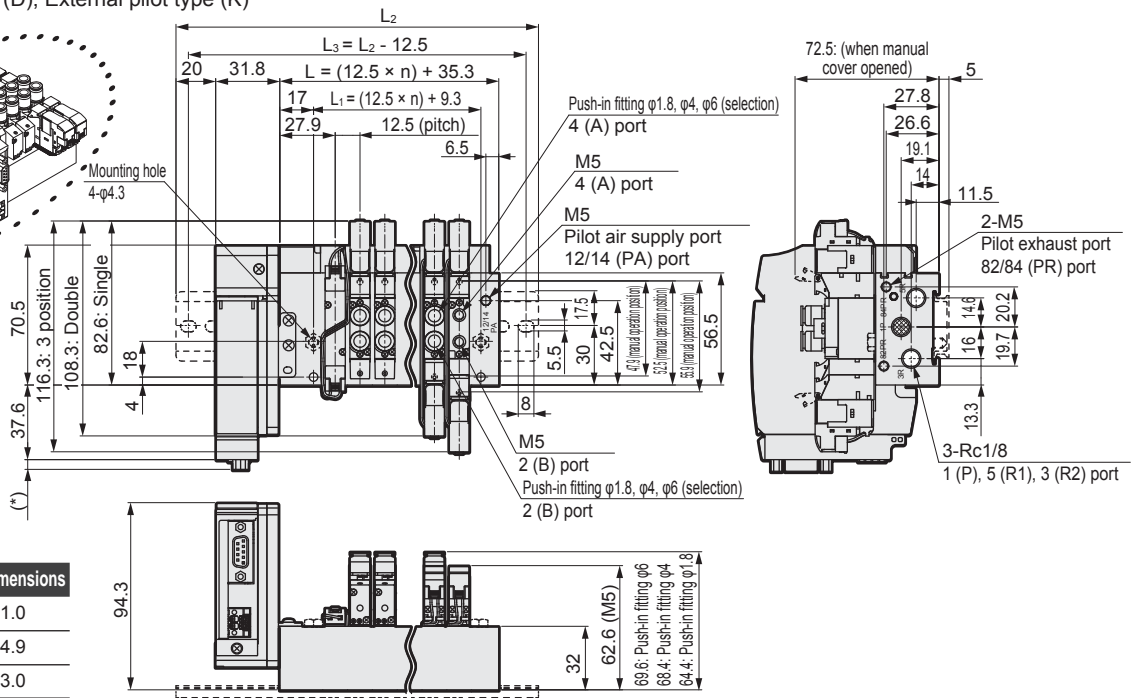
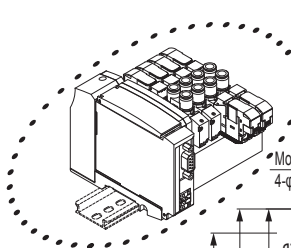


Serial transmission	(*) Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3	197.8	210.3	222.8	235.3	247.8	260.3	272.8	285.3
L ₁	33.3	45.8	58.3	70.8	83.3	95.8	108.3	120.8	133.3	145.8	158.3	170.8	183.3	195.8	208.3	220.8	233.3	245.8	258.3
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	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	287.5	300.0				

M4GA1

- Serial transmission (T8*)
DIN rail mounting (D); External pilot type (K)



Serial transmission	(*) Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

Station no.	2	3	4	5	6	7	8	9	10	11	12
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3
L ₁	34.3	46.8	59.3	71.8	84.3	96.8	109.3	121.8	134.3	146.8	159.3
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

4GAB
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4GA2-T* Series

Reduced wiring manifold; base piping

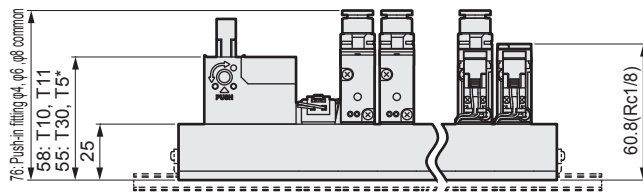
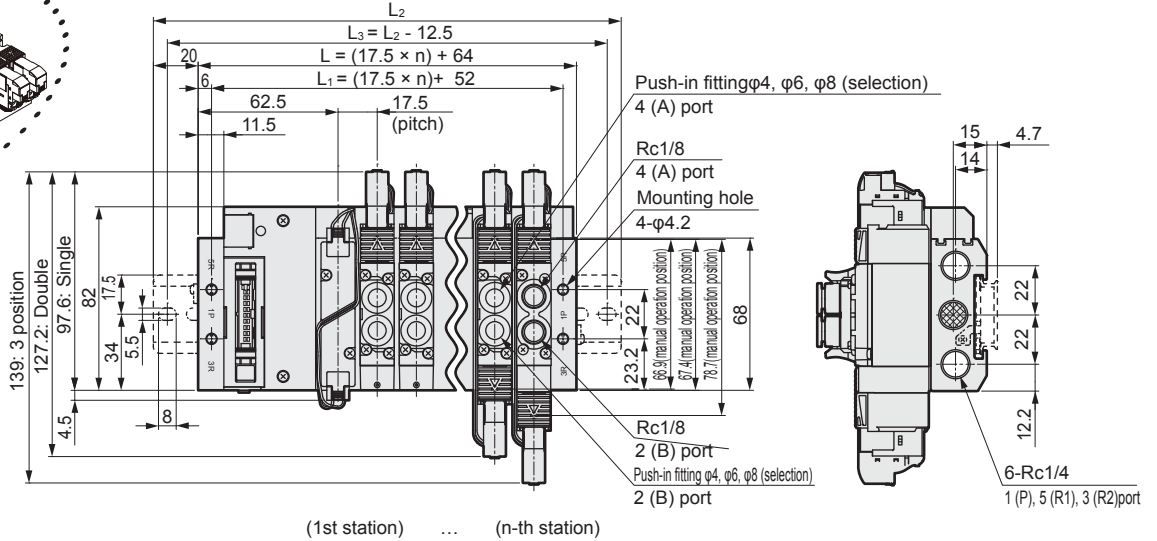
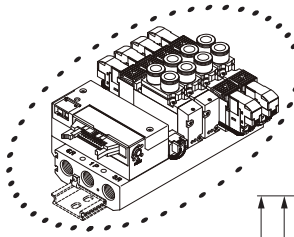
Dimensions 

M4GA2

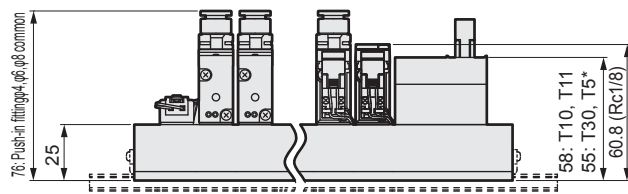
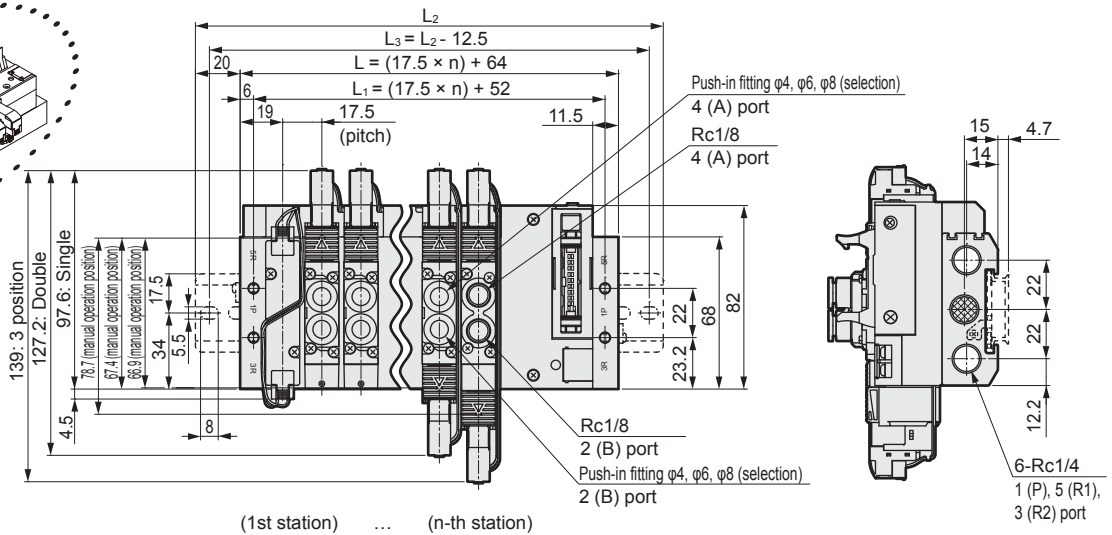
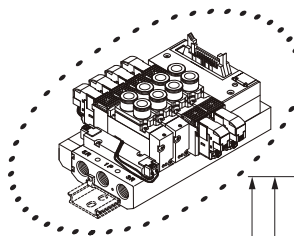
● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

*This drawing shows T50. Refer to page 148 to 149 for detailed dimensions of the electrical block.

*For 2-position single 3 port valve, the port A or port B is a plug. The dimension of dual 3 port valve integrated type is the same as that of the double type.



● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0	396.5	414.0
L ₁	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0	384.5	402.0
L ₂	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5				
L ₃	137.5	150.0	162.5	187.5	200.0	225.0	237.5	250.0	275.0	287.5	312.5	325.0	337.5	362.5	375.0				

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

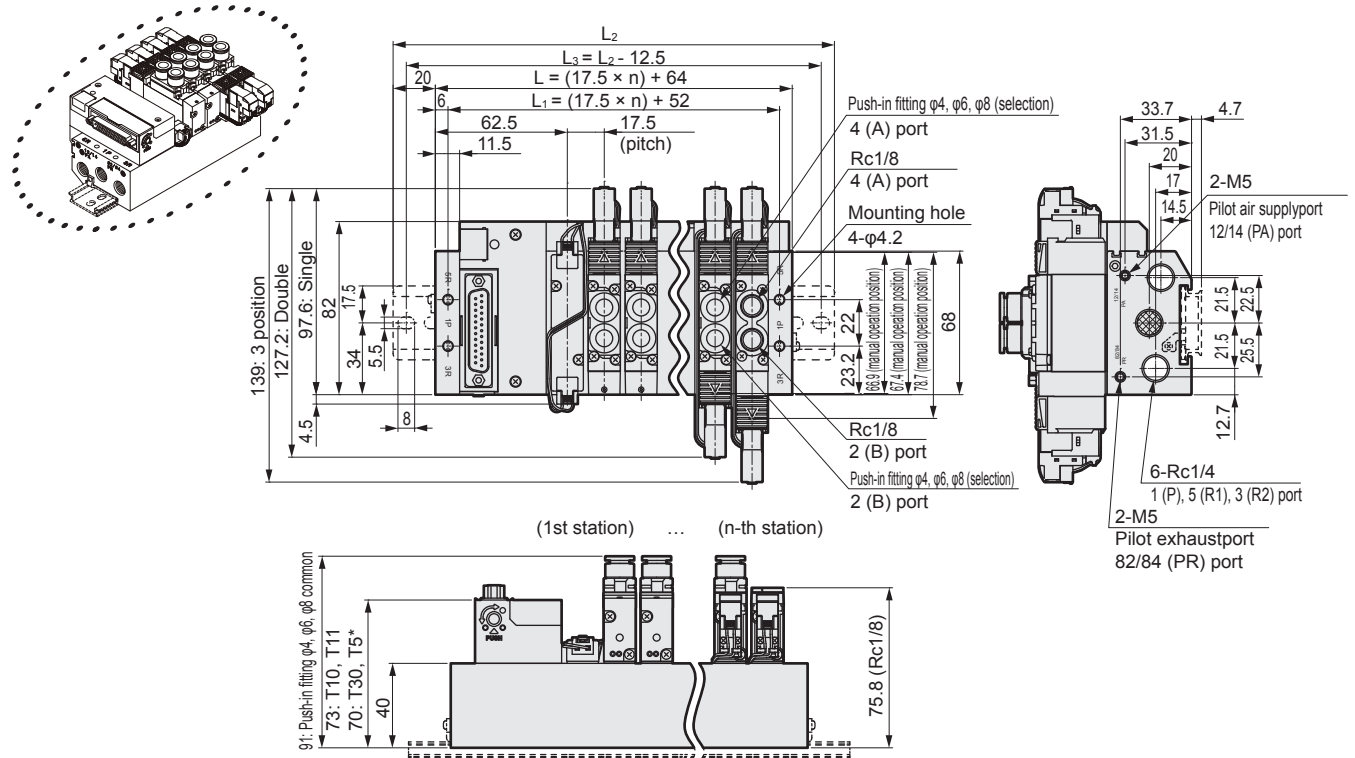
Dimensions



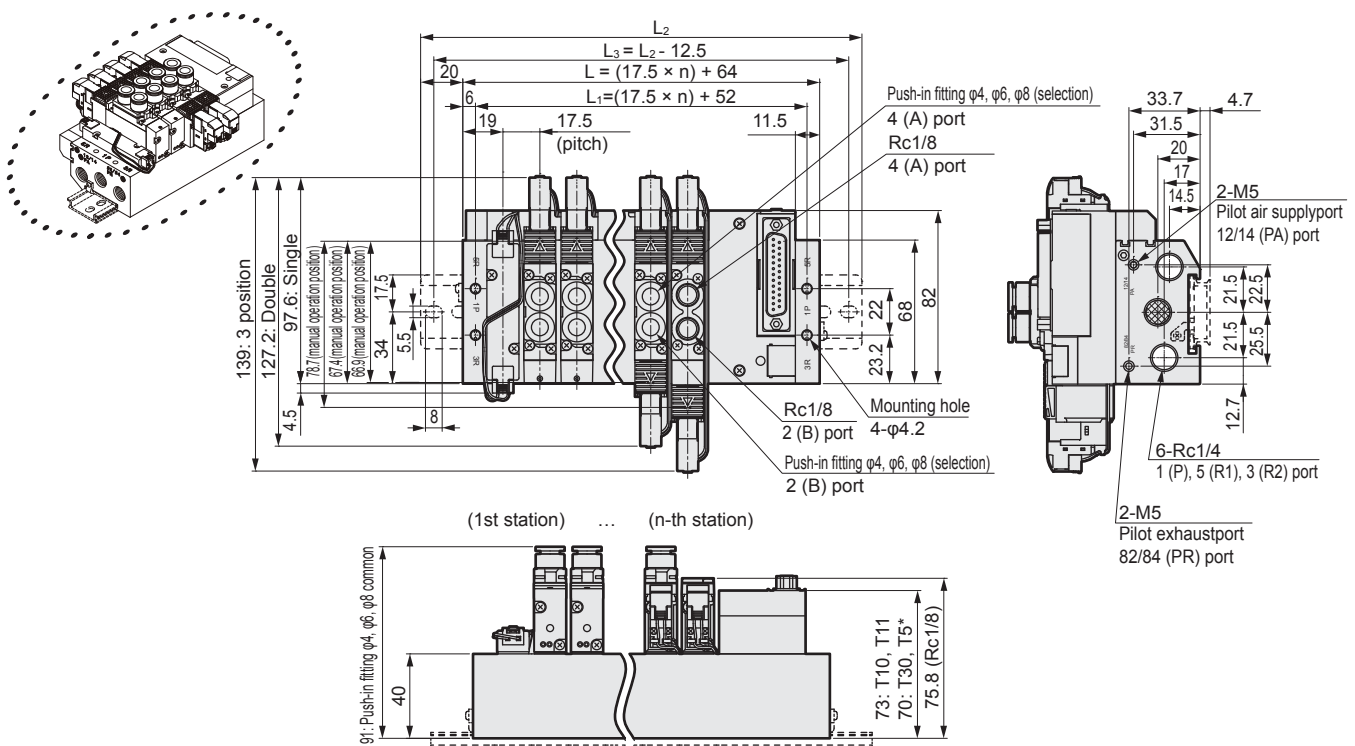
M4GA2

- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)

*This drawing shows T30. Refer to page 148 to 149 for detailed dimensions of the electrical block.
*For 2-position single 3 port valve, the port A or port B is a plug.



- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0	396.5	414.0
L ₁	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0	384.5	402.0
L ₂	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5				
L ₃	137.5	150.0	162.5	187.5	200.0	225.0	237.5	250.0	275.0	287.5	312.5	325.0	337.5	362.5	375.0				

M4GA2-T6D Series

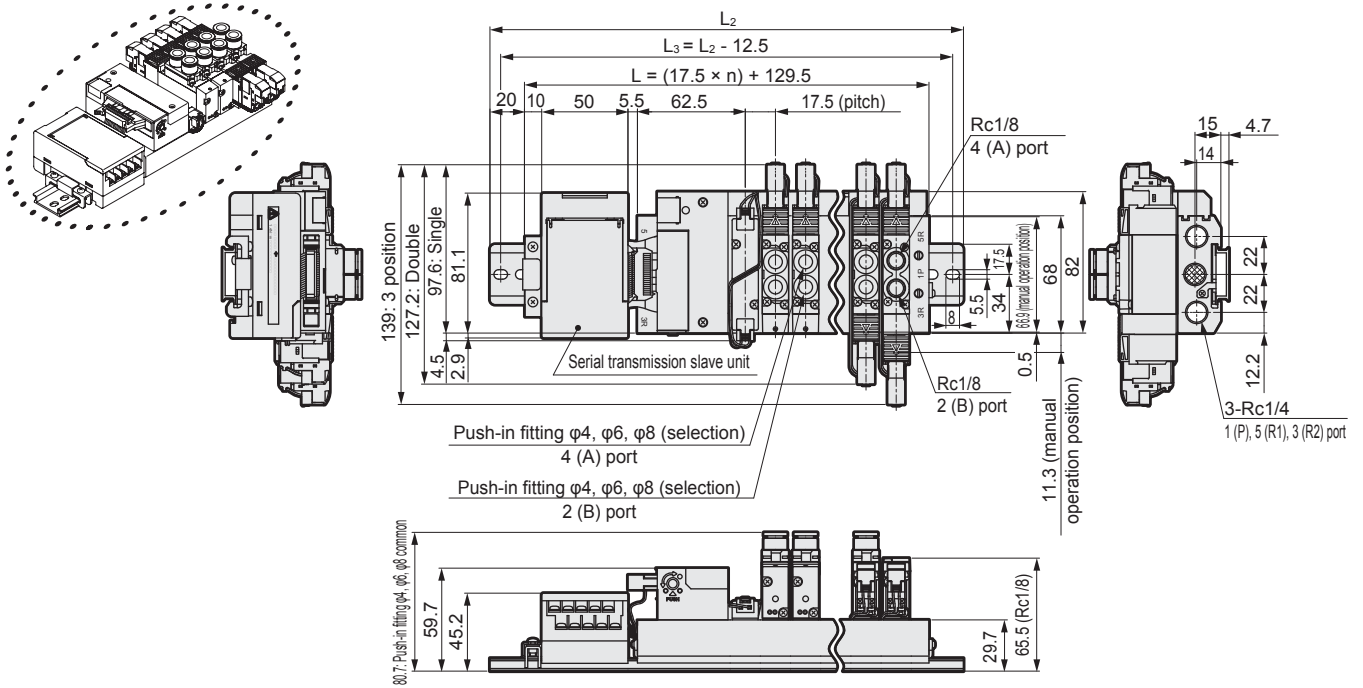
Reduced wiring manifold; body piping; serial transmission

Dimensions

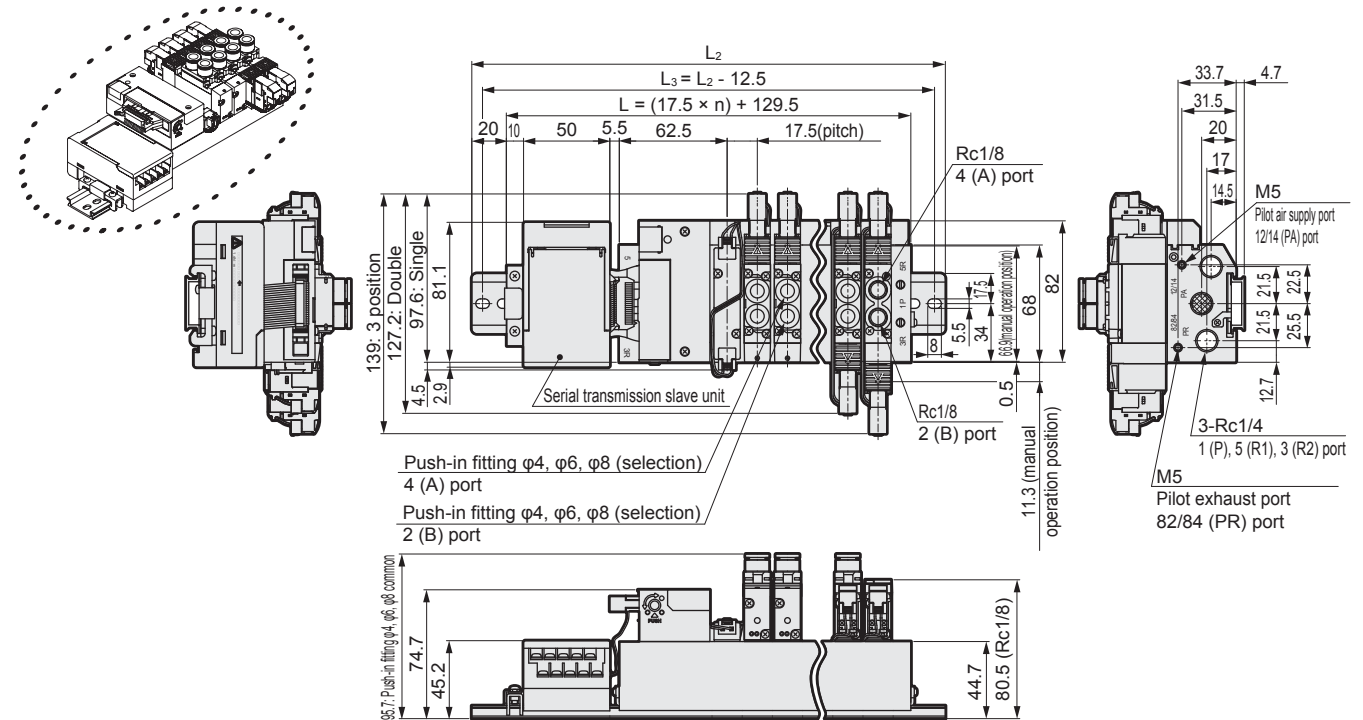
M4GA2

- Serial transmission (T6*)
DIN rail mounting type (D)

*For 2-position single 3 port valve, the port A or port B is a plug. The dimension of dual 3 port valve integrated type is the same as that of the double type.



- Serial transmission (T6*)
DIN rail mounting (D); External pilot type (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	164.5	182.0	199.5	217.0	234.5	252.0	269.5	287.0	304.5	322.0	339.5	357.0	374.5	392.0	409.5
L ₂	212.5	225.0	250.0	262.5	275.0	300.0	312.5	337.5	350.0	362.5	387.5	400.0	425.0	437.5	450.0
L ₃	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5	412.5	425.0	437.5

4GAB
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

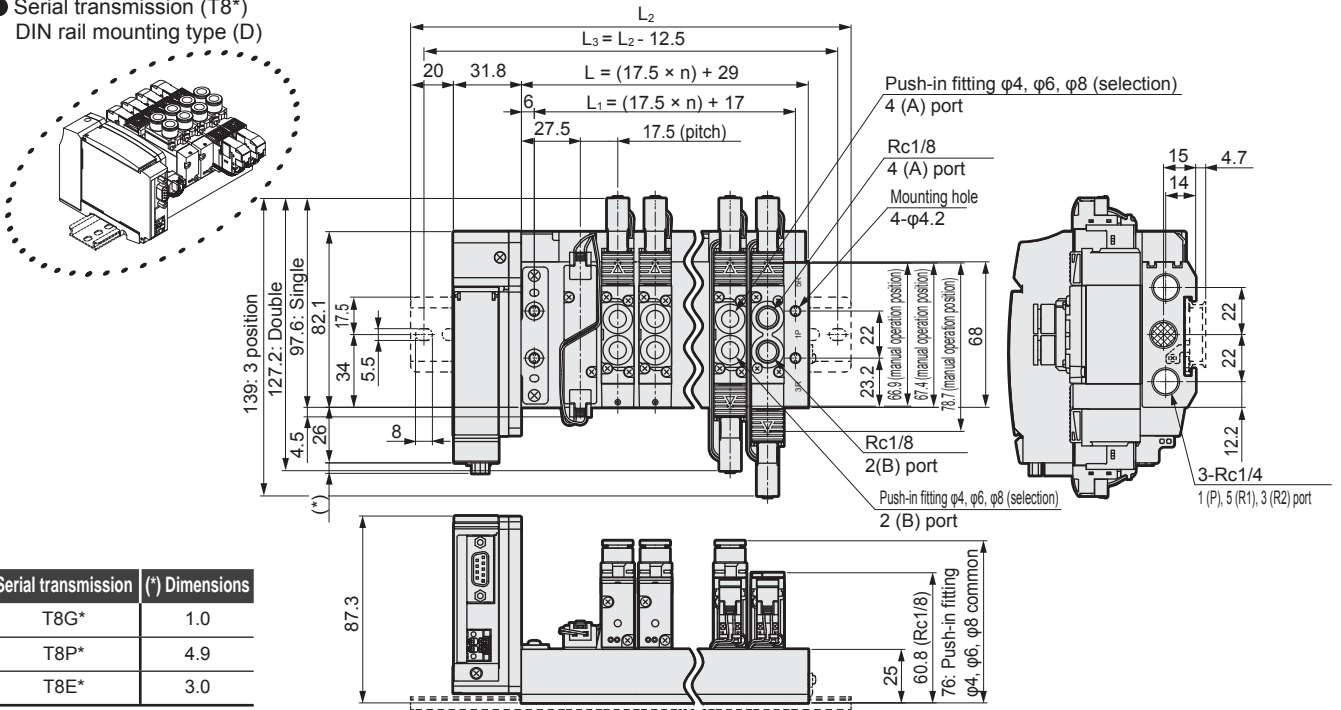
M4GA2-T8* Series

Reduced wiring manifold; body piping; serial transmission

Dimensions

M4GA2

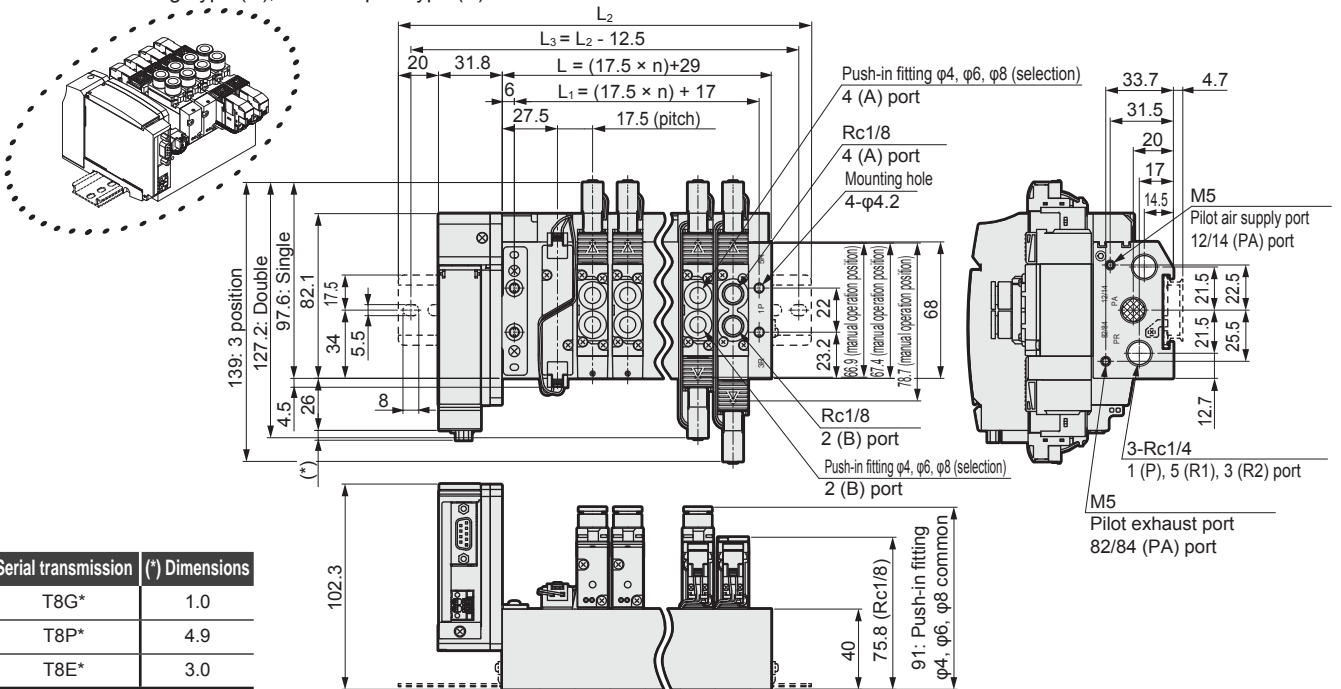
- Serial transmission (T8*)
DIN rail mounting type (D)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L ₁	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L ₂	137.5	162.5	175.0	200.0	212.5	225.0	250.0	262.5	287.5	300.0	312.5	337.5	350.0	375.0	387.5				
L ₃	125.0	150.0	162.5	187.5	200.0	212.5	237.5	250.0	275.0	287.5	300.0	325.0	337.5	362.5	375.0				

M4GA2

- Serial transmission (T8*)
DIN rail mounting type (D); External pilot type (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L ₁	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L ₂	137.5	162.5	175.0	200.0	212.5	225.0	250.0	262.5	287.5	300.0	312.5	337.5	350.0	375.0	387.5				
L ₃	125.0	150.0	162.5	187.5	200.0	212.5	237.5	250.0	275.0	287.5	300.0	325.0	337.5	362.5	375.0				

4GAB
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4GA3-T* Series

Reduced wiring manifold; base piping

Dimensions

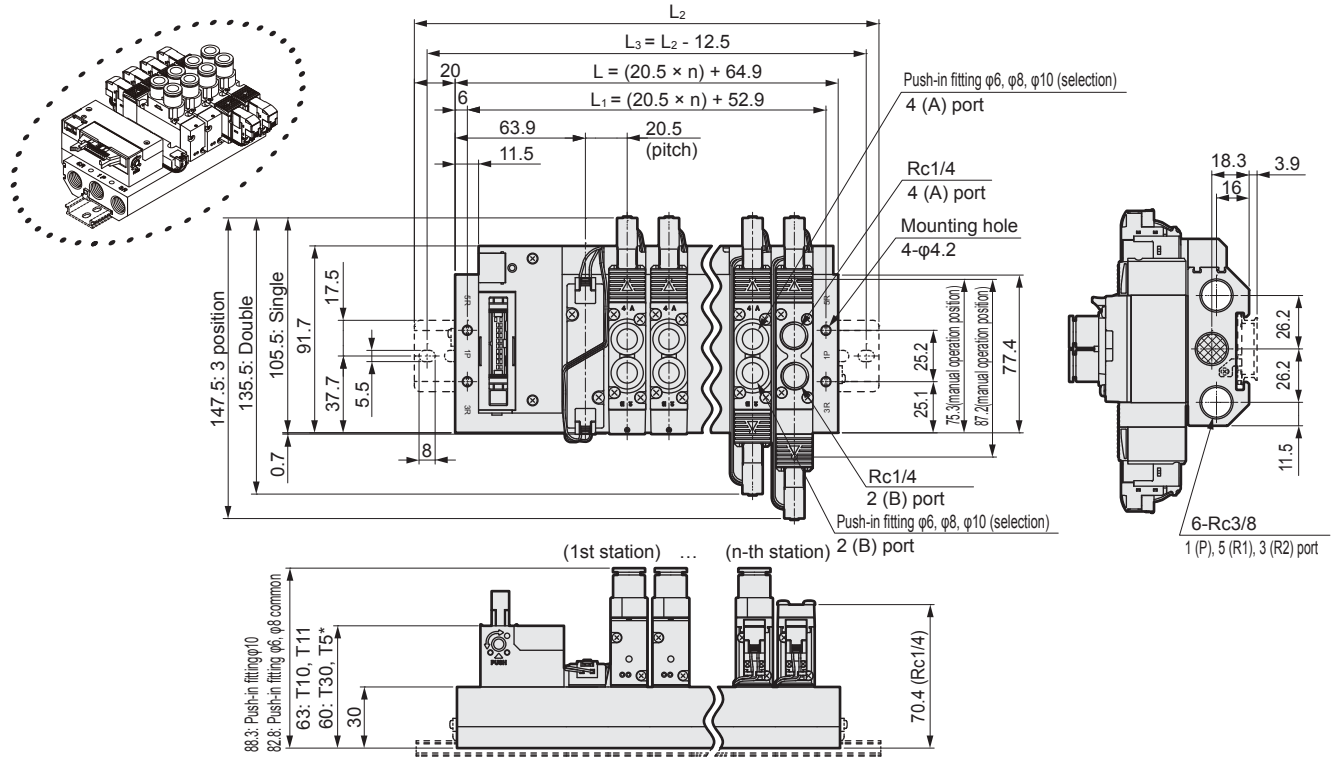


M4GA3

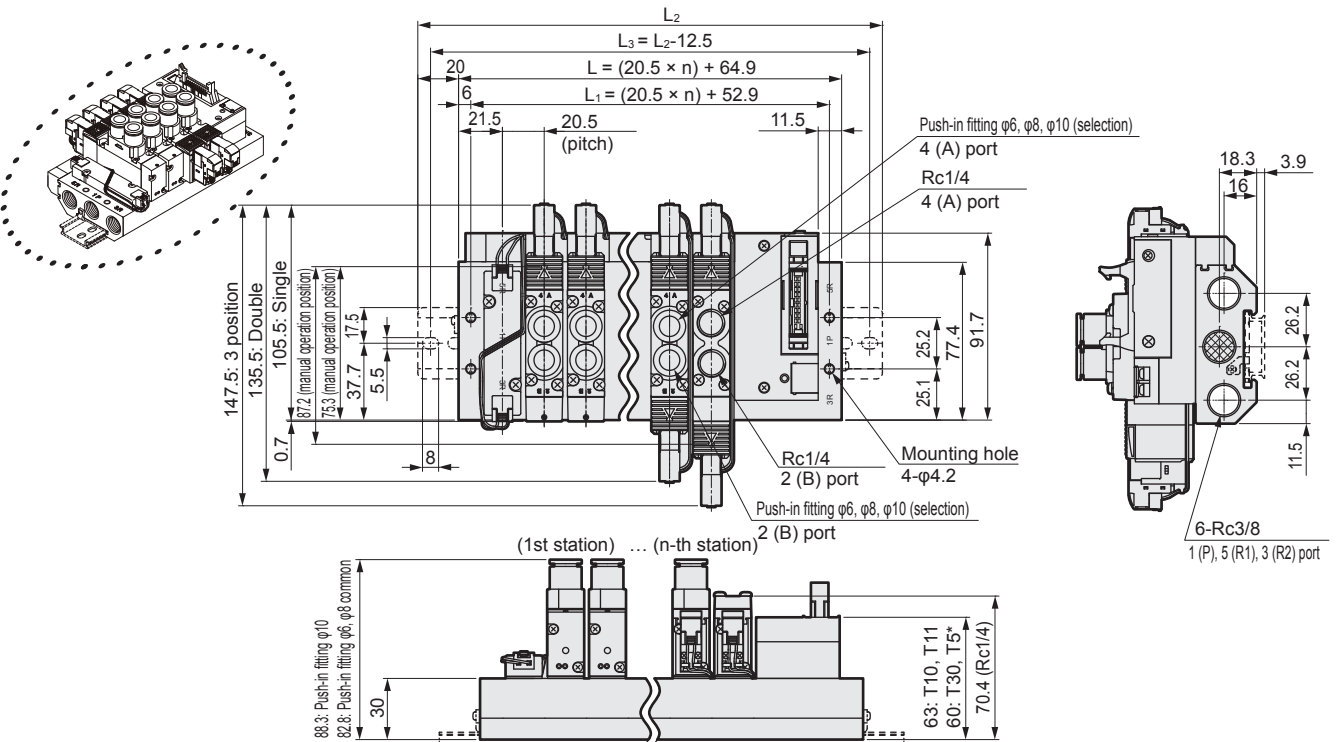
● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

*This drawing shows T50. Refer to page 148 to 149 for detailed dimensions of the electrical block.

*For 2-position single 3 port valve, the port A or port B is a plug.



● Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	105.9	126.4	146.9	167.4	187.9	208.4	228.9	249.4	269.9	290.4	310.9	331.4	351.9	372.4	392.9
L ₁	93.9	114.4	134.9	155.4	175.9	196.4	216.9	237.4	257.9	278.4	298.9	319.4	339.9	360.4	380.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	300.0	312.5	337.5	362.5	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	287.5	300.0	325.0	350.0	362.5	387.5	400.0	425.0

Dimensions

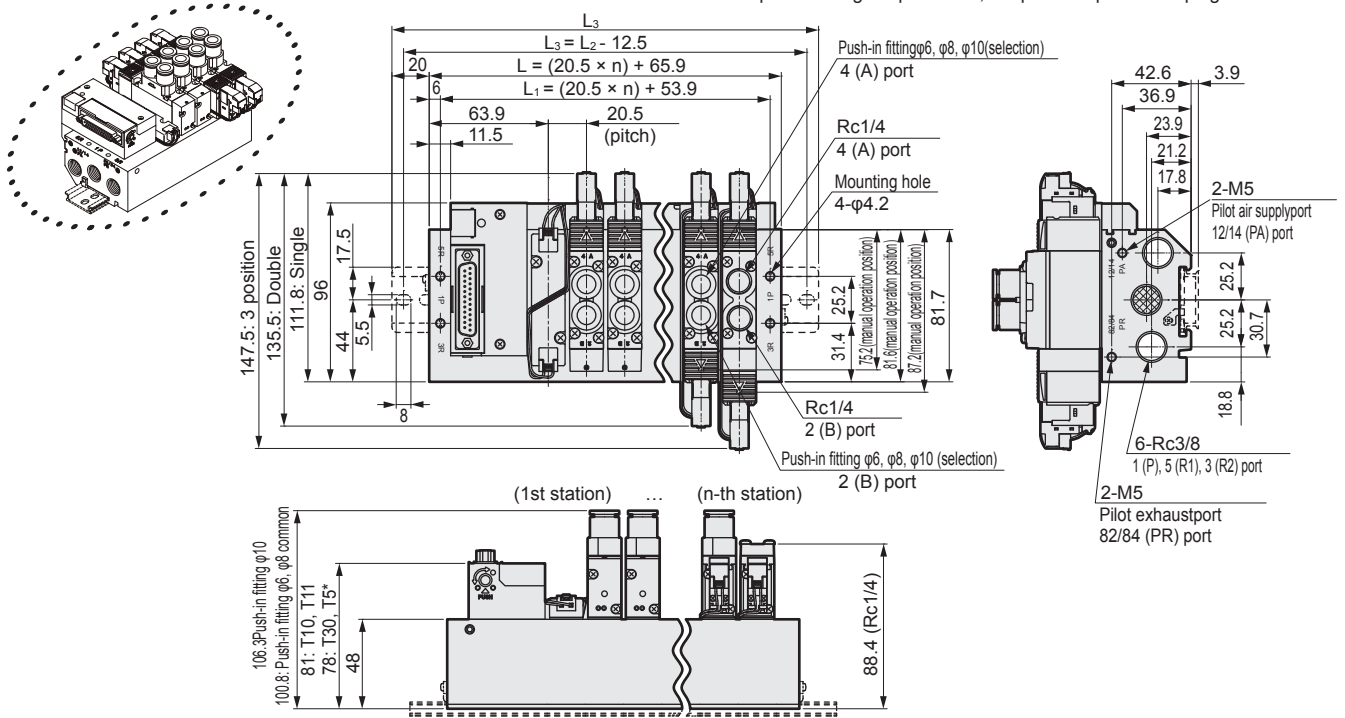


M4GA3

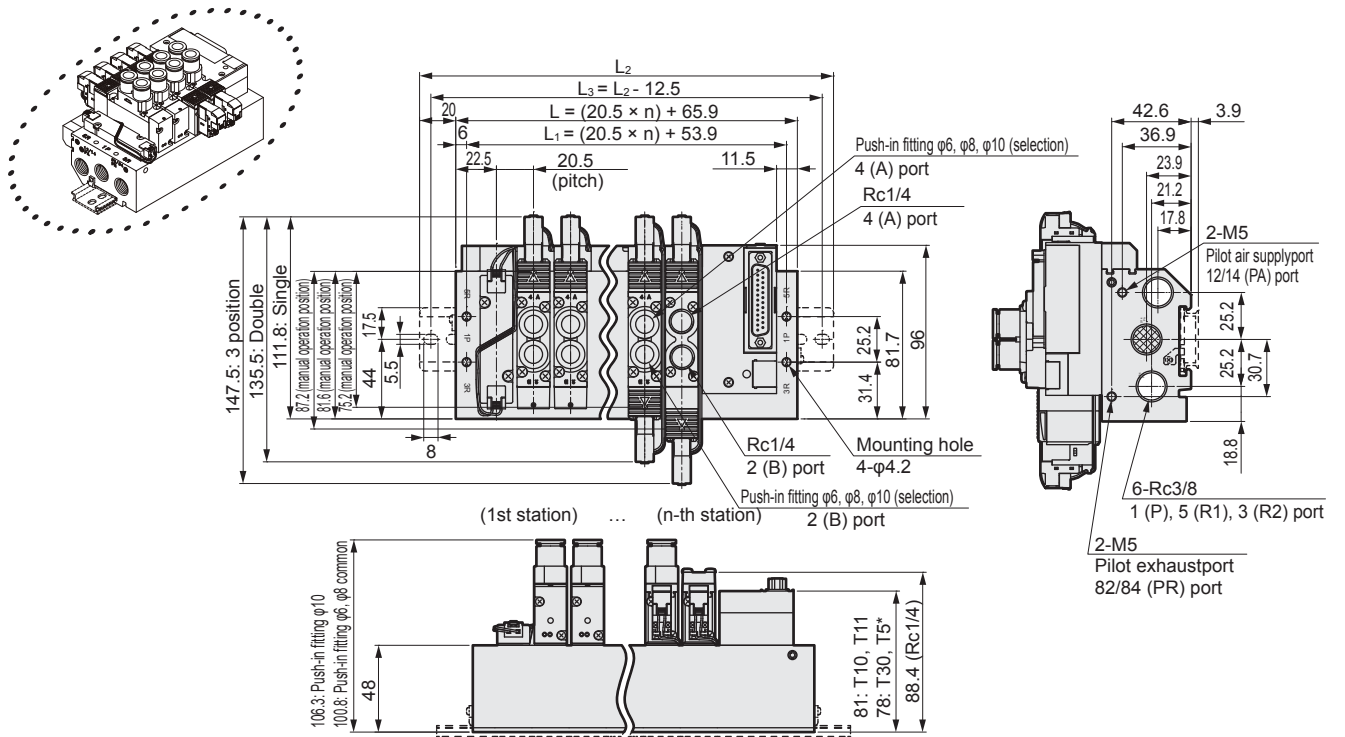
- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)

*This drawing shows T30. Refer to page 148 to 149 for detailed dimensions of the electrical block.

*For 2-position single 3 port valve, the port A or port B is a plug.



- Reduced wiring right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	106.9	127.4	147.9	168.4	188.9	209.4	229.9	250.4	270.9	291.4	311.9	332.4	352.9	373.4	393.9
L ₁	94.9	115.4	135.9	156.4	176.9	197.4	217.9	238.4	258.9	279.4	299.9	320.4	340.9	361.4	381.9
L ₂	150.0	175.0	200.0	212.5	237.5	250.0	275.0	300.0	312.5	337.5	362.5	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	187.5	200.0	225.0	237.5	262.5	287.5	300.0	325.0	350.0	362.5	387.5	400.0	425.0

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA3-T6D Series

Reduced wiring manifold; body piping; serial transmission

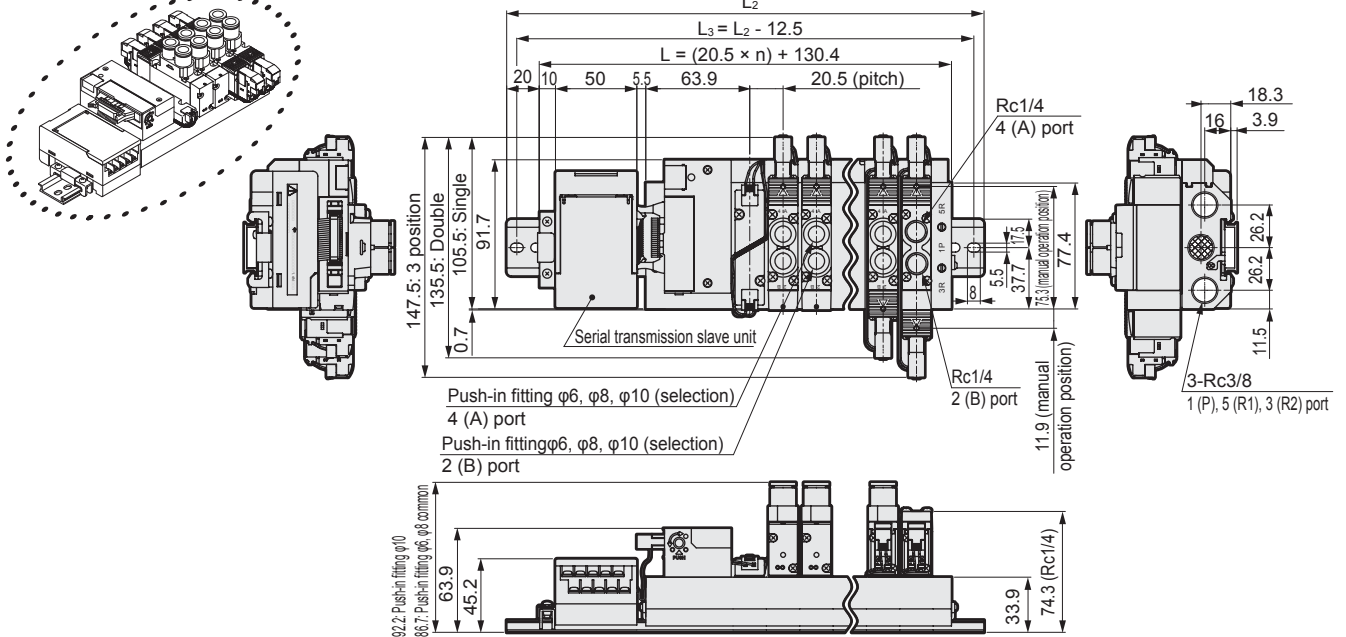
Dimensions



M4GA3

- Serial transmission (T6*)
DIN rail mounting type (D)

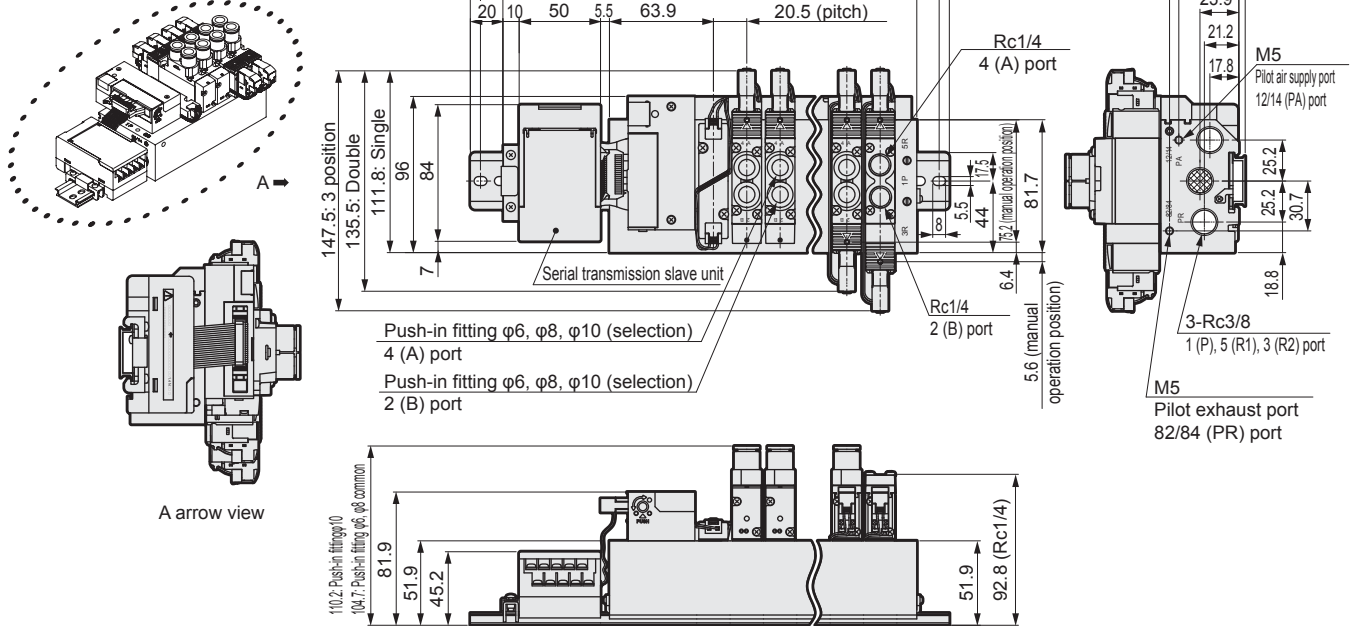
*For 2-position single 3 port valve, the port A or port B is a plug.



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	171.4	191.9	212.4	232.9	253.4	273.9	294.4	314.9	335.4	355.9	376.4	396.9	417.4	437.9	458.4
L ₂	212.5	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0	437.5	462.5	487.5	500.0
L ₃	200.0	225.0	250.0	262.5	287.5	312.5	325.0	350.0	375.0	387.5	412.5	425.0	450.0	475.0	487.5

M4GA3

- Serial transmission (T6*)
DIN rail mounting type (D);
External pilot type (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	172.4	192.9	213.4	233.9	254.4	274.9	295.4	315.9	336.4	356.9	377.4	397.9	418.4	438.9	459.4
L ₂	212.5	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0	437.5	462.5	487.5	500.0
L ₃	200.0	225.0	250.0	262.5	287.5	312.5	325.0	350.0	375.0	387.5	412.5	425.0	450.0	475.0	487.5

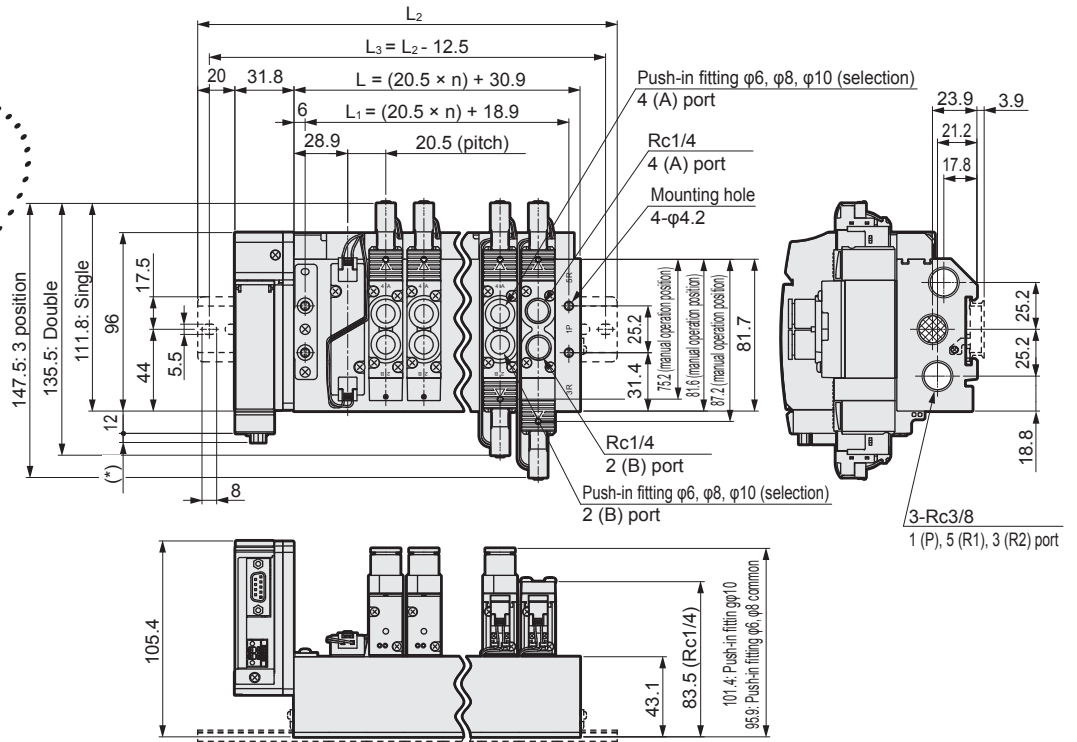
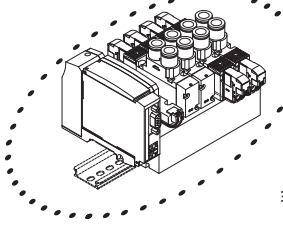
M4GA3-T8* Series

Reduced wiring manifold; body piping; serial transmission

Dimensions

M4GA3

- Serial transmission (T8*)
DIN rail mounting type (D)

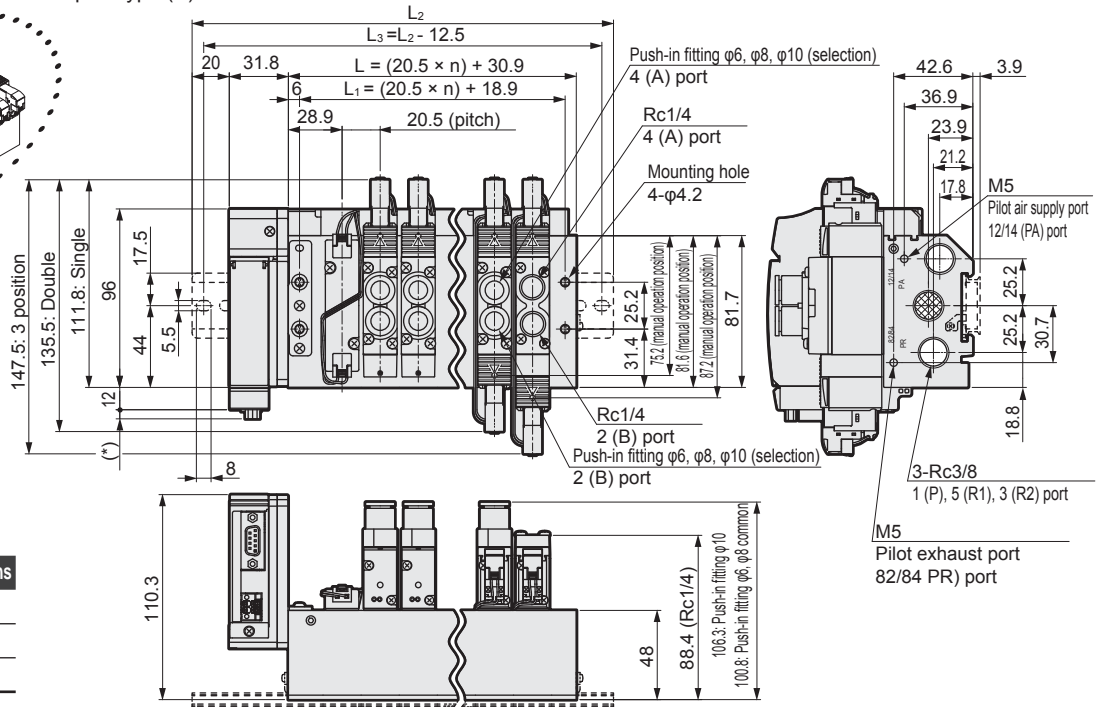
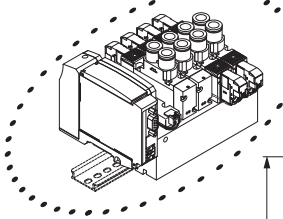


Serial transmission	(*) Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L ₁	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0

M4GA3

- Serial transmission (T8*)
DIN rail mounting (D); External pilot type (K)



Serial transmission	(*) Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L ₁	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

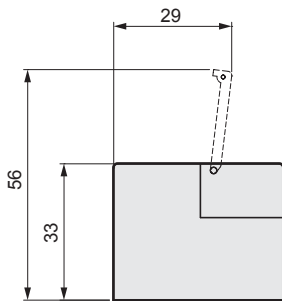
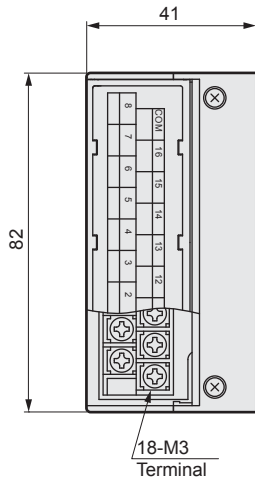
M4GA-T* Series

Reduced wiring manifold; base piping

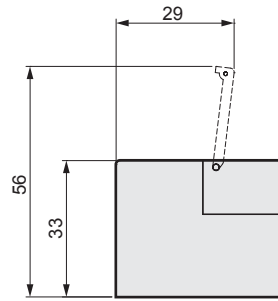
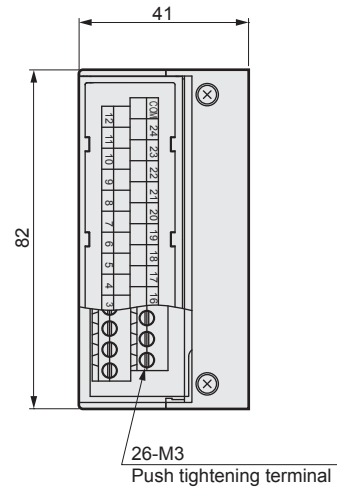
Electrical block part: dimensions

4GAB	M4GA/B	MN4GA/B	4GAB Master valve	4GD/E	M4GD/E	MN4GD/E	Technical data	Safety precautions	Manifold Specifications
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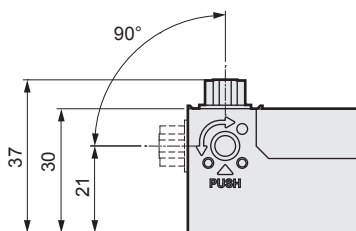
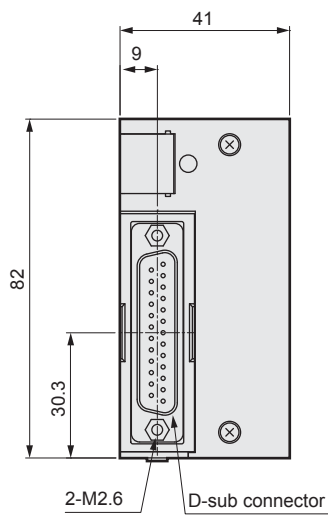
● Common terminal block (M3 thread) T10



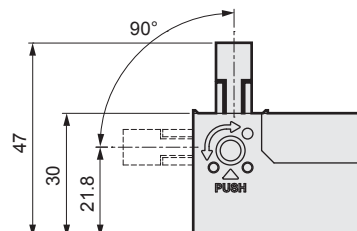
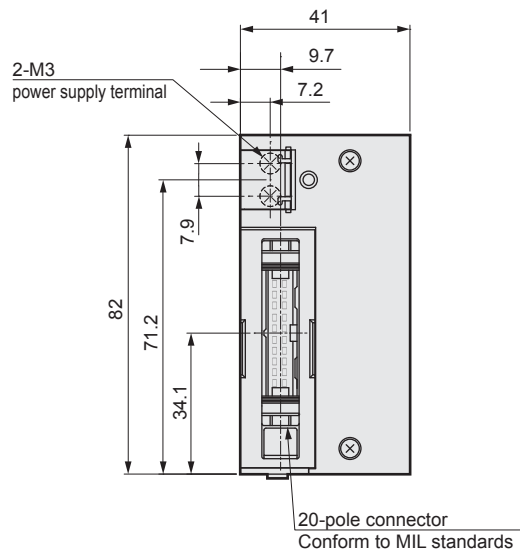
● Common terminal block (push tightening) T11



● D sub-connector T30

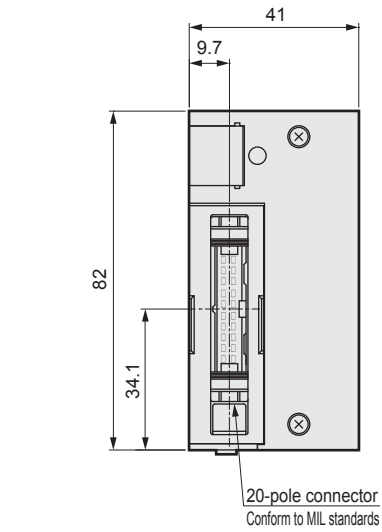


● 20 pin flat cable connector (with power supply terminal) T50

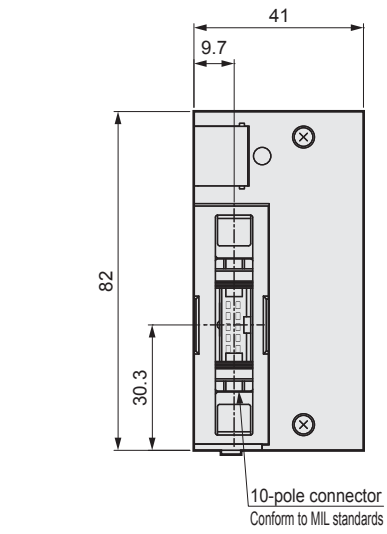


Electrical block part: dimensions

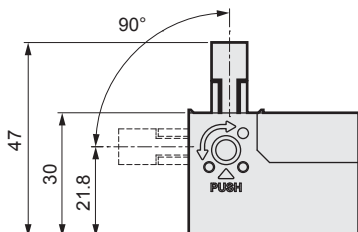
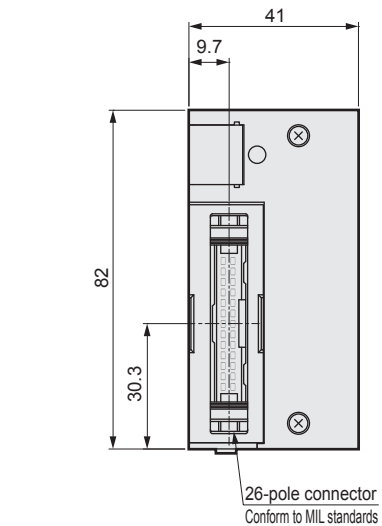
- 20 pin flat cable connector (without power supply terminal)
T51



- 10 pin flat cable connector (without power supply terminal)
T52



- 26 pin flat cable connector (without power supply terminal)
T53



4GA/B

M4GA/B

MN4GA/B

4GA/B
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA3-T6D Series

Reduced wiring manifold; body piping; serial transmission

● Discrete serial transmission slave unit

4G R - **OPP3** - **0A**

A Wiring method

Symbol	Descriptions		
A Wiring method			
0A	T6A0	UNIWIRESYS- TEM	8 points
1A	T6A1		16 points
0C	T6C0	CompoBus/S	8 points
1C	T6C1		16 points
0E	T6E0	S-LINK	8 points
1E	T6E1		16 points
1G	T6G1	CC-Link	16 points
0J	T6J0	UNIWIRESYS H	8 points
1J	T6J1		16 points

4G R - **OPP7** - **2G**

A Wiring method

Symbol	Descriptions			
A Wiring method				
1G	T8G1	CC-Link (Thin type)	16 points	
2G	T8G2		NPN	32 points
1G-P	T8GP1		PNP	16 points
2G-P	T8GP2			32 points
1P	T8P1	PROFIBUS-DP (Thin type)	16 points	
2P	T8P2		NPN	32 points
1P-P	T8PP1		PNP	16 points
2P-P	T8PP2			32 points
1EC	T8EC1	EtherCAT (Thin type)	16 points	
2EC	T8EC2		NPN	32 points
1EC-P	T8ECP1		PNP	16 points
2EC-P	T8ECP2			32 points
1EN	T8EN1	EtherNet/IP (Thin type)	16 points	
2EN	T8EN2		NPN	32 points
1EN-P	T8ENP1		PNP	16 points
2EN-P	T8ENP2			32 points

4GAB
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

MEMO

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

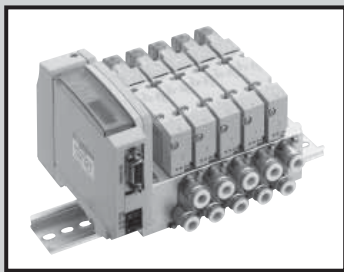
M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications



Reduced wiring manifold
Base piping
Direct mount type/DIN rail mount type

M3GB1, 2-T* (D) Series

M4GB1, 2, 3-T* (D) Series

● Applicable cylinder bore size: $\phi 20$ to $\phi 100$



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

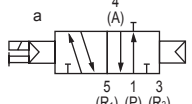
Technical data

Safety
precautions

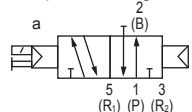
Manifold
Specifications

JIS symbol

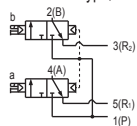
- 3 port valve
2-position single N.C. type



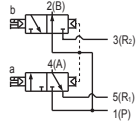
- 2-position single N.O. type



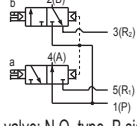
- Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



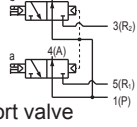
(A side valve: N.C. type, B side valve: N.O. type)



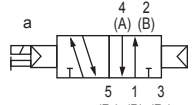
(A side valve: N.O. type, B side valve: N.C. type)



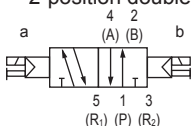
(A side valve: N.O. type, B side valve: N.O. type)



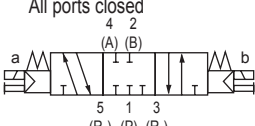
- 5 port valve
2-position single



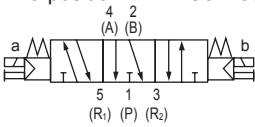
- 2-position double



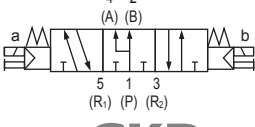
- 3-position



- 3-position A/B/R Connection



- 3-position P/A/B Connection



Manifold common specifications

Descriptions		
Manifold type		Reduced wiring integrated base
Mounting method		Direct mount type/DIN rail mount type
Supply and exhaust method		Common supply/common exhaust (check valve integrated)
Pilot exhaust method	Internal pilot	Main valve/pilot valve common exhaust (Pilot exhaust check valve integrated)
	External pilot	Main valve/pilot valve individual exhaust
Piping direction		Base part lateral direction
Valve type and operation		Pilot operated type soft spool valve
Working fluid		Compressed air
Max. working pressure MPa		0.7
Min. working pressure MPa		0.2 (Note 3)
Proof pressure MPa		1.05
Ambient temperature °C		-5 to 55 (no freezing)
Fluid temperature °C		5 to 55
Manual operating device		Non-locking/locking common type (standard)
Lubrication (Note 1)		Not required
Degree of protection (Note 2)		Dust proof
Vibration resistance m/s ²		50 or less
Shock resistance m/s ²		300 or less
Atmosphere		Containing corrosive gas is not permissible

Electrical specification

Descriptions		T1*, T30*, T5*		T6*, T8*	
Rated voltage		24 VDC (2 VDC)		24 VDC	
Voltage fluctuation range (Note 4)		±10%		+10%, -5%	
Holding current A	Standard	0.017	0.034	0.017	
	With low heat energy-saving circuit	0.005	0.010	0.005	
Power consumption W	Standard	0.4			
		With low heat energy-saving circuit			
		0.1			
Thermal class		B			
Surge suppressor (Note 5)		Zener diode			
Indicator		LED			

- Note 1 Use the turbine oil Class 1 ISO VG32 if lubricated. Excessive or intermittent lubrication results in unstable operation.
- Note 2 Avoid water drops or oil, etc. during use.
- Note 3 The working pressure range is 0 to 0.7 MPa when the external pilot (option symbol: K) is selected. Set the external pilot pressure between 0.2 to 0.7 MPa.
- Note 4 Please note the voltage fluctuation range since the T6* and T8* (Serial transmission type) have a voltage drop due to the internal circuit.
- Note 5 If you select the low heat energy-saving circuit or surgeless, it will become a diode.

Common specifications

Descriptions		M3GB1/M4GB1	M3GB2/M4GB2	M3GB3/M4GB3
Port size	A/B port	Barbed fitting $\phi 1.8$ Barbed fitting $\phi 1.8, \phi 4, \phi 6, \phi 8$ (Note 6) M5	Push-in fitting $\phi 4, \phi 6, \phi 8, \phi 10$ (Note 6) Rc1/8	Push-in fitting $\phi 6, \phi 8, \phi 10$ Rc1/4
	P/R1/R2 port	Rc1/8	Rc1/4	Rc3/8

Note 6 This is a available consult factory order.

T1*, T30*, T5*

Descriptions	M3GB1/M4GB1		M3GB2/M4GB2		M3GB3/M4GB3		
	Direct mount	DIN rail mount	Direct mount	DIN rail mount	Direct mount	DIN rail mount	
Max. station no.	Standard (Internal pilot) 20 stations	16 stations	20 stations	16 stations	16 stations		
	External pilot	12 stations					
Manifold base weight calculation formula (n: station no.) g	Standard	43n+335	45n+348	80n+398	82n+431	124n+548	126n+582
	External pilot	44n+330	46n+344	88n+433	90n+467	129n+577	131n+606

T6*

Descriptions	M3GB1/M4GB1		M3GB2/M4GB2		M3GB3/M4GB3	
	DIN rail mount		DIN rail mount		DIN rail mount	
Max. station no.	Standard (Internal pilot)	16 stations	16 stations		16 stations	
	External pilot	12 stations				
Manifold base weight calculation formula (n: station no.) g	Standard	45n+495	82n+578		126n+729	
	External pilot	46n+491	90n+615		131n+753	

T8*

Descriptions	M3GB1/M4GB1		M3GB2/M4GB2		M3GB3/M4GB3		
	Direct mount	DIN rail mount	Direct mount	DIN rail mount	Direct mount	DIN rail mount	
Max. station no.	Standard (Internal pilot)	20 stations	16 stations	20 stations	16 stations	16 stations	
	External pilot	12 stations					
Manifold base weight calculation formula (n: station no.) g	Standard	46n+305	49n+332	83n+318	86n+350	128n+384	132n+416
	External pilot	48n+312	51n+339	91n+336	94n+368	146n+417	150n+449

The manifold base weight is the value for screw connection specifications with the DIN rail and electrical block.

The max. station no. of the manifold is limited by the max. number of solenoid for each of the following wiring specifications.

M₄GB1, 2, 3-T* (D) Series

Reduced wiring manifold; base piping

Flow characteristics

Model no.	Valve Position	P→A/B		A/B→R1/R2		
		C [dm ³ /(s/bar)]	b	C [dm ³ /(s/bar)]	b	
M3GB1 M4GB1	Dual 3 port valve integrated type	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)	
	3-position	All ports closed	0.98	0.22	1.1 -	0.24 -
		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	Dual 3 port valve integrated type	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)	
	3-position	All ports closed	2.2	0.34	2.4 -	0.29 -
		ABR connection	2.2	0.34	2.8 (1.8)	0.24 (0.27)
		PAB connection	2.4	0.29	2.4 -	0.29 -
	2-position	3.5	0.34	3.8 (2.6)	0.11 (0.27)	
M4GB3	All ports closed	3.1	0.33	3.3 -	0.22 -	
	3-position	3.0	0.30	3.8 (2.7)	0.11 (0.22)	
	ABR connection	3.0	0.30	3.8 (2.7)	0.11 (0.22)	
	PAB connection	3.6	0.36	3.3 -	0.28 -	

Note 1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$. Note 2: Values in () apply when a check valve is attached.

Wiring specifications

Descriptions	T10* Centralized terminal block type	T11* Centralized terminal block type	T30* D-sub-connector	T50* Flat cable 20 pin type	T51* Flat cable 20 pin type	T52* Flat cable 10 pin type	T53* Flat cable 26 pin type																															
Connector and Terminal block specifications	M3 thread tightening type 18 terminals	Push tightening type 26 terminals	D sub connector 25 pin	MIL-C-83503 standards conformed pressure welding socket 20 pin	MIL-C-83503 standards conformed pressure welding socket 20 pin	MIL-C-83503 standards conformed pressure welding socket 10 pin	MIL-C-83503 standards conformed pressure welding socket 26 pin																															
Max. number of solenoid	16 points	24 points	24 points	16 points	18 points	8 points	24 points																															
Manifold internal wiring	Details on page 594 to 601																																					
Electrical block position Blank: Left side R: Right side	Left side: T* 			Right side: T*R 																																		
Arrangement type Blank: Standard sequential W: Double wiring	(Example) T50* Manifold specifications 		Standard wiring (sequential): Blank <table border="1"> <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 border="1"> <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>Void</td> <td>2a</td> <td>2b</td> <td>3a</td> <td>Void</td> <td>4a</td> <td>4b</td> </tr> </table>		Connector pin No.	1	2	3	4	5	6	7	8	Valve solenoid no.	1a	Void	2a	2b	3a	Void	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	Void	2a	2b	3a	Void	4a	4b																														

Serial transmission slave unit specifications

Descriptions	T6G1 <small>Note 1</small>	T6C0 T6C1 <small>Note 2</small>	T6A0 T6A1 <small>Note 3</small>	T6E0 T6E1	T6J0 T6J1 <small>Note 3</small>
	Network name	CC-Link	CompoBus/S	UNIWIRESYSTEM	S-LINK
Power supply voltage	Unit side: 24 VDC ±10% Valve side: 24 VDC +10% ± -5%	24 VDC +10% ± -5% (Unit power supply/valve power supply common terminal)			
Current consumption	Unit side: 100 mA or less (when all output points are ON) Valve side: 15mA or less (when all output points are OFF)	100 mA or less (when all output points are ON) Load current is not included			
Output points	16 points	T6*0: 8 points T6*1: 16 points			
Occupied number	1 station	T6C0: 1 node address (8 point mode) T6C1: 2 node address (8 point mode)	T6A0: Output 8 points T6A1: Output 16 points	T6E0: FAN-in: 3 T6E1: FAN-in: 3	T6J0: Output 8 points T6J1: Output 16 points
Operation display	LED (power supply and communication state)				

Note 1: CC-Link is ver1.10. Note 2: Long-distance communication mode is not supported. Contact CKD for details on its support.

Note 3: The number of transmission points of 128 points and the transmission distance of 200 m are supported. Contact CKD for other specifications.

Serial transmission slave unit specifications

Descriptions	T8G1	T8GP1	T8P1	T8PP1	T8EC1	T8ECP1	T8EN1	T8ENP1
	T8G2	T8GP2	T8P2	T8PP2	T8EC2	T8ECP2	T8EN2	T8ENP2
Network name	CC-Link ver1.10		PROFIBUS-DP (V0)		EtherCAT		EtherNet/IP	
Power supply voltage	24 VDC ± 10% 24 VDC+10%, -5%							
Current consumption	60mA or less (when all output points are ON)		60mA or less (when all output points are ON)		110mA or less (when all output points are ON)		120mA or less (when all output points are ON)	
Output points	T8*1: 15mA or less T8*2: 20mA or less (when all output points are ON) Load current is not included							
Occupied number	T8*1: 16 points T8*2: 32 points							
Operation display	1 station LED (power supply and communication state)							
Output type	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output	NPN output	PNP output

M4GB1, 2, 3-T* (D) Series

Reduced wiring manifold; body piping

How to order

Manifold model no.

M **4GB1** **1** **0R** - **C6** - **T30** **W** **H** **D** - **3**

3 port manifold model no.

M **3GB1** **1** **0R** - **C6** - **T30** **W** **H** **D** - **3**

● Discrete valve for mounting base

4GB1 **1** **9R** - **00** - **A2N** **H** - **3**

● 3 port discrete valve for mounting base

3GB1 **1** **9R** - **00** - **A2N** **H** - **3**



- Refer to page 597 for cable model no. with D-sub connector.
- Refer to page 593 for cable model no. for flat cable connector.

Note on model no. selection

Note 1 Select M4GB*80R when mixing with 3, 5 port valves. Select M3GB*80R when mixing with the masking plate.

Note 2 Combination with the external pilot (K) is not available. Dimensions are the same as the respective 2-position double.

Note 3 CL* push-in fitting L type (upward) is available only for the single solenoid manifold. The port A is a long elbow and the port B is short elbow.

Note 4 A/B port sizes do not differ for the push-in fitting L type.

Note 5 The 4G1's C8 and 4G2's C10 are available consult factory order. In addition, this does not handle the push-in fitting mix.

Note 6 Blank...Wired based on the type of valve used.

W*...Wired for the double solenoid regardless of the type of valve used.

Note 7 Reduced wiring (A type socket assembly) is attached to the cap side. The discrete valve (A2N) comes with a holder for holding the socket assembly. Refer to page 188 for details.

Note 8 3-position all ports closed and PAB connection are not provided with check valve (H). Refer to Page 628 for details on the check valve.

Note 9 Consult CKD when using a vacuum with the external pilot (K).

Note 10 Only the E2* type, E2* J type connector and 12/24 VDC are supported. In addition, the surgeless "S" and low heat energy-saving circuit "E" cannot be selected at the same time.

Note 11 This is surgeless specifications.

Note 12 The P port has a filter built inside as a standard.

Note 13 Specify the spacer mounting location and quantity in manifold specifications. Stacking multiple spacers is not supported. Combination with the masking plate is not supported. Refer to page 180 to 184 for details.

Note 14 Combination with the external pilot (K) is not available.

Note 15 Combination with the push-in fitting L type (upward) is not available.

A Model No.				
3GB1	3GB2	4GB1	4GB2	4GB3

B Valve Position						
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	Dual 3 port valve integrated type	A side valve: Normally closed	●	●		
		B side valve: Normally closed				
67	Note 1, 2	A side valve: Normally closed	●	●		
		B side valve: Normally open				
76	Note 1, 2	A side valve: Normally open	●	●		
		B side valve: Normally closed				
77	Note 1, 2	A side valve: Normally open	●	●		
		B side valve: Normally open				
8	Mix manifold (In case of multiple Valve Positions)	●	●	●	●	●

C Port size						
Port	4 (A) / 2 (B) port	P/R1/R2 port ① = Rc1/8 ② = Rc1/4 ③ = Rc3/8				
CF	φ1.8 barbed fitting (applicable tube UP-9102-**)	②	②			
C18	φ1.8 push-in fitting (applicable tube UP-9402-**) (2)	②				
C4	φ4 push-in fitting	②	③	②	③	
C6	φ6 push-in fitting	②	③	②	③	④
C8	φ8 push-in fitting Note 5	②	③	②	③	④
C10	φ10 push-in fitting Note 5		③		③	④
CL18	L type φ1.8 push-in fitting (upward) (applicable tube UP-9402-**) (2)			②		
CL4	L type φ4 push-in fitting (upward)			②		
CL6	L type φ6 push-in fitting (upward)			②	③	
CL8	L type φ8 push-in fitting (upward)				③	④
CL10	L type φ10 push-in fitting (upward)					④
CD18	L type φ1.8 push-in fitting (downward) (applicable tube UP-9402-**) (2)	②		②		
CD4	L type φ4 push-in fitting (downward)	②		②		
CD6	L type φ6 push-in fitting (downward)	②	③	②	③	
CD8	L type φ8 push-in fitting (downward)		③		③	④
CD10	L type φ10 push-in fitting (downward)					④
CX	Push-in fitting mix	②	③	②	③	④
M5	M5	②		②		
06	Rc1/8		③		③	
08	Rc1/4					④
00	Discrete valve for mounting base	●	●	●	●	●

D Reduced wiring connection	
Refer to the next page for wire connections.	

E Terminal and connector pin wiring						
Blank	Standard wiring Note 6	●	●	●	●	●
W	Double wiring Note 6	●	●	●	●	●
W1	Double wiring (With single reduced wiring) Note 6, Note 7	●	●	●	●	●

F Option						
Blank	Non-locking/locking common manual override	●	●	●	●	●
M	Non-locking manual override	●	●	●	●	●
H	With check valve Note 8	●	●	●	●	●
K	External pilot Note 9	●	●	●	●	●
A	Ozone/cutting oil proof	●	●	●	●	●
S	Surgeless Note 10	●	●	●	●	●
E	Low heat and energy saving circuit Note 10, Note 11	●	●	●	●	●
F	A/B port filter integrated Note 12	●	●	●	●	●
Z1	Air supply spacer Note 13	●	●	●	●	●
Z2	In stop valve spacer Note 13, Note 14	●	●	●	●	●
Z3	Exhaust spacer Note 13	●	●	●	●	●
Z6	Spacer type pilot check valve Note 13, Note 15				●	

G Mount type						
Blank	Direct mount type	●	●	●	●	●
D	DIN rail mount type	●	●	●	●	●

H Station no.						
2	2 stations					
to	to	●	●	●	●	●
20	Refer to page 152 for the max. station no. per port size.					

I Voltage						
3	24 VDC	●	●	●	●	●
4	12 VDC	●	●	●	●	●

is not available.

M4GB1, 2, 3-T* (D) Series

Reduced wiring manifold; body piping

			A Model No.				
			3GB1	3GB2	4GB1	4GB2	4GB3
④ Reduced wiring connection (light and surge suppressor provided as standard) 12/24 VDC							
T10	Common terminal block (M3 thread)	Left side specifications	●	●	●	●	●
T10R		Right side specifications	●	●	●	●	●
T11	Common terminal block (push tightening)	Left side specifications	●	●	●	●	●
T11R		Right side specifications	●	●	●	●	●
T30	D-sub-connector	Left side specifications	●	●	●	●	●
T30R		Right side specifications	●	●	●	●	●
T50	20 pin flat cable connector (with power supply terminal)	Left side specifications	●	●	●	●	●
T50R		Right side specifications	●	●	●	●	●
T51	20 pin flat cable connector (without power supply terminal)	Left side specifications	●	●	●	●	●
T51R		Right side specifications	●	●	●	●	●
T52	10 pin flat cable connector (without power supply terminal)	Left side specifications	●	●	●	●	●
T52R		Right side specifications	●	●	●	●	●
T53	26 pin flat cable connector (without power supply terminal)	Left side specifications	●	●	●	●	●
T53R		Right side specifications	●	●	●	●	●

			A Model No.				
			3GB1	3GB2	4GB1	4GB2	4GB3
④ Serial transmission (light and surge suppressor provided as standard) 24 VDC							
T6A0	UNIWIRESYSTEM	NPN 8 points	●	●	●	●	●
T6A1		NPN 16 points	●	●	●	●	●
T6C0	CompoBus/S	NPN 8 points	●	●	●	●	●
T6C1		NPN 16 points	●	●	●	●	●
T6E0	S-LINK	NPN 8 points	●	●	●	●	●
T6E1		NPN 16 points	●	●	●	●	●
T6G1	CC-Link	NPN 16 points	●	●	●	●	●
T6J0		UNIWIRESYSTEM H	NPN 8 points	●	●	●	●
T6J1	NPN 16 points		●	●	●	●	●
T8G1	CC-Link (Thin type)	NPN 16 points	●	●	●	●	●
T8G2		NPN 32 points	●	●	●	●	●
T8GP1		PNP 16 points	●	●	●	●	●
T8GP2		PNP 32 points	●	●	●	●	●
T8P1	PROFIBUS-DP (Thin type)	NPN 16 points	●	●	●	●	●
T8P2		NPN 32 points	●	●	●	●	●
T8PP1		PNP 16 points	●	●	●	●	●
T8PP2		PNP 32 points	●	●	●	●	●
T8EC1	EtherCAT (Thin type)	NPN 16 points	●	●	●	●	●
T8EC2		NPN 32 points	●	●	●	●	●
T8ECP1		PNP 16 points	●	●	●	●	●
T8ECP2		PNP 32 points	●	●	●	●	●
T8EN1	EtherNet/IP (Thin type)	NPN 16 points	●	●	●	●	●
T8EN2		NPN 32 points	●	●	●	●	●
T8ENP1		PNP 16 points	●	●	●	●	●
T8ENP2		PNP 32 points	●	●	●	●	●
A2N	Without lead wire (without socket) with a light/surge suppressor		●	●	●	●	●

Ozone proof specifications / Cutting oil proof type specifications

Select the option "A" of (F) in how to order on page 154.

Clean room specifications (Catalog No. CB-033S)

- Particle generation preventing structure for use in clean rooms

** - Voltage - **P7***

Specifications for secondary battery (Catalog No. CC-947A)

- In order to be applicable for secondary battery manufacturing process, confine materials for air passage and sliding section

** - Voltage - **P4**

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

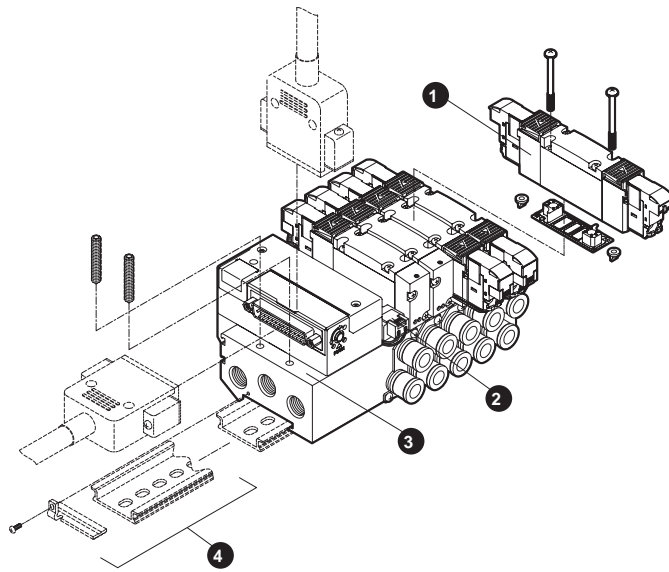
Manifold
Specifications

M4GA1, 2, 3-T* (D) Series

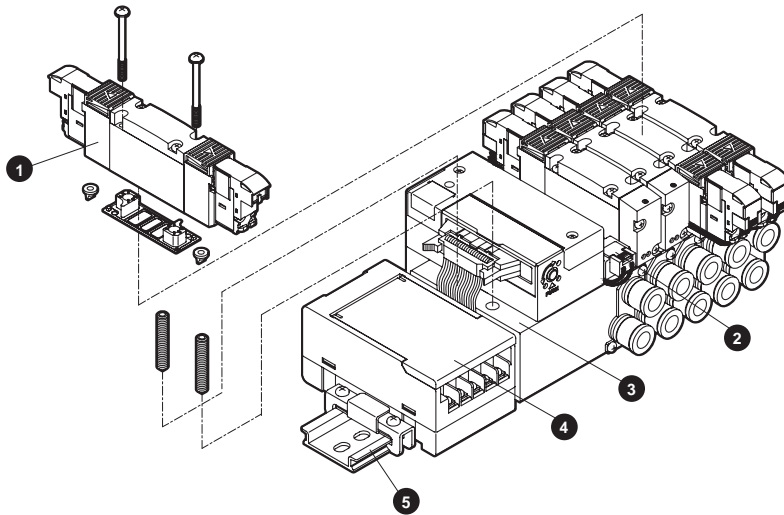
Reduced wiring manifold; body piping

Manifold components explanation and parts list

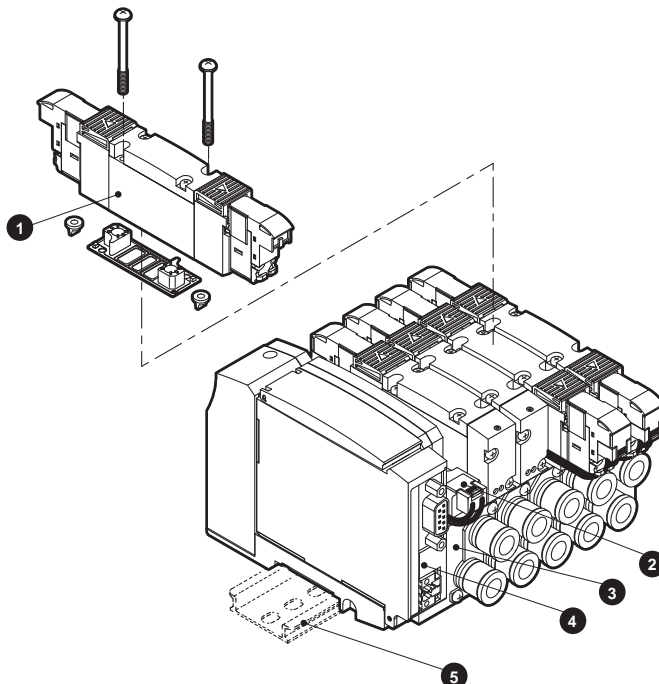
● T30



● T6D



● T8*



The M4GA2-T8 and M4GA3-T8 series mount type (direct, DIN rail) can not be changed after purchase.
The M4GB1-T8 series can be changed.

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4GA1, 2, 3-T* (D) Series

Reduced wiring manifold; body piping

Main components list

No.	Component name	Model no.	Descriptions	Remarks
1	Discrete valve for mounting base	3 4 GB**9R-00-A2N [Option] - [Voltage] Valve Position Series flow rate size	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page154
2	Masking plate	3G1 & 4G1 4G1R-MP 3G2 & 4G2 4G2R-MP 3G2 & 4G3 4G3R-MP	Masking plate Gasket Set screw 2	*3G3 & 4G3 has two PR check valves.
3	Manifold base assembly	M4GB* R [Port size] - [T56] - [Option] - [Station no.] Series flow rate size	Manifold base Electrical block	
4	Serial transmission slave unit	4GR-OPP3- [Wiring method] 4GR-OPP7- [Wiring method]	Serial transmission slave unit	Details on page178
5	DIN rail kit			Details on page191

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.
-	Coil assembly	4GR-A2N- * -COIL- [Voltage] Blank: Standard A: Ozone/cutting oil specifications			
-	A type connector socket assembly Details on page 613	4GR * -SOCKET-ASSY-A * * - [Row no.] Blank: Left side, R: Right side A: aSOL side, B: bSOL side n: Specify the position of the valve to be connected			
			-	Cartridge type push-in fitting and related parts	
				4G1	<ul style="list-style-type: none"> φ1.8 barbed type 4G1R-JOINT-CF φ1.8 straight type 4G1R-JOINT-C18 φ4 straight type 4G1R-JOINT-C4 φ6 straight type 4G1R-JOINT-C6 φ8 straight type 4G1R-JOINT-C8 φ1.8 elbow type 4G1R-JOINT-CL18,CLL18 φ4 elbow type 4G1R-JOINT-CL4,CLL4 φ6 elbow type 4G1R-JOINT-CL6,CLL6 Plug cartridge 4G1R-JOINT-CPG
				4G2	<ul style="list-style-type: none"> φ4 straight type 4G2R-JOINT-C4 φ6 straight type 4G2R-JOINT-C6 φ8 straight type 4G2R-JOINT-C8 φ10 straight type Note 1 4G2R-JOINT-C10 φ6 elbow type 4G2R-JOINT-CL6,CLL6 φ8 elbow type 4G2R-JOINT-CL8,CLL8 Plug cartridge 4G2R-JOINT-CPG
				4G3	<ul style="list-style-type: none"> φ6 straight type 4G3R-JOINT-C6 φ8 straight type 4G3R-JOINT-C8 φ10 straight type 4G3R-JOINT-C10 φ8 elbow type 4G3R-JOINT-CL8,CLL8 φ10 elbow type 4G3R-JOINT-CL10,CLL10

Note 1 These are common parts with the φ10 straight type for the 4G3.

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautionsManifold
Specifications

M4GB1-T* Series

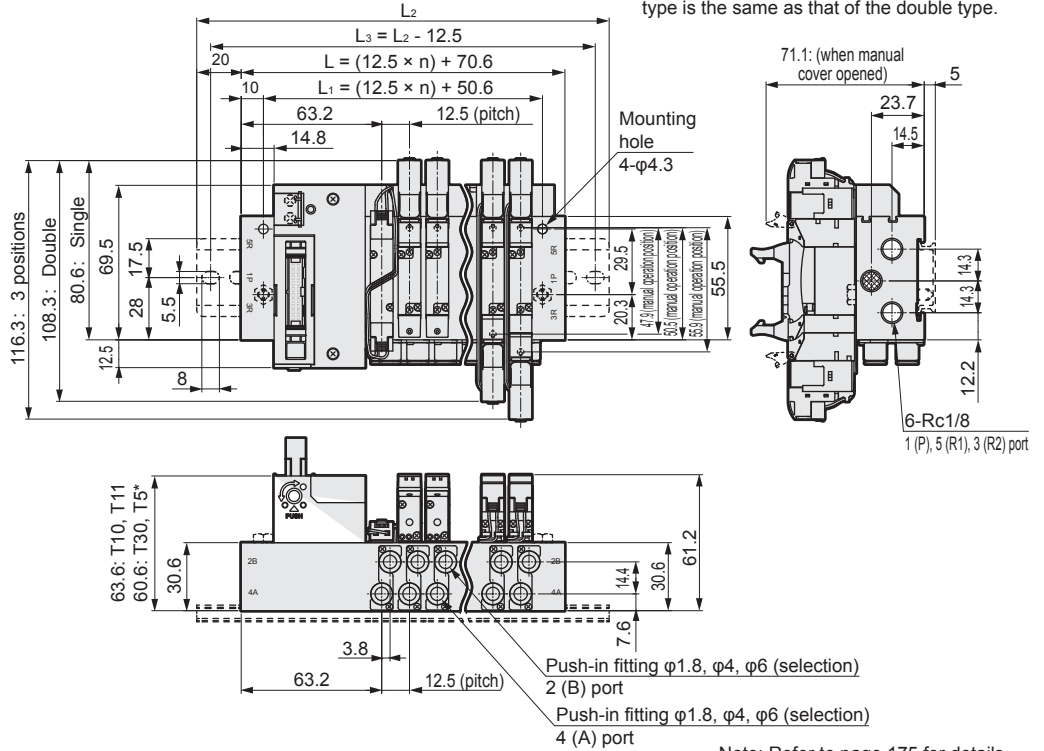
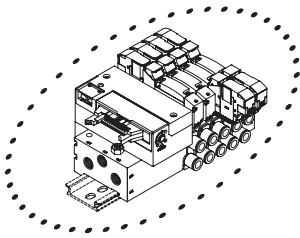
Reduced wiring manifold; base piping

Dimensions 

M4GB1

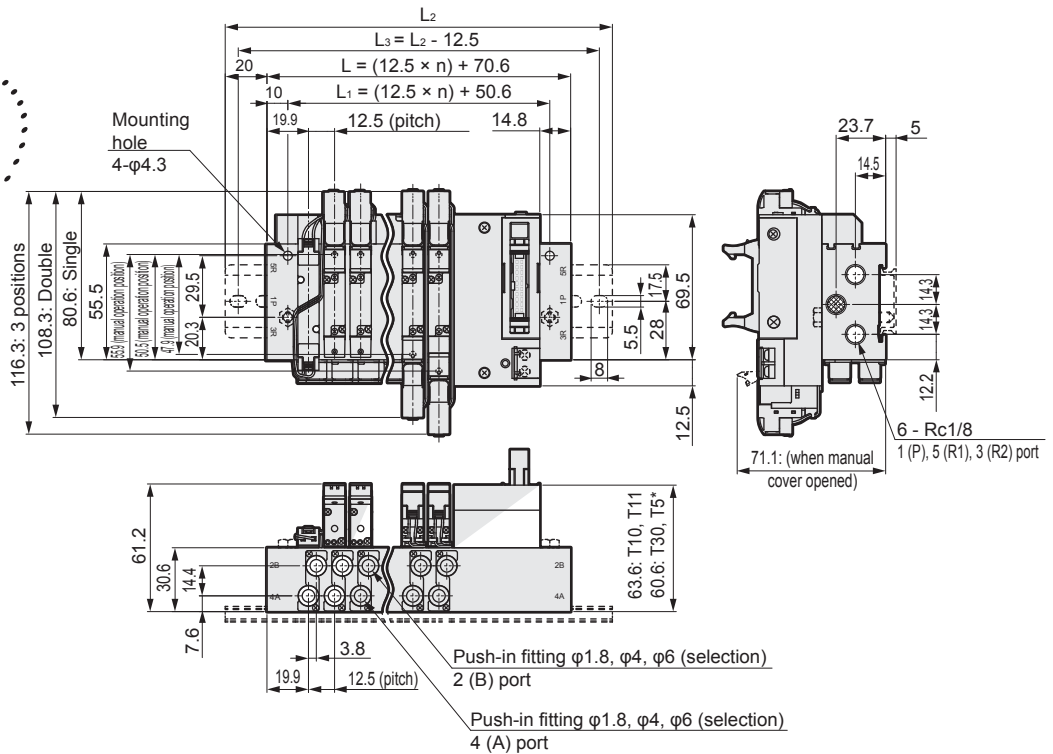
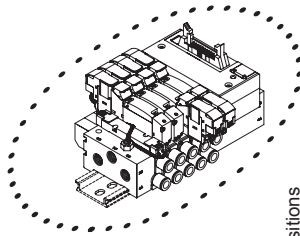
● Reduced wiring Left side type (T10/T11/T30/T50/T51/T52/T53)

* 1 This drawing shows T50. Refer to page 174 for detailed dimensions of the electrical block.
* 2 The dimension of dual 3 port valve integrated type is the same as that of the double type.



● Reduced wiring Right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)

Note: Refer to page 175 for details on the push-in fitting elbow type (upward) (downward).



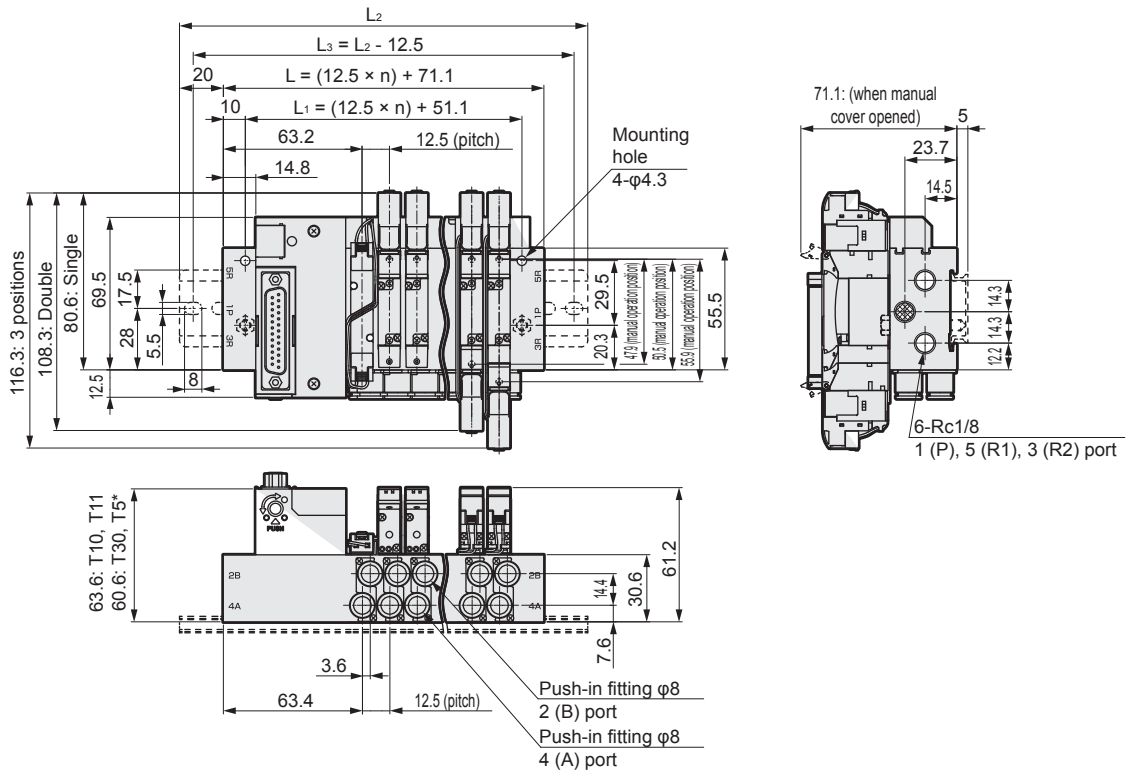
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	95.6	108.1	120.6	133.1	145.6	158.1	170.6	183.1	195.6	208.1	220.6	233.1	245.6	258.1	270.6	283.1	295.6	308.1	320.6
L1	75.6	88.1	100.6	113.1	125.6	138.1	150.6	163.1	175.6	188.1	200.6	213.1	225.6	238.1	250.6	263.1	275.6	288.1	300.6
L2	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L3	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	287.5	300.0				

4GAB
 M4GAB
 MN4GAB
 4GAB Master valve
 4GD/E
 M4GD/E
 MN4GD/E
 Technical data
 Safety precautions
 Manifold Specifications

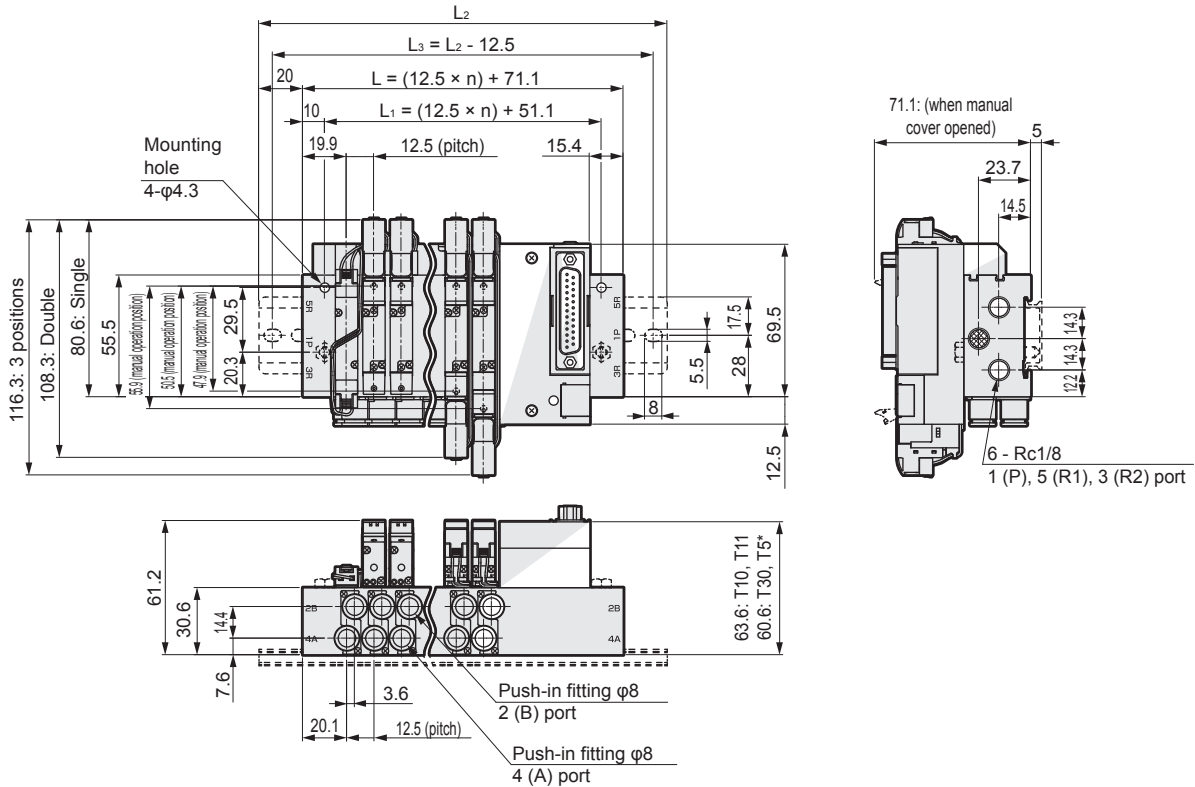
Dimensions

M4GB1-C8

- Reduced wiring Left side type (T10/T11/T30/T50/T51/T52/T53)



- Reduced wiring Right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	96.1	108.6	121.1	133.6	146.1	158.6	171.1	183.6	196.1	208.6	221.1	233.6	246.1	258.6	271.1	283.6	296.1	308.6	321.1
L ₁	76.1	88.6	101.1	113.6	126.1	138.6	151.1	163.6	176.1	188.6	201.1	213.6	226.1	238.6	251.1	263.6	276.1	288.6	301.1
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	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	287.5	300.0				

M4GB1-T* Series

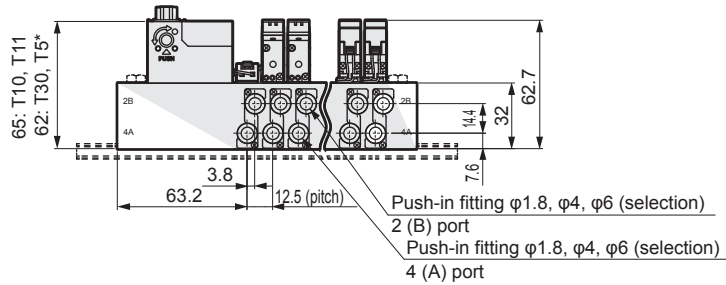
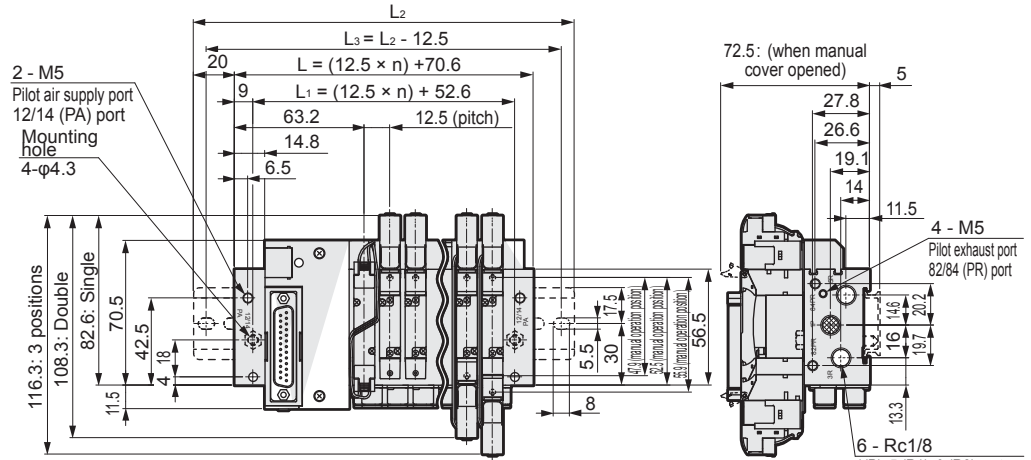
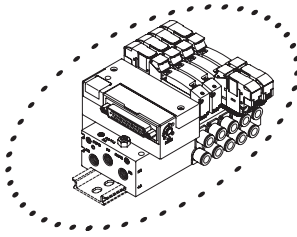
Reduced wiring manifold; base piping

Dimensions 

M4GB1

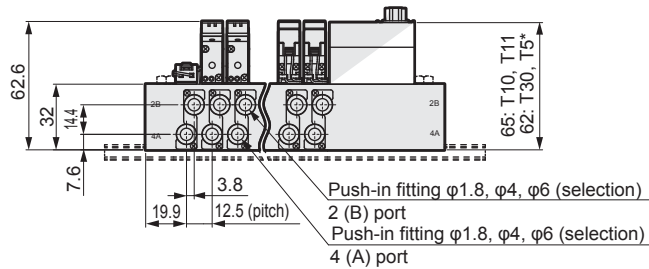
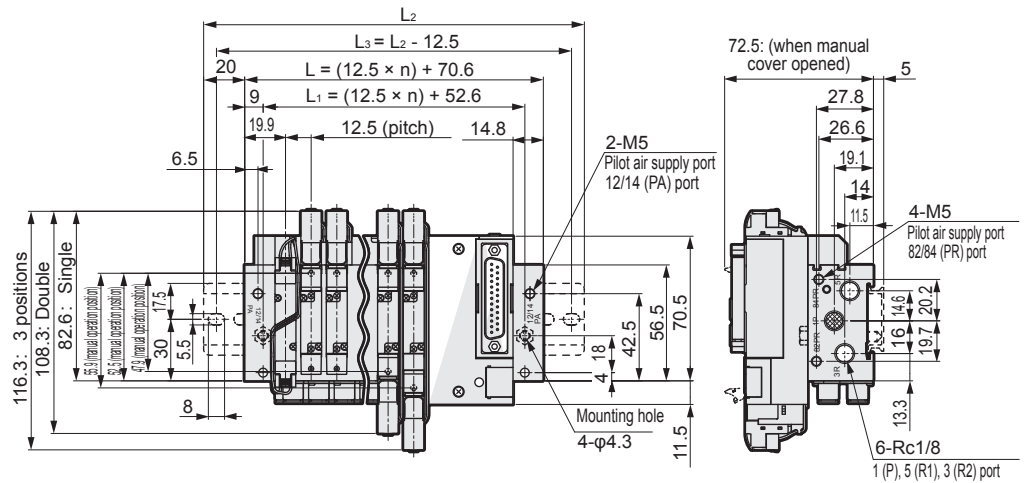
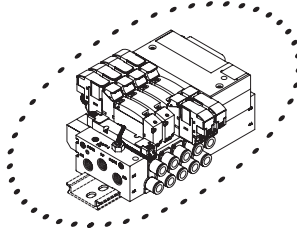
- Reduced wiring Left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)

* This drawing shows T30. Refer to page 177 for detailed dimensions of the electrical block.



Note: Refer to page 166 for details on the push-in fitting elbow type (upward) (downward).

- Reduced wiring Right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



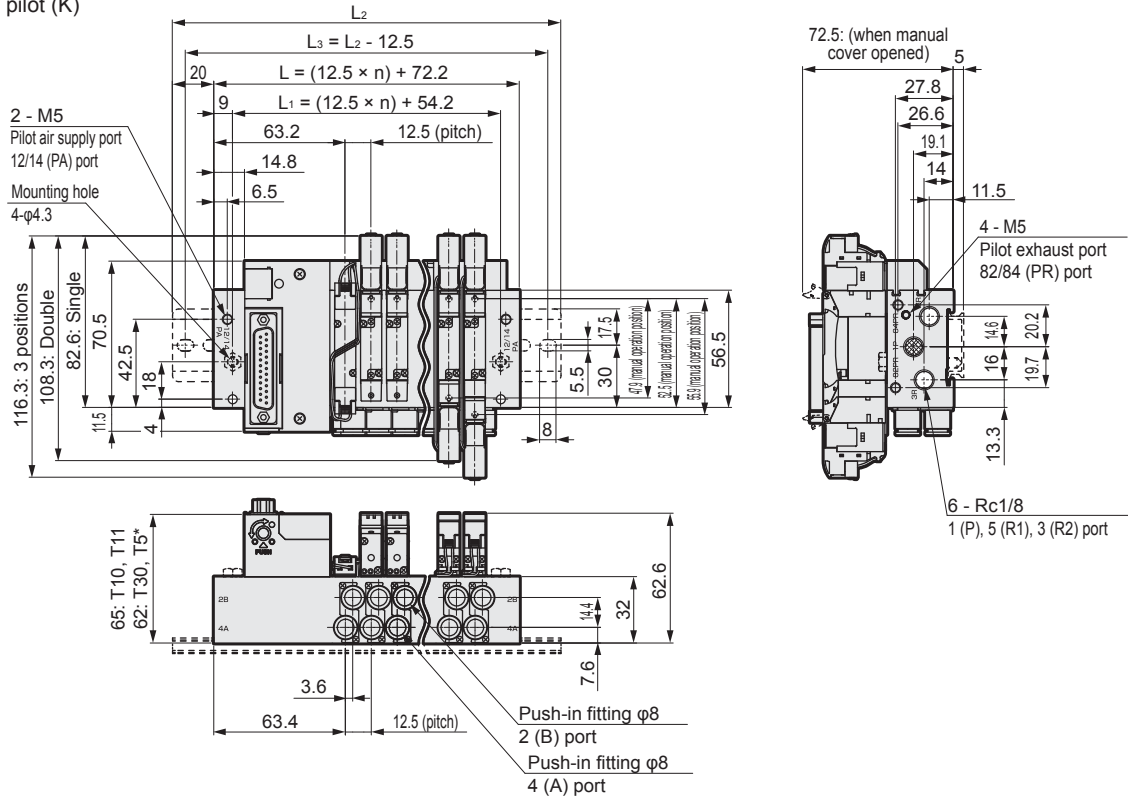
Station no.	2	3	4	5	6	7	8	9	10	11	12
L	95.6	108.1	120.6	133.1	145.6	158.1	170.6	183.1	195.6	208.1	220.6
L ₁	77.6	90.1	102.6	115.1	127.6	140.1	152.6	165.1	177.6	190.1	202.6
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

4GAB
 M4GAB
 MN4GAB
 4GAB Master valve
 4GD/E
 M4GD/E
 MN4GD/E
 Technical data
 Safety precautions
 Manifold Specifications

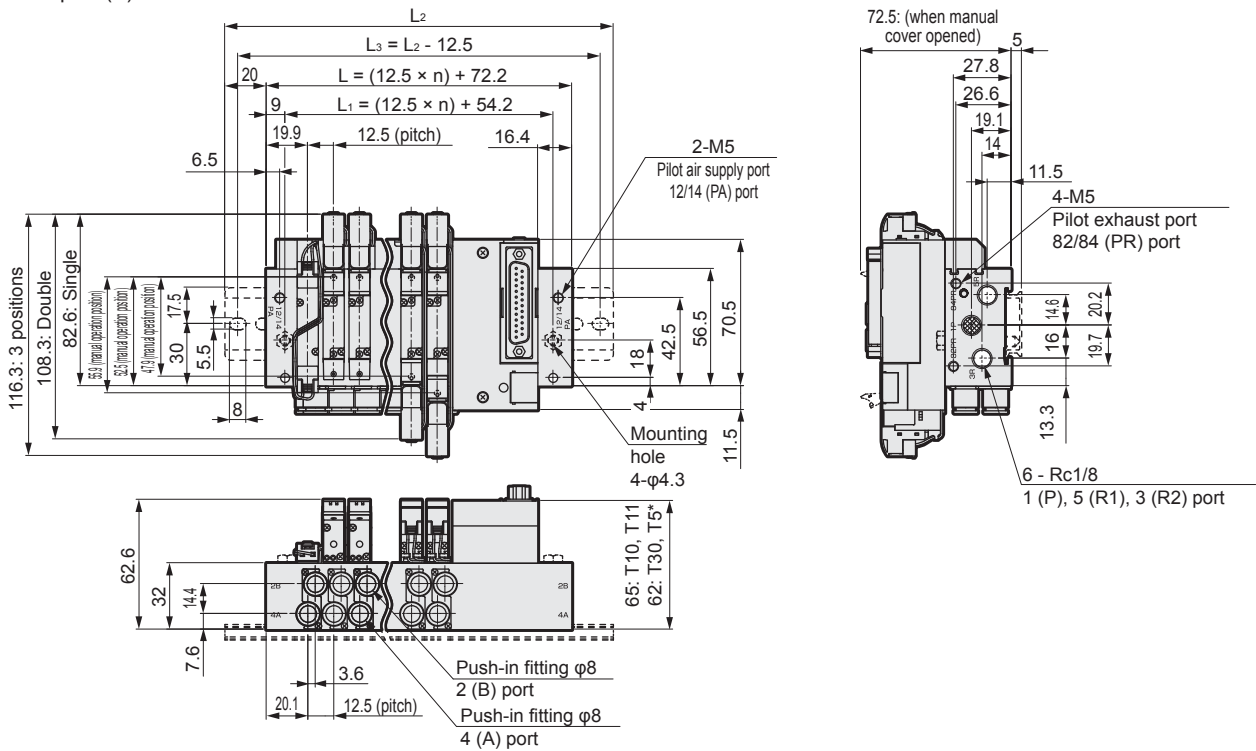
Dimensions

M4GB1-C8

- Reduced wiring Left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)



- Reduced wiring Right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12
L	97.2	109.7	122.2	134.7	147.2	159.7	172.2	184.7	197.2	209.7	222.2
L ₁	79.2	91.7	104.2	116.7	129.2	141.7	154.2	166.7	179.2	191.7	204.2
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

M4GB1-T6D Series

Reduced wiring manifold; base piping; serial transmission

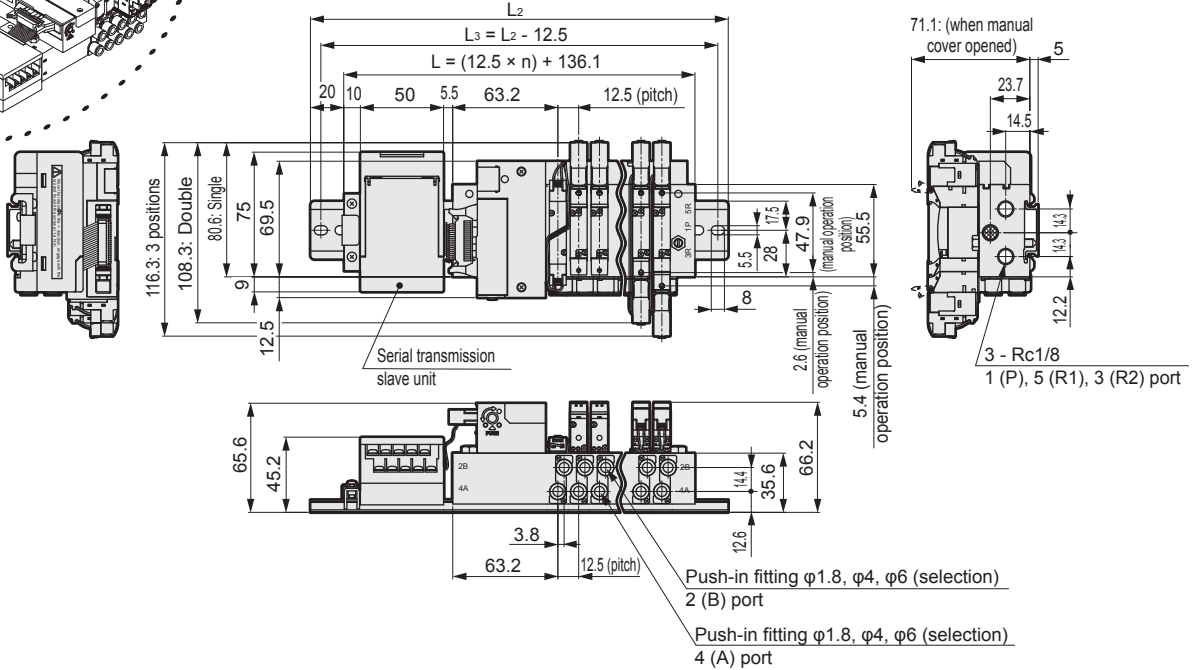
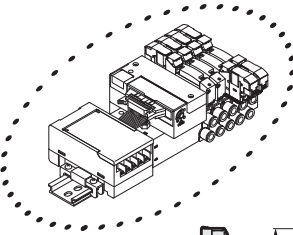
Dimensions



M4GB1

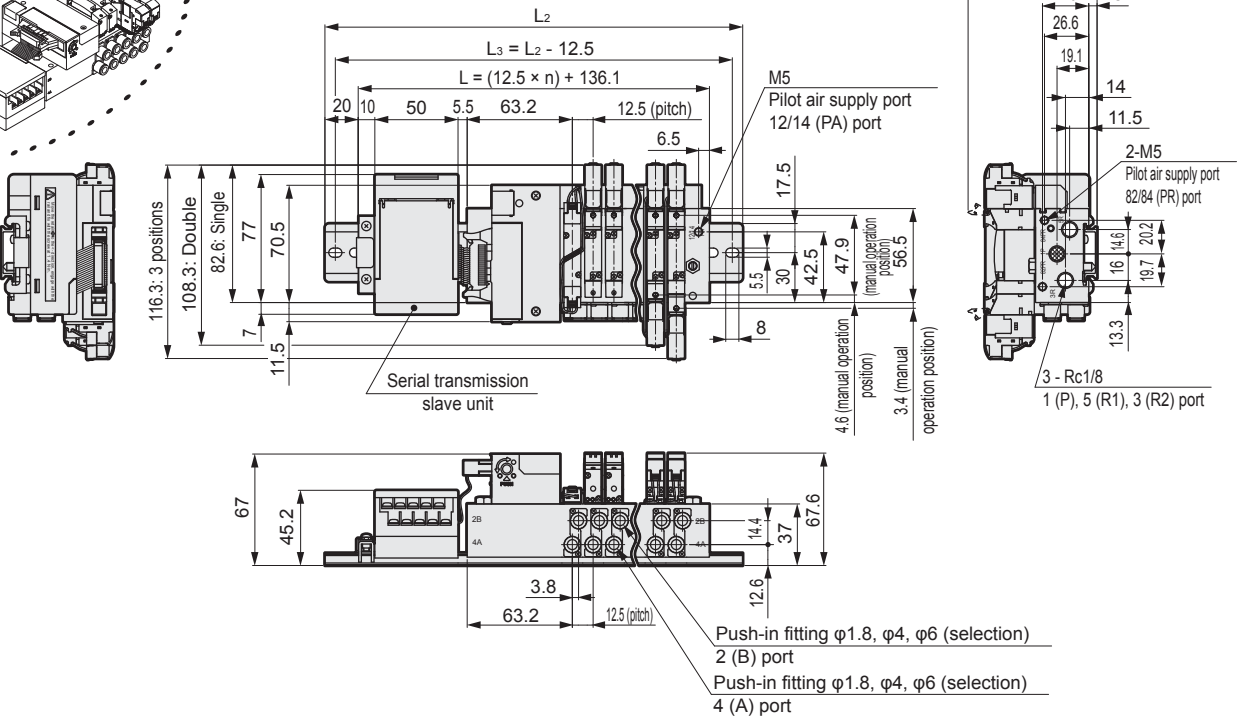
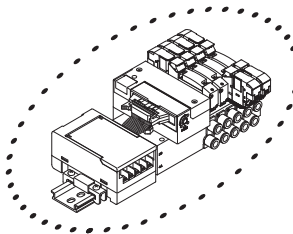
- Serial transmission (T6*)
DIN rail mounting type (D)

*The dimension of dual 3 port valve integrated type is the same as that of the double type.



- Serial transmission (T6*)
DIN rail mounting type (D);
External pilot type (K)

Note: Refer to page 166 for details on the push-in fitting elbow type (upward) (downward).



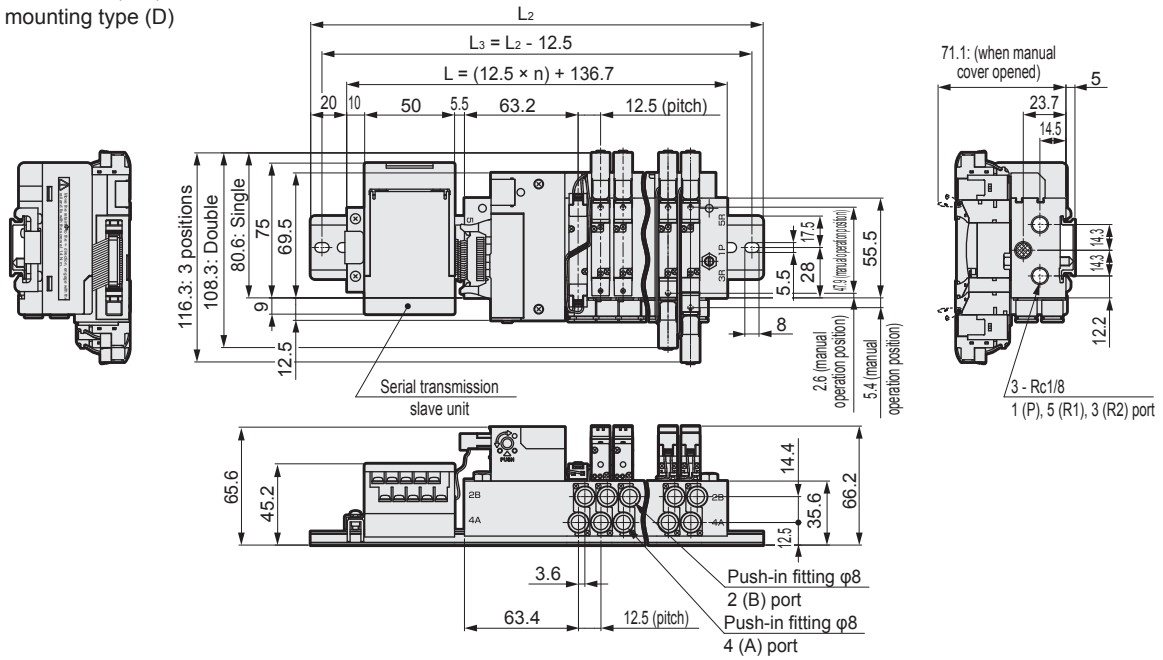
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	161.1	173.6	186.1	198.6	211.1	223.6	236.1	248.6	261.1	273.6	286.1	298.6	311.1	323.6	336.1
L ₂	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5	375.0	387.5
L ₃	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5	375.0

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

Dimensions

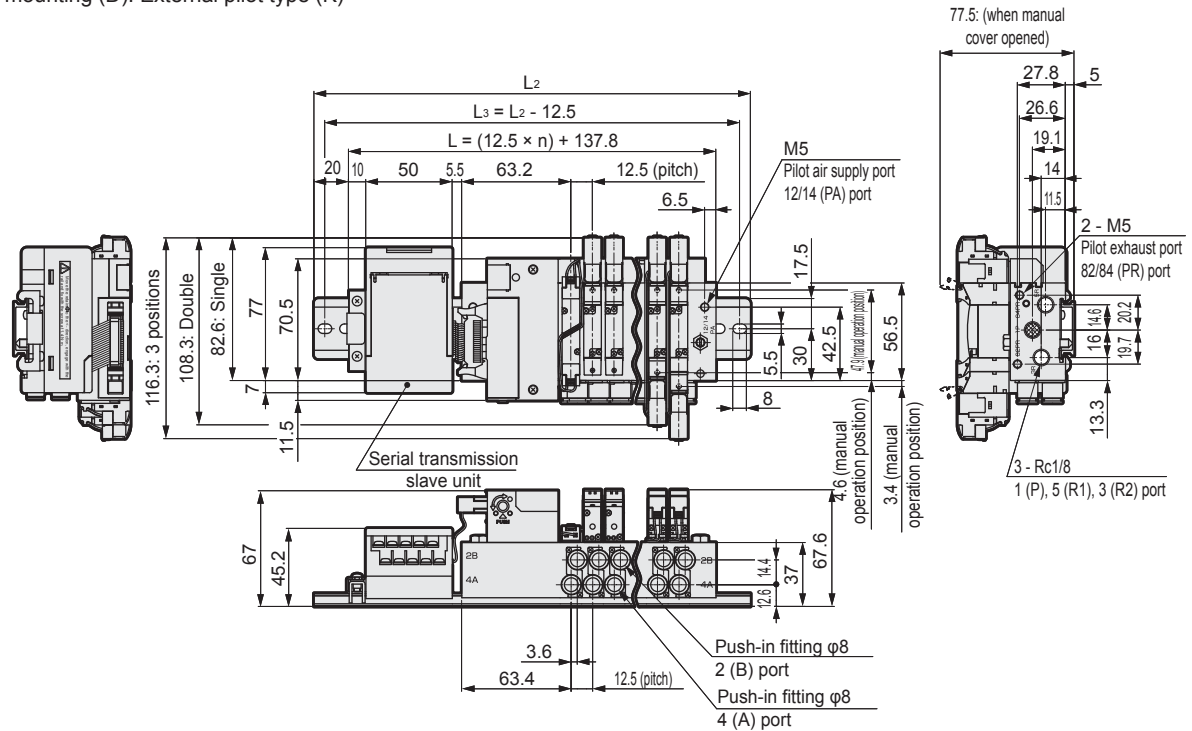
M4GB1-C8

- Serial transmission (T6*)
DIN rail mounting type (D)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	161.7	174.2	186.7	199.2	211.7	224.2	236.7	249.2	261.7	274.2	286.7	299.2	311.7	324.2	336.7
L ₂	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5	375.0	387.5
L ₃	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350.0	362.5	375.0

- Serial transmission (T6*)
DIN rail mounting (D): External pilot type (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12
L	162.8	175.3	187.8	200.3	212.8	225.3	237.8	250.3	262.8	275.3	287.8
L ₂	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5
L ₃	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0

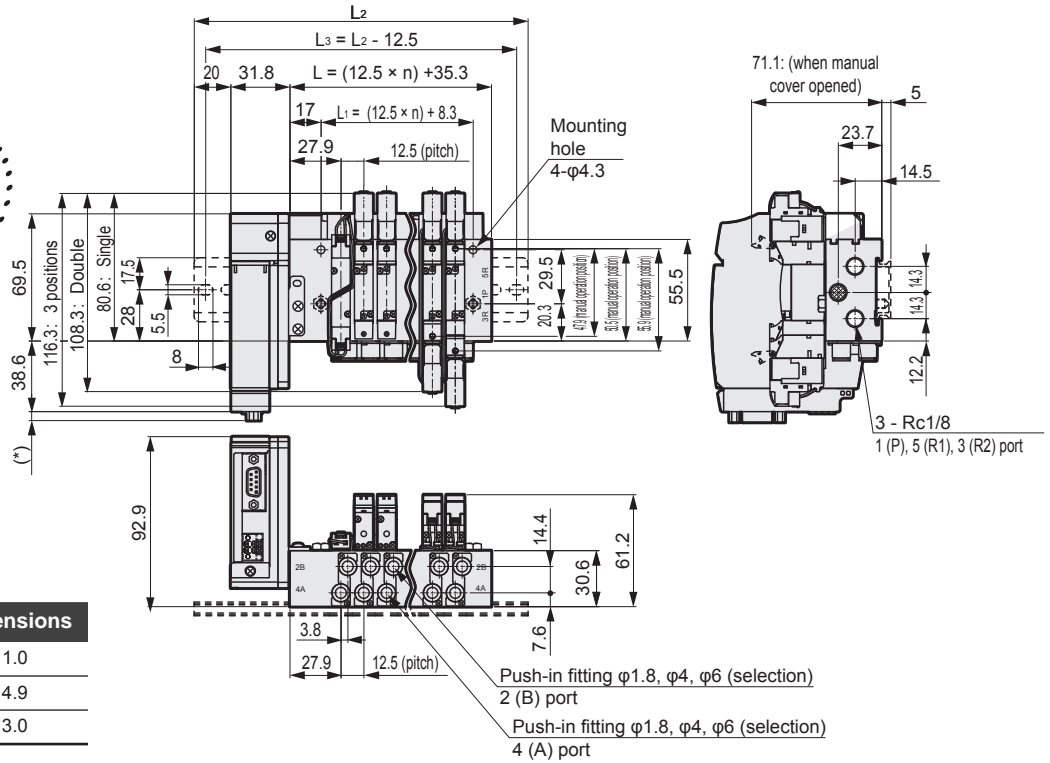
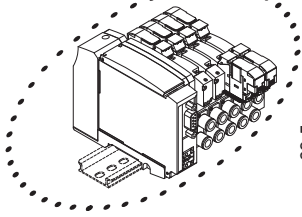
M4GB1-T8* Series

Reduced wiring manifold; base piping; serial transmission

Dimensions 

M4GB1

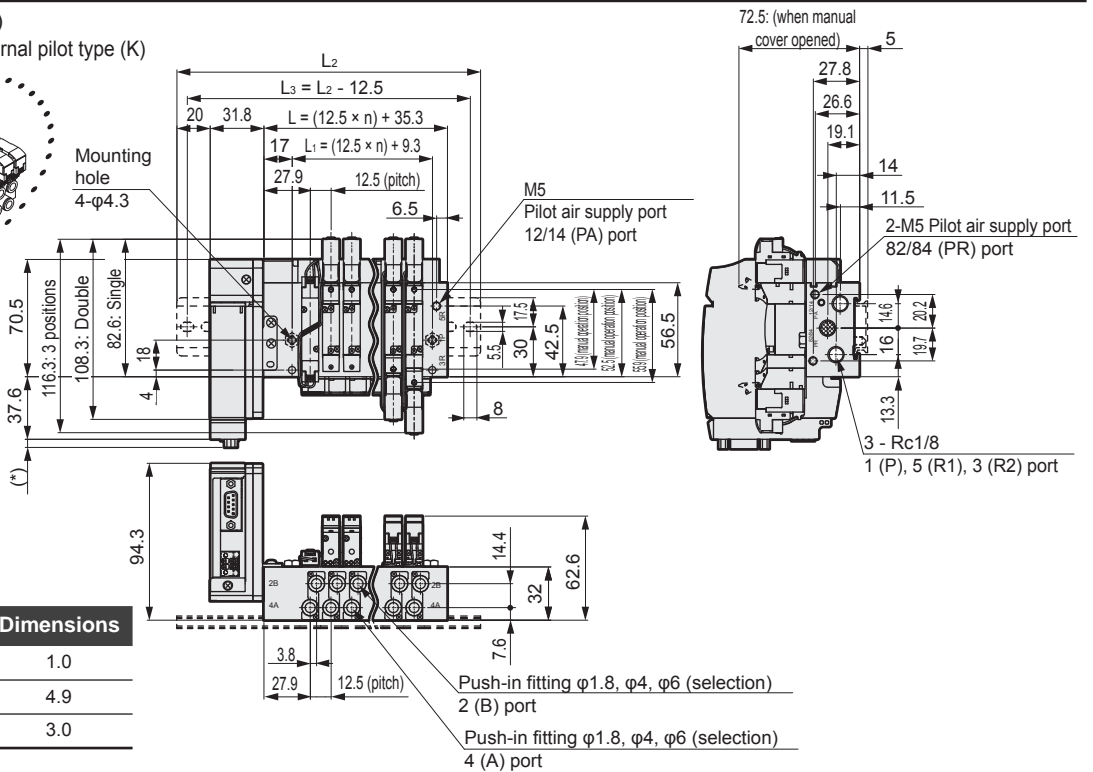
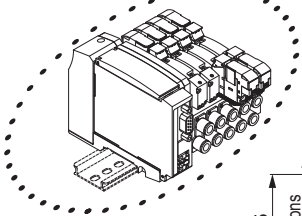
- Serial transmission (T8*)
- DIN rail mounting type (D)



Serial transmission	*Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3	197.8	210.3	222.8	235.3	247.8	260.3	272.8	285.3
L ₁	33.3	45.8	58.3	70.8	83.3	95.8	108.3	120.8	133.3	145.8	158.3	170.8	183.3	195.8	208.3	220.8	233.3	245.8	258.3
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5				
L ₃	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	287.5	300.0				

- Serial transmission (T8*)
- DIN rail mounting (D); External pilot type (K)



Serial transmission	*Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

Station no.	2	3	4	5	6	7	8	9	10	11	12
L	60.3	72.8	85.3	97.8	110.3	122.8	135.3	147.8	160.3	172.8	185.3
L ₁	34.3	46.8	59.3	71.8	84.3	96.8	109.3	121.8	134.3	146.8	159.3
L ₂	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0	262.5
L ₃	125.0	137.5	150.0	162.5	175.0	187.5	200.0	212.5	225.0	237.5	250.0

M4GB1-T* Series

Reduced wiring manifold; base piping

Dimensions

M4GB1

● Fitting straight

● $\phi 1.8$ (CF)

● $\phi 1.8$ (C18)

● $\phi 4$ (C4)

● $\phi 6$ (C6)

● $\phi 8$ (C8)

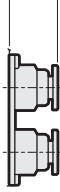
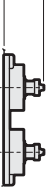
8.8

6.7

10.7

11.9

13.2



● Fitting straight, single plug

● $\phi 1.8$ (CFNC)

● $\phi 1.8$ (C18NC)

● $\phi 4$ (C4NC)

● $\phi 6$ (C6NC)

● $\phi 8$ (C8NC)

● $\phi 1.8$ (CFNO)

● $\phi 1.8$ (C18NO)

● $\phi 4$ (C4NO)

● $\phi 6$ (C6NO)

● $\phi 8$ (C8NO)

8.8

6.7

10.7

11.9

13.2

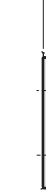
8.8

6.7

10.7

11.9

13.2



● Fitting L type (upward)

● $\phi 1.8$ (CL18)

● $\phi 4$ (CL4)

● $\phi 6$ (CL6)

● Fitting L type (downward)

● $\phi 1.8$ (CD18)

● $\phi 4$ (CD4)

● $\phi 6$ (CD6)

17

7.2 6.8

25.2

9.9 10.5

26.2

10.9 10.5

17

7.2 6.8

25.2

9.9 10.5

26.2

10.9 10.5



● Fitting L type (upward), single plug

● $\phi 1.8$ (CL18NC)

● $\phi 4$ (CL4NC)

● $\phi 6$ (CL6NC)

● $\phi 1.8$ (CL18NO)

● $\phi 4$ (CL4NO)

● $\phi 6$ (CL6NO)

17

14

25.2

20.4

26.2

21.4

10.2

7.2

14.7

9.9

15.7

10.9



● Push-in fitting L (downward), single plug

● $\phi 1.8$ (CD18NC)

● $\phi 4$ (CD4NC)

● $\phi 6$ (CD6NC)

● $\phi 1.8$ (CD18NO)

● $\phi 4$ (CD4NO)

● $\phi 6$ (CD6NO)

7.2

10.2

9.9

14.7

10.9

15.7

14

17

20.4

25.2

21.4

26.2



M4GB2-T* Series

Reduced wiring manifold; base piping

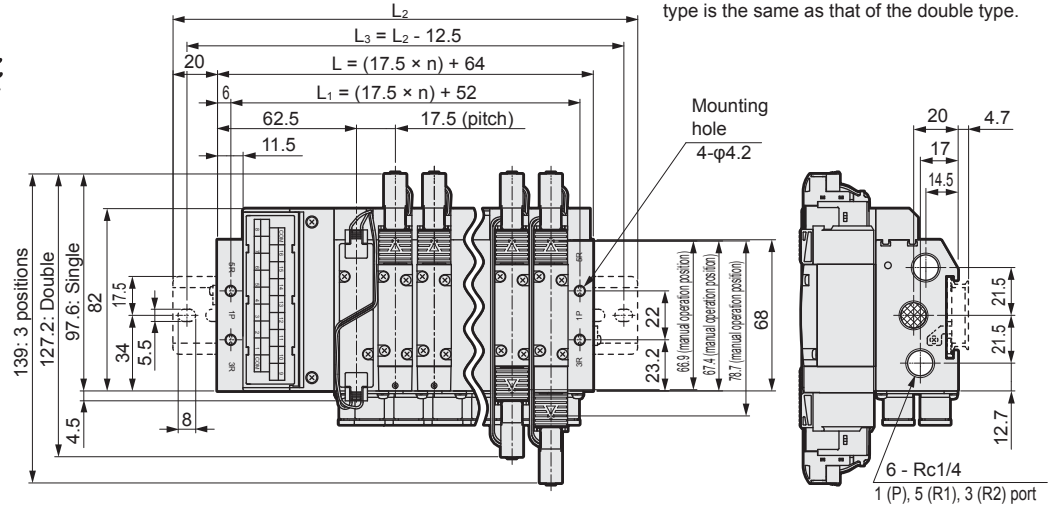
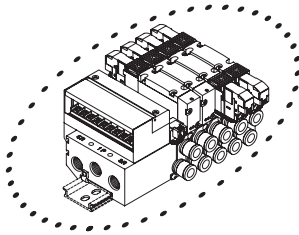
Dimensions



M4GB2

● Reduced wiring Left side type (T10/T11/T30/T50/T51/T52/T53)

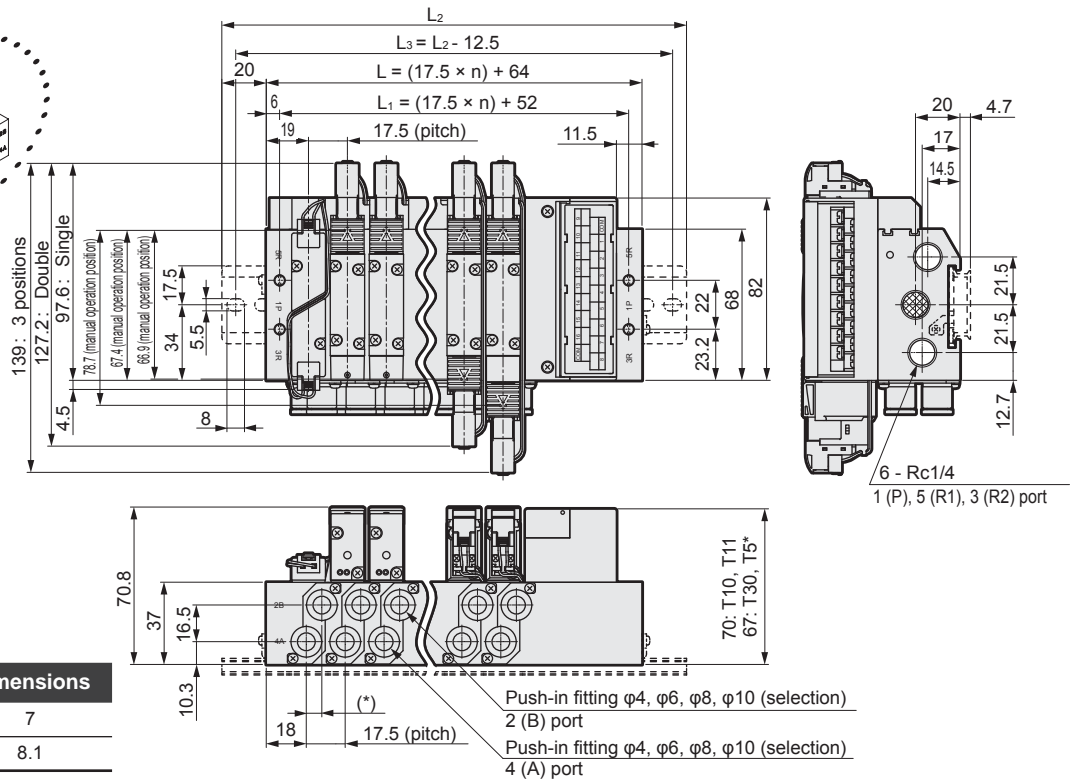
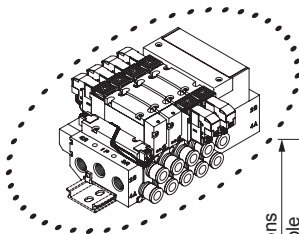
*1 This drawing shows T10. Refer to page 177 for detailed dimensions of the electrical block.
*2 The dimension of dual 3 port valve integrated type is the same as that of the double type.



A/B Port size	*Dimensions
φ4, φ6, φ8	7
φ10	8.1

● Reduced wiring Right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)

Note: Refer to page 171 for details on the push-in fitting elbow type (upward) (downward).




A/B Port size	*Dimensions
φ4, φ6, φ8	7
φ10	8.1

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0	396.5	414.0
L ₁	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0	384.5	402.0
L ₂	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5				
L ₃	137.5	150.0	162.5	187.5	200.0	225.0	237.0	250.0	275.0	287.5	312.5	325.0	337.5	362.5	375.0				

M4GB2-T* Series

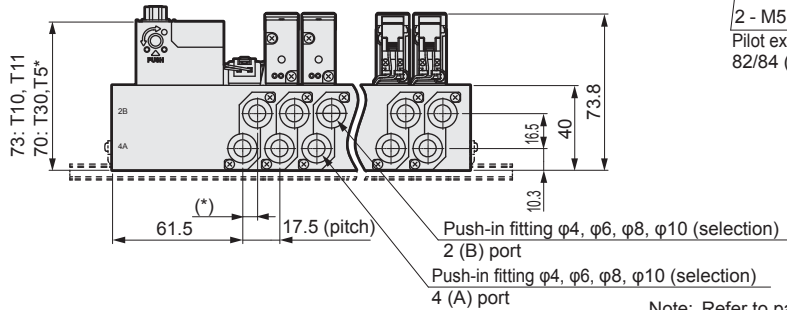
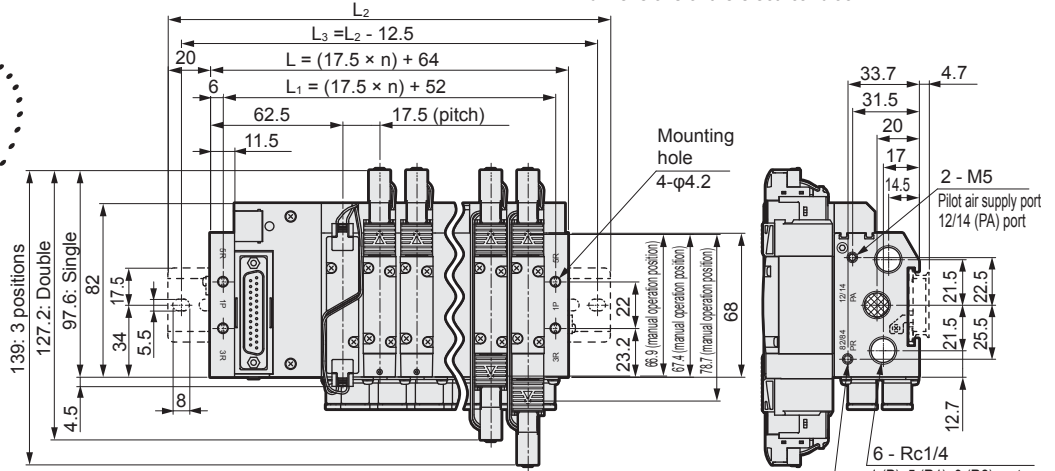
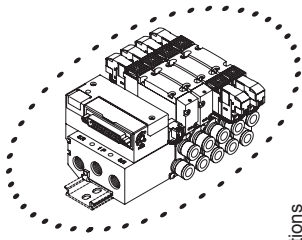
Reduced wiring manifold; base piping

Dimensions 

M4GB2

- Reduced wiring Left side type (T10/T11/T30/T50/T51/T52/T53)
- External pilot (K)

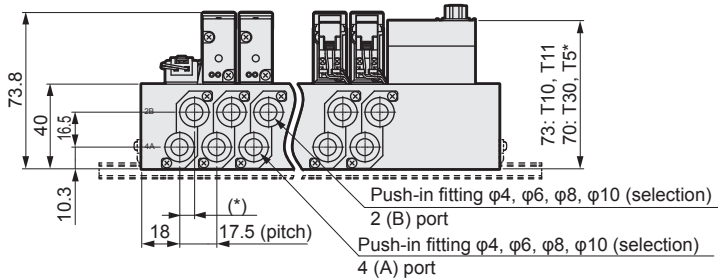
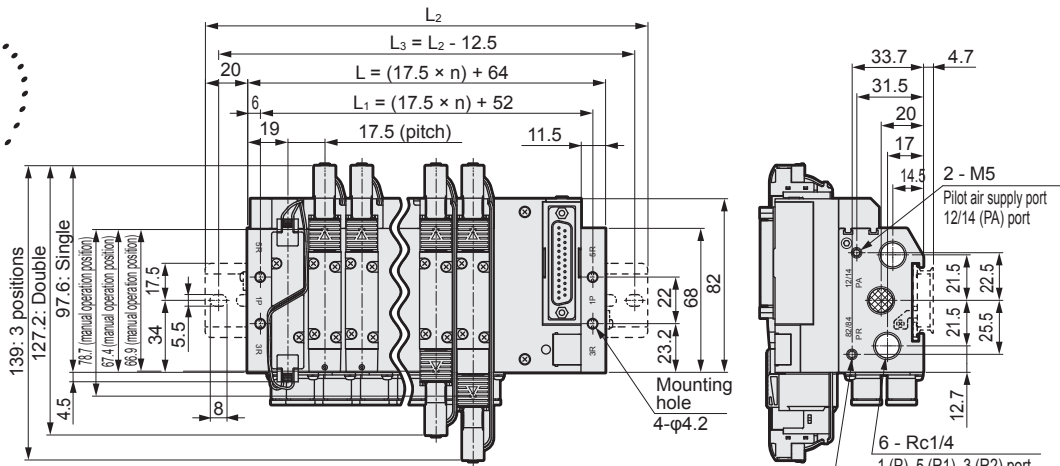
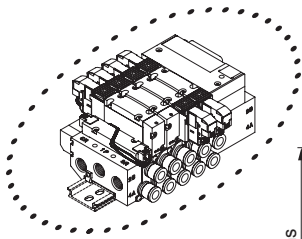
* This drawing shows T30. Refer to page 177 for detailed dimensions of the electrical block.



A/B Port size	*Dimensions
φ4, φ6, φ8	7
φ10	8.1

- Reduced wiring Right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
- External pilot (K)

Note: Refer to page 171 for details on the push-in fitting elbow type (upward) (downward).



A/B Port size	*Dimensions
φ4, φ6, φ8	7
φ10	8.1

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0	396.5	414.0
L ₁	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0	384.5	402.0
L ₂	150.0	162.5	175.0	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5				
L ₃	137.5	150.0	162.5	187.5	200.0	225.0	237.5	250.0	275.0	287.5	312.5	325.0	337.5	362.5	375.0				

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4GB2-T6D Series

Reduced wiring manifold; base piping; serial transmission

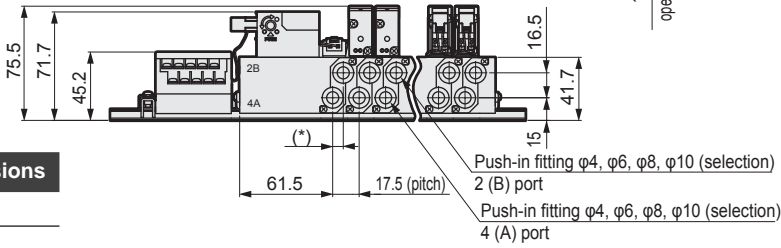
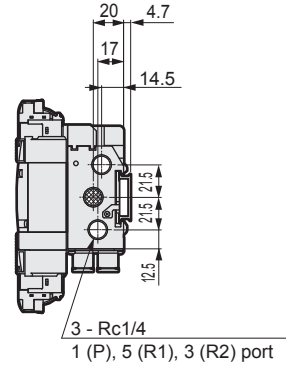
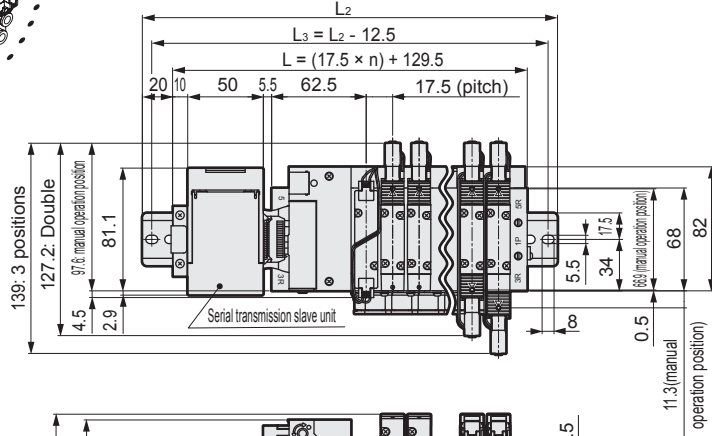
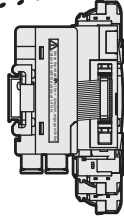
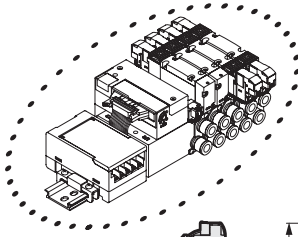
Dimensions



M4GB2

- Serial transmission (T6*)
DIN rail mounting type (D)

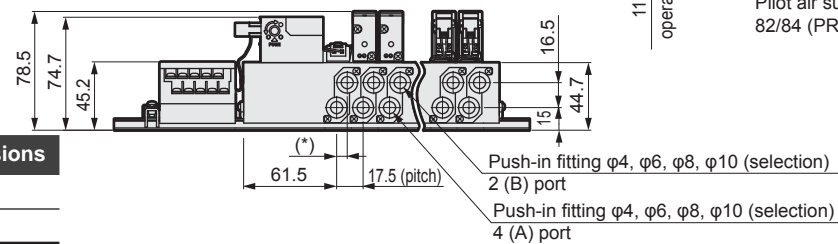
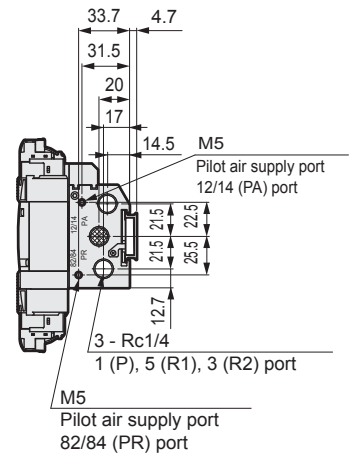
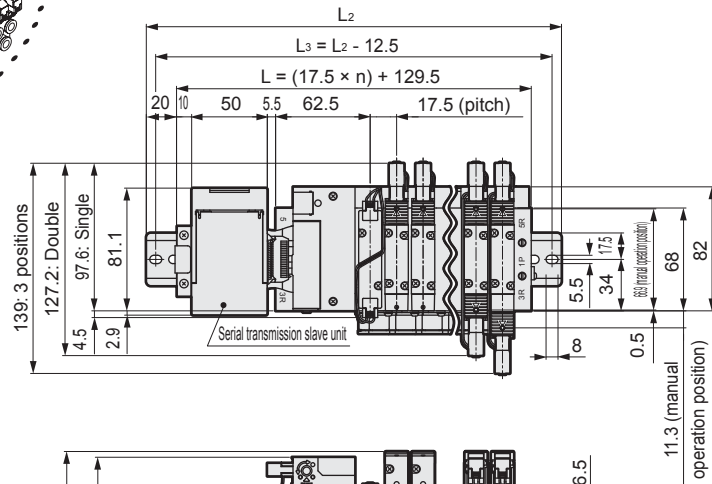
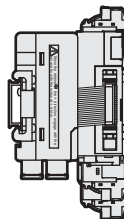
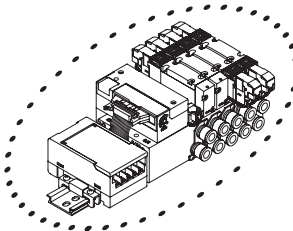
*The dimension of dual 3 port valve integrated type is the same as that of the double type.



A/B Port size	*Dimensions
φ4, φ6, φ8	7
φ10	8.1

- Serial transmission (T6*)
DIN rail mounting type (D); External pilot type (K)

Note: Refer to page 171 for details on the push-in fitting elbow type (upward) (downward).



A/B Port size	*Dimensions
φ4, φ6, φ8	7
φ10	8.1

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	164.5	182.0	199.5	217.0	234.5	252.0	269.5	287.0	304.5	322.0	339.5	357.0	374.5	392.0	409.5
L ₂	212.5	225.0	250.0	262.5	275.0	300.0	312.5	337.5	350.0	362.5	387.5	400.0	425.0	437.5	450.0
L ₃	200.0	212.5	237.5	250.0	262.5	287.5	300.0	325.0	337.5	350.0	375.0	387.5	412.5	425.0	437.5

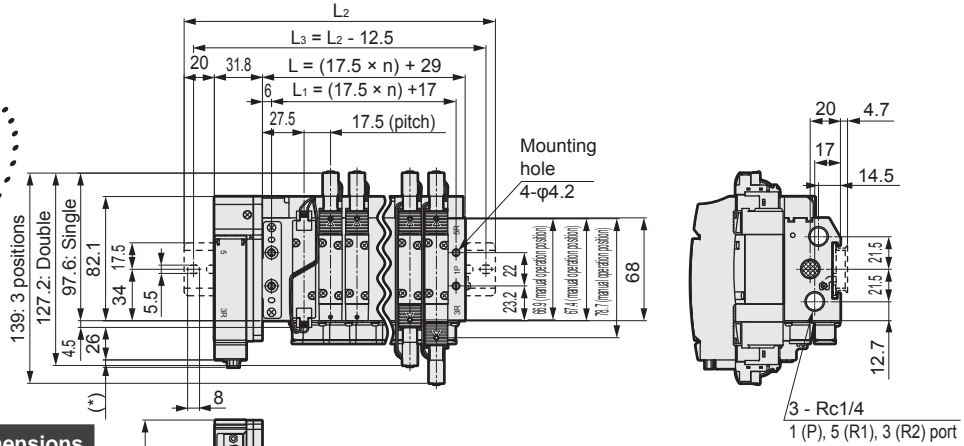
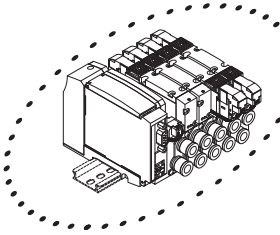
M4GB2-T8* Series

Reduced wiring manifold; base piping; serial transmission

Dimensions

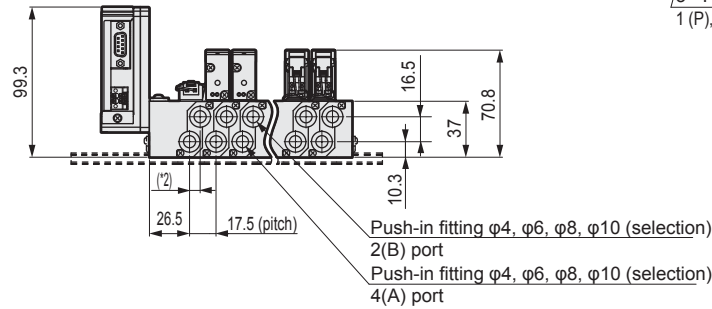
M4GB2

- Serial transmission (T8*)
- DIN rail mounting type (D)



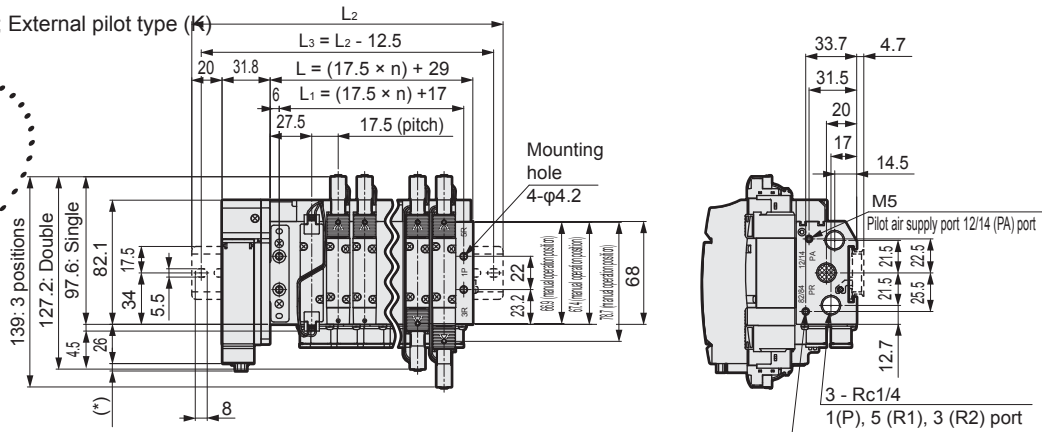
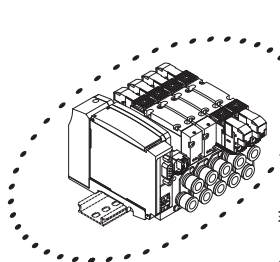
Serial transmission	*Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

A/B Port size	*2 Size
φ4, φ6, φ8	7
φ10	8.1



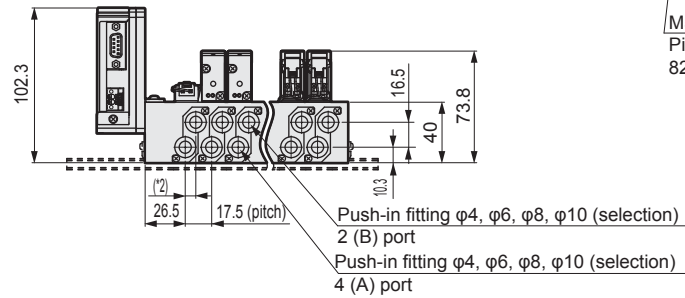
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L ₁	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L ₂	137.5	162.5	175.0	200.0	212.5	225.0	250.0	262.5	287.5	300.0	312.5	337.5	350.0	375.0	387.5				
L ₃	125.0	150.0	162.5	187.5	200.0	212.5	237.5	250.0	275.0	287.5	300.0	325.0	337.5	362.5	375.0				

- Serial transmission (T8*)
- DIN rail mounting type (D); External pilot type (K)



Serial transmission	*Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

A/B Port size	*2 Size
φ4, φ6, φ8	7
φ10	8.1



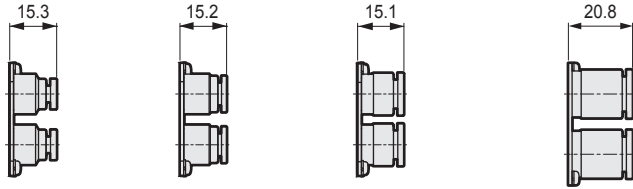
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64.0	81.5	99.0	116.5	134.0	151.5	169.0	186.5	204.0	221.5	239.0	256.5	274.0	291.5	309.0	326.5	344.0	361.5	379.0
L ₁	52.0	69.5	87.0	104.5	122.0	139.5	157.0	174.5	192.0	209.5	227.0	244.5	262.0	279.5	297.0	314.5	332.0	349.5	367.0
L ₂	137.5	162.5	175.0	200.0	212.5	225.0	250.0	262.5	287.5	300.0	312.5	337.5	350.0	375.0	387.5				
L ₃	125.0	150.0	162.5	187.5	200.0	212.5	237.5	250.0	275.0	287.5	300.0	325.0	337.5	362.5	375.0				

Dimensions

M4GB2

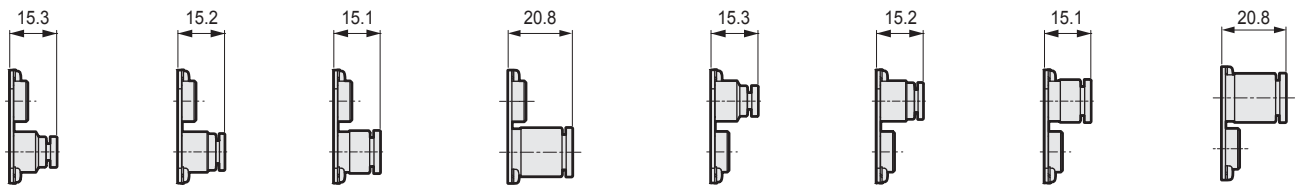
● Fitting straight

- $\phi 4$ (C4)
- $\phi 6$ (C6)
- $\phi 8$ (C8)
- $\phi 10$ (C10)



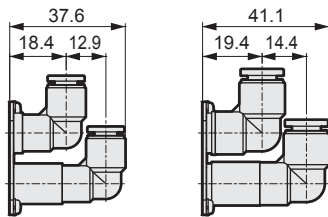
● Fitting straight, single plug

- $\phi 4$ (C4NC)
- $\phi 6$ (C6NC)
- $\phi 8$ (C8NC)
- $\phi 10$ (C10NC)
- $\phi 4$ (C4NO)
- $\phi 6$ (C6NO)
- $\phi 8$ (C8NO)
- $\phi 10$ (C10NO)



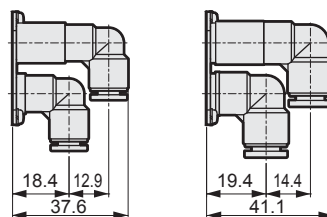
● Fitting L type (upward)

- $\phi 6$ (CL6)
- $\phi 8$ (CL8)



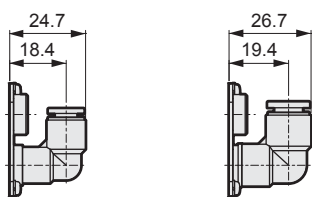
● Fitting L type (downward)

- $\phi 6$ (CD6)
- $\phi 8$ (CD8)

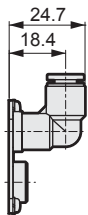


● Fitting L type (upward), single plug

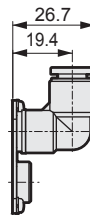
- $\phi 6$ (CL6NC)
- $\phi 8$ (CL8NC)



- $\phi 6$ (CL6NO)

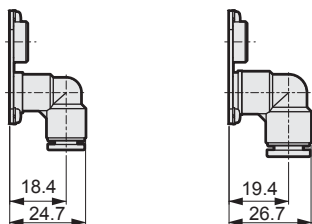


- $\phi 8$ (CL8NO)

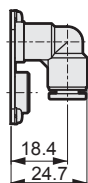


● Fitting L type (downward), single plug

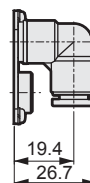
- $\phi 6$ (CD6NC)
- $\phi 8$ (CD8NC)



- $\phi 6$ (CD6NO)



- $\phi 8$ (CD8NO)



4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E


Technical data

Safety
precautions

Manifold
Specifications

M4GB3-T* Series

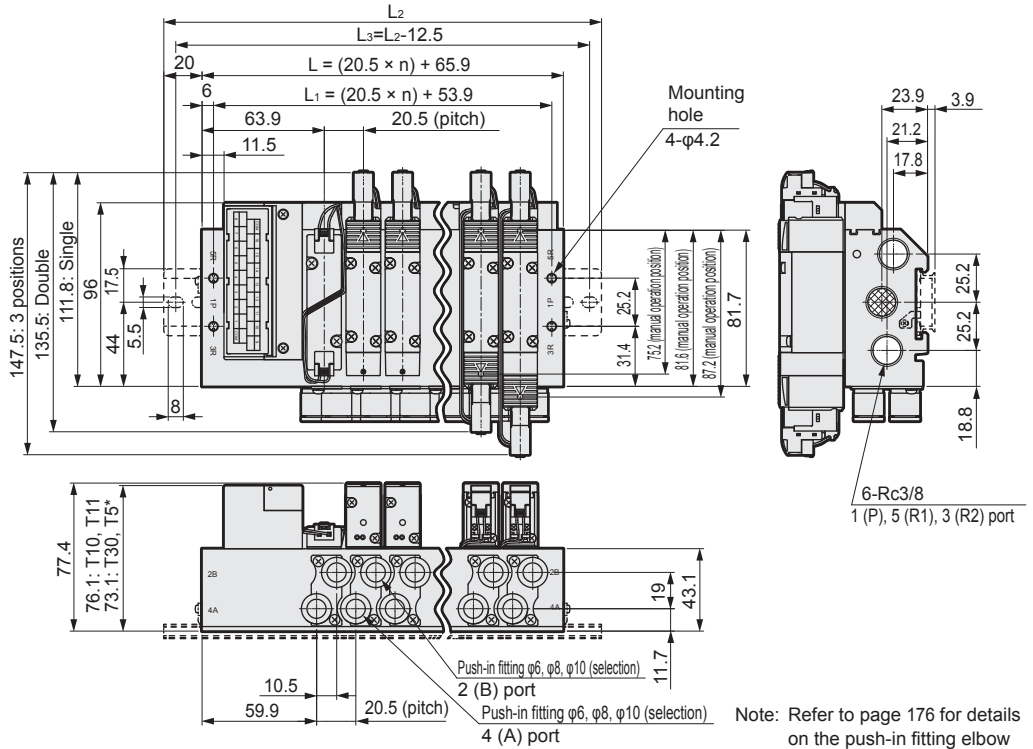
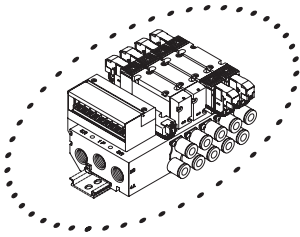
Reduced wiring manifold; base piping

Dimensions 

M4GB3

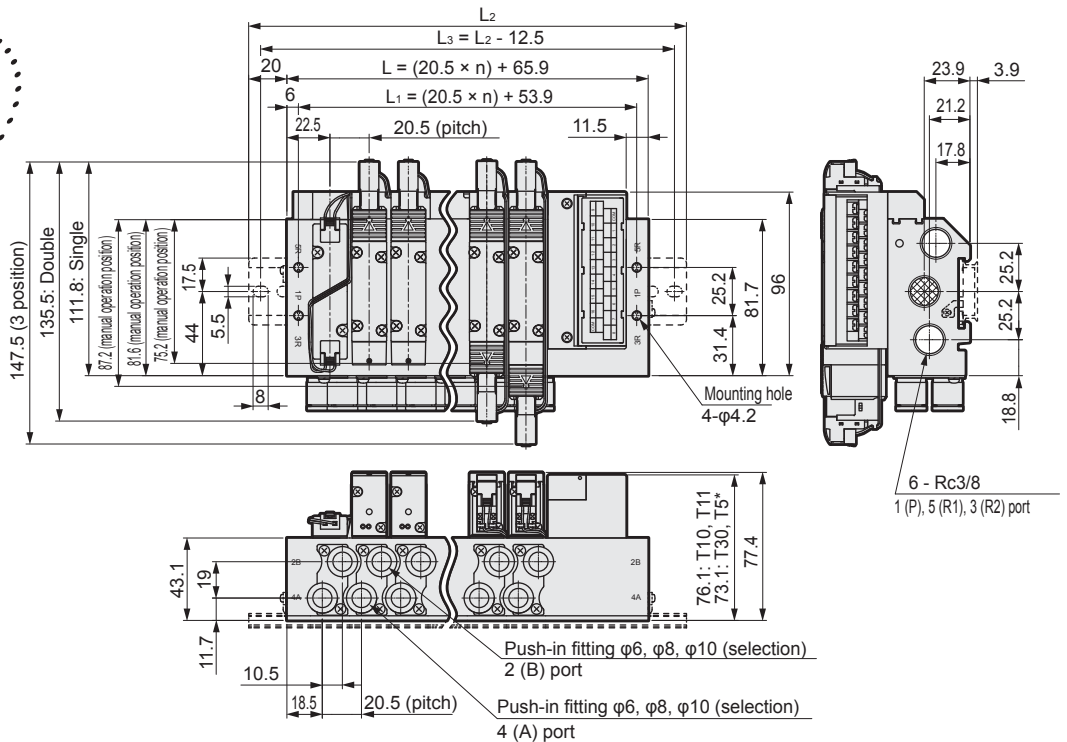
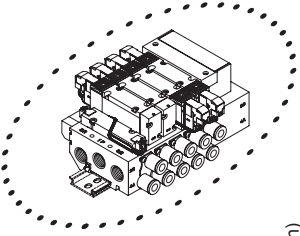
● Reduced wiring Left side type (T10/T11/T30/T50/T51/T52/T53)

* This drawing shows T10. Refer to page 177 for detailed dimensions of the electrical block.



Note: Refer to page 176 for details on the push-in fitting elbow type (upward) (downward).

● Reduced wiring Right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	106.9	127.4	147.9	168.4	188.9	209.4	229.9	250.4	270.9	291.4	311.9	332.4	352.9	373.4	393.9
L ₁	94.9	115.4	135.9	156.4	176.9	197.4	217.9	238.4	258.9	279.4	299.9	320.4	340.9	361.4	381.9
L ₂	150.0	175.0	200.0	212.5	237.5	250.0	275.0	300.0	312.5	337.5	362.5	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	187.5	200.0	225.0	237.5	262.5	287.5	300.0	325.0	350.0	362.5	387.5	400.0	425.0

4GAB
M4GAB
MN4GAB
4GAB Master/valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4GB3-T* Series

Reduced wiring manifold; base piping

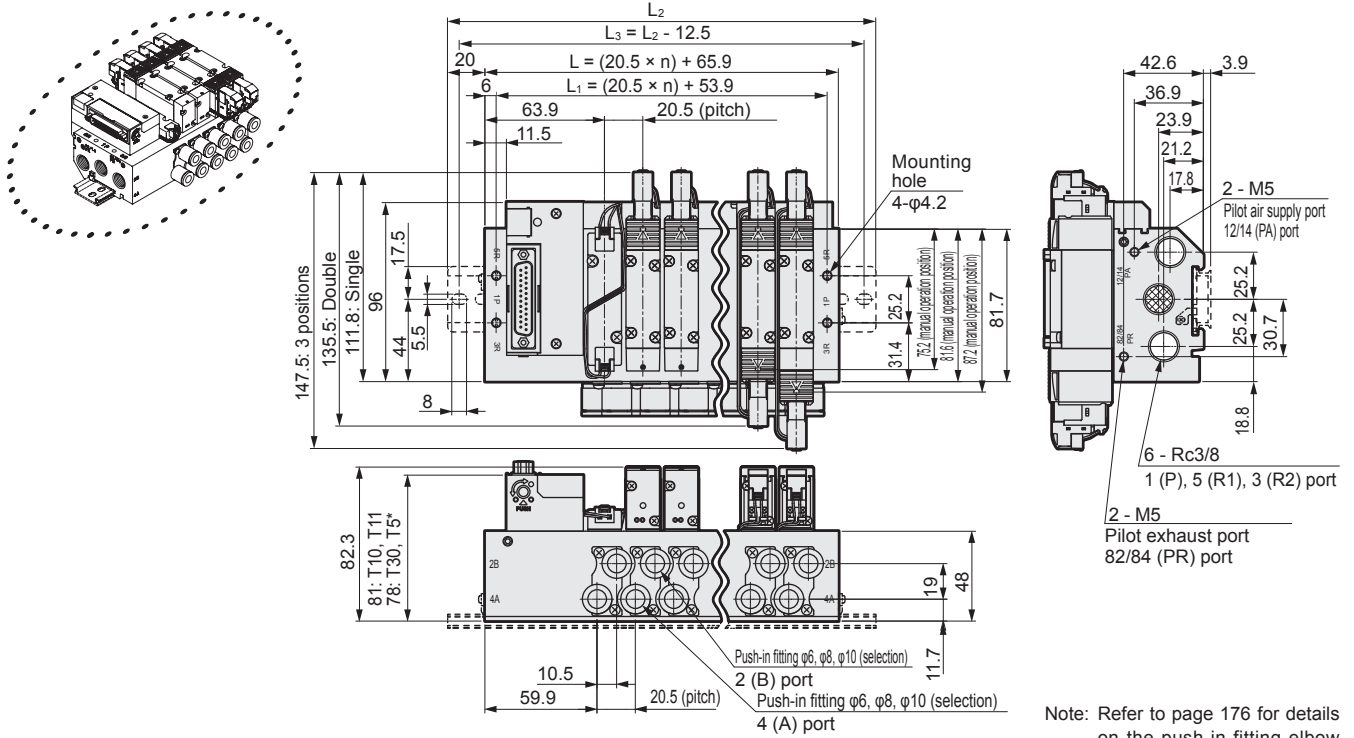
Dimensions



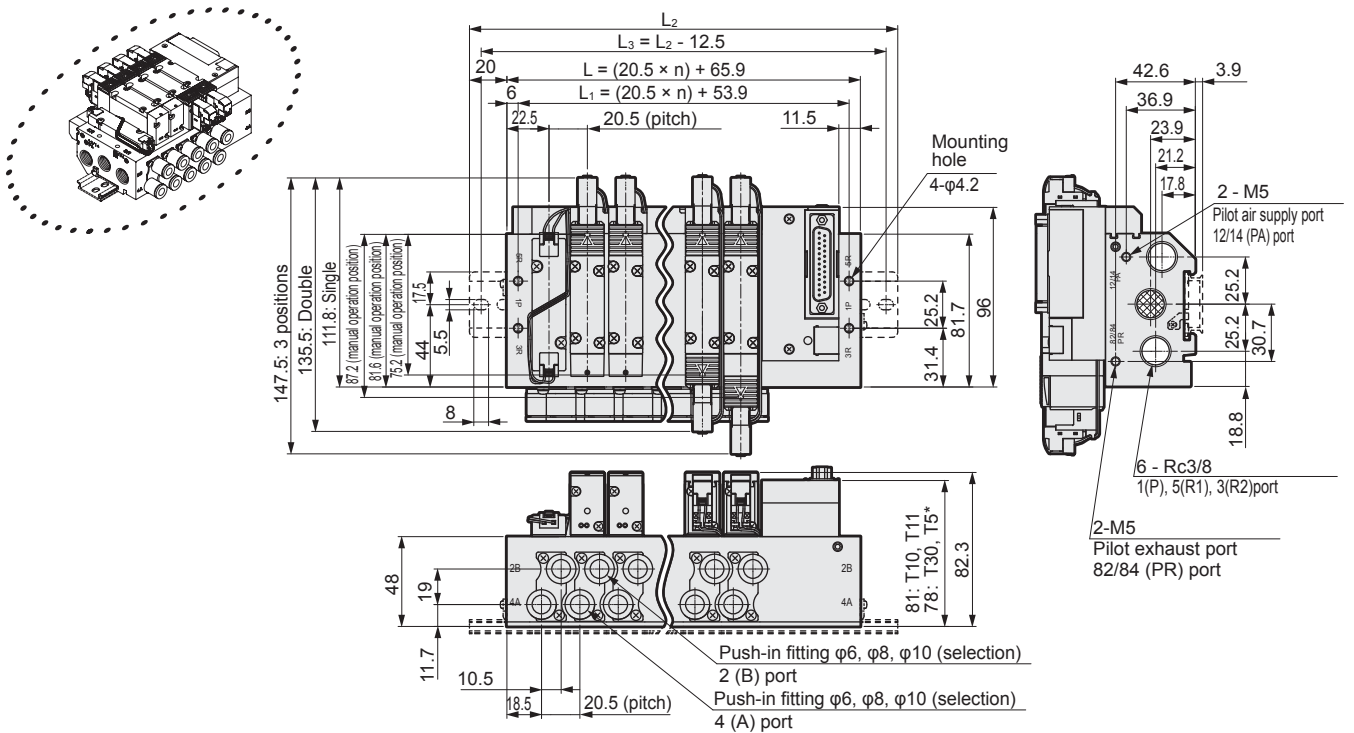
M4GB3

- Reduced wiring Left side type (T10/T11/T30/T50/T51/T52/T53)
External pilot (K)

* This drawing shows T30. Refer to page 177 for detailed dimensions of the electrical block.



- Reduced wiring Right side type (T10R/T11R/T30R/T50R/T51R/T52R/T53R)
External pilot (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	106.9	127.4	147.9	168.4	188.9	209.4	229.9	250.4	270.9	291.4	311.9	332.4	352.9	373.4	393.9
L ₁	94.9	115.4	135.9	156.4	176.9	197.4	217.9	238.4	258.9	279.4	299.9	320.4	340.9	361.4	381.9
L ₂	150.0	175.0	200.0	212.5	237.5	250.0	275.0	300.0	312.5	337.5	362.5	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	187.5	200.0	225.0	237.5	262.5	287.5	300.0	325.0	350.0	362.5	387.5	400.0	425.0

M4GB3-T6D Series

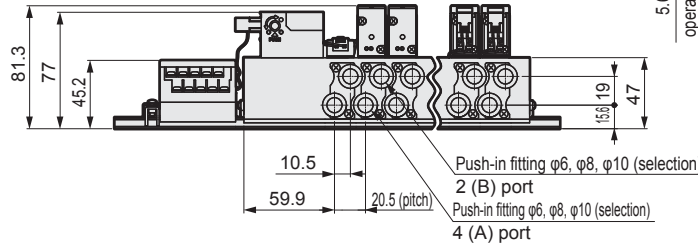
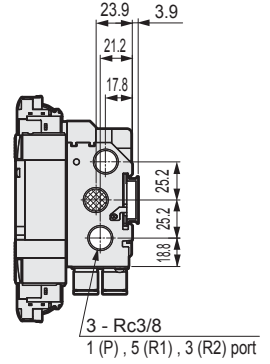
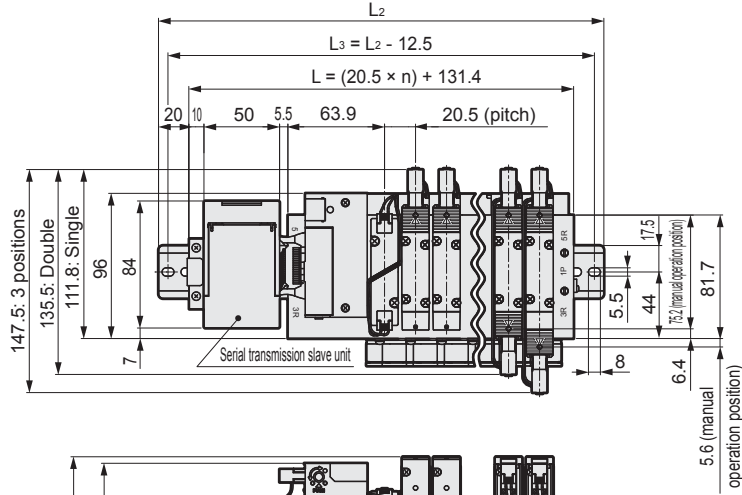
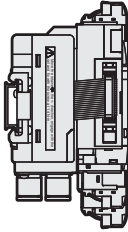
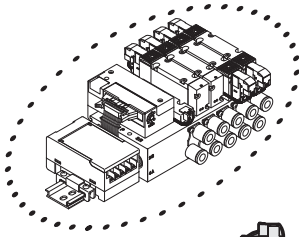
Reduced wiring manifold; base piping; serial transmission

Dimensions



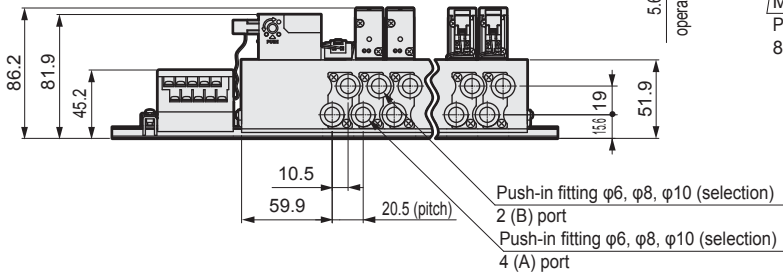
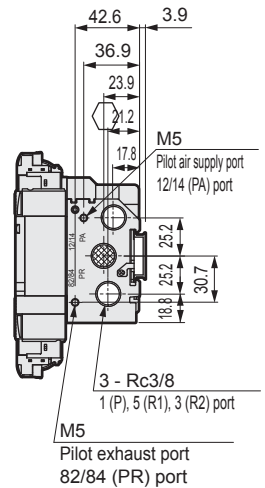
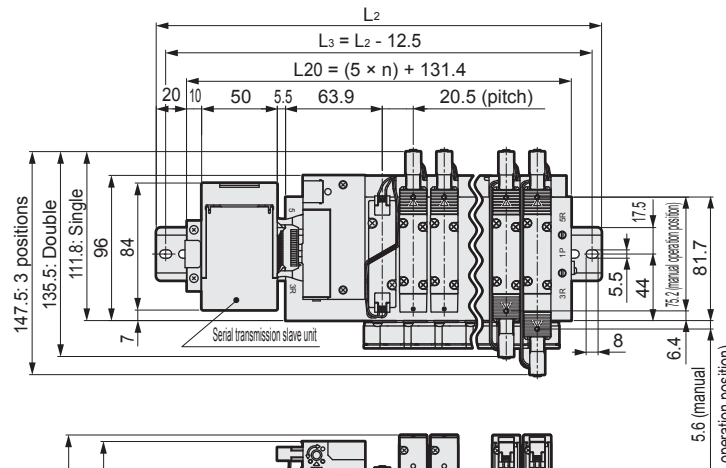
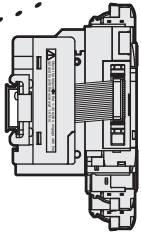
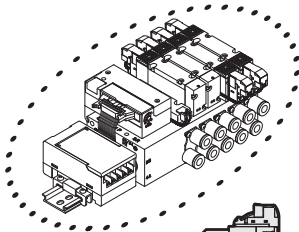
M4GB3

- Serial transmission (T6*)
DIN rail mounting type (D)



Note: Refer to page 176 for details on the push-in fitting elbow type (upward) (downward).

- Serial transmission (T6*)
DIN rail mounting type (D); External pilot type (K)



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	172.4	192.9	213.4	233.9	254.4	274.9	295.4	315.9	336.4	356.9	377.4	397.9	418.4	438.9	459.4
L ₂	212.5	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0	450.0	462.5	487.5	500.0
L ₃	200.0	225.0	250.0	262.5	287.5	312.5	325.0	350.0	375.0	387.5	412.5	437.5	450.0	475.0	487.5

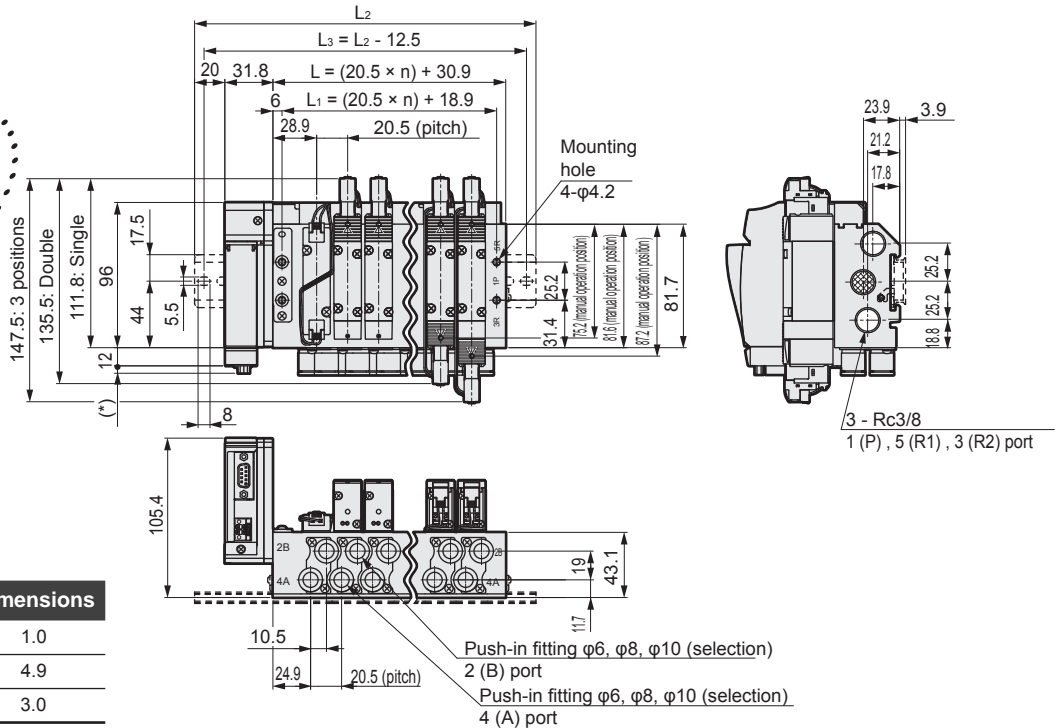
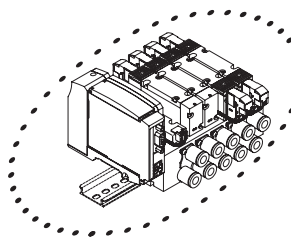
M4GB3-T8* Series

Reduced wiring manifold; base piping; serial transmission

Dimensions

M4GB3

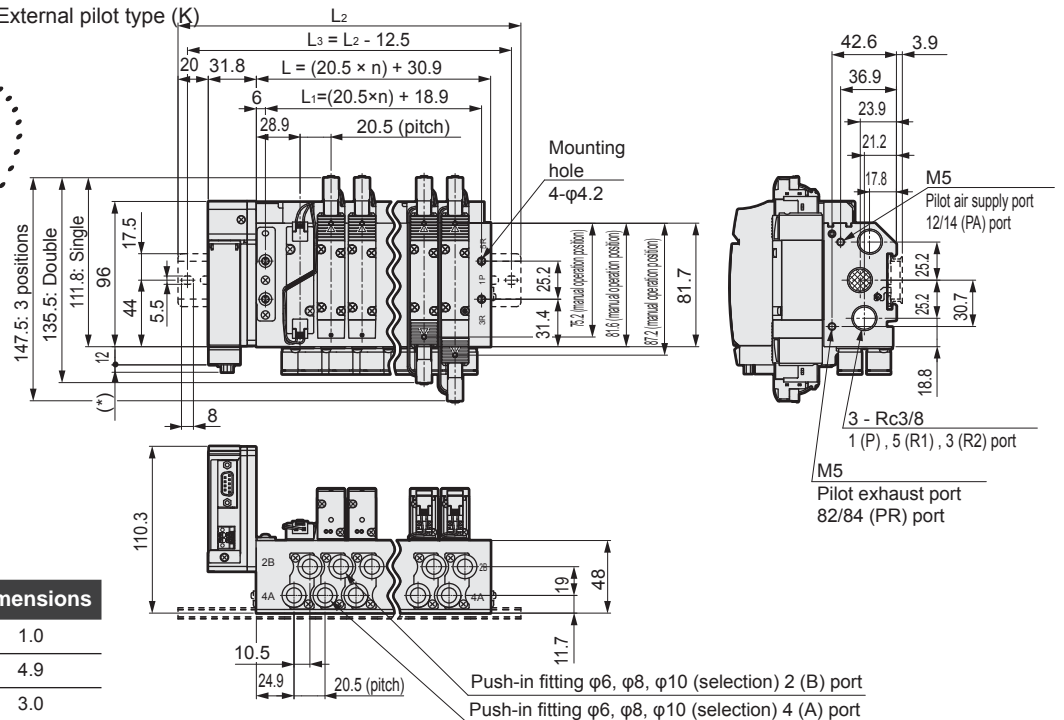
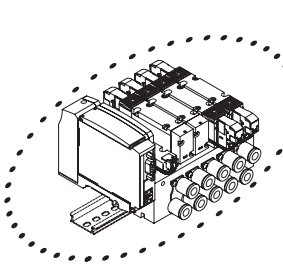
- Serial transmission (T8*)
DIN rail mounting type (D)



Serial transmission	*Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L ₁	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0

- Serial transmission (T8*)
DIN rail mounting type (D); External pilot type (K)



Serial transmission	*Dimensions
T8G*	1.0
T8P*	4.9
T8E*	3.0

Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	71.9	92.4	112.9	133.4	153.9	174.4	194.9	215.4	235.9	256.4	276.9	297.4	317.9	338.4	358.9
L ₁	59.9	80.4	100.9	121.4	141.9	162.4	182.9	203.4	223.9	244.4	264.9	285.4	305.9	326.4	346.9
L ₂	150.0	175.0	187.5	212.5	237.5	250.0	275.0	287.5	312.5	337.5	350.0	375.0	400.0	412.5	437.5
L ₃	137.5	162.5	175.0	200.0	225.0	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0

M4GB3-T* Series

Reduced wiring manifold; base piping

Dimensions

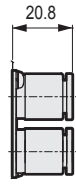
M4GB3

● Fitting straight

● $\phi 6$ (C6)

● $\phi 8$ (C8)

● $\phi 10$ (C10)



● Fitting straight, single plug

● $\phi 6$ (C6NC)

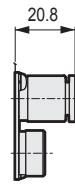
● $\phi 8$ (C8NC)

● $\phi 10$ (C10NC)

● $\phi 6$ (C6NO)

● $\phi 8$ (C8NO)

● $\phi 10$ (C10NO)



● Fitting L type (upward)

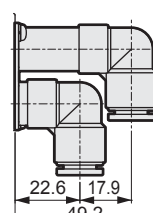
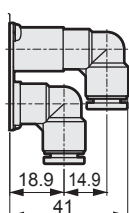
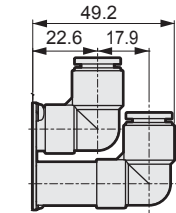
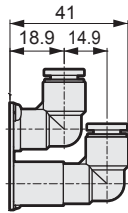
● $\phi 8$ (CL8)

● $\phi 10$ (CL10)

● Fitting L type (downward)

● $\phi 8$ (CD8)

● $\phi 10$ (CD10)



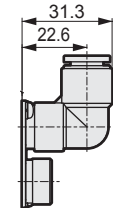
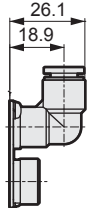
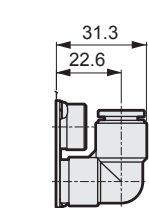
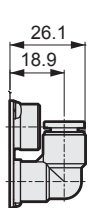
● Fitting L type (upward), single plug

● $\phi 8$ (CL8NC)

● $\phi 10$ (CL10NC)

● $\phi 8$ (CL8NO)

● $\phi 10$ (CL10NO)



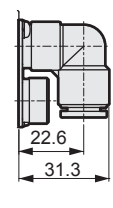
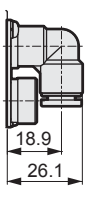
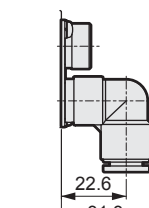
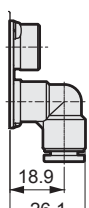
● Fitting L type (downward), single plug

● $\phi 8$ (CD8NC)

● $\phi 10$ (CD10NC)

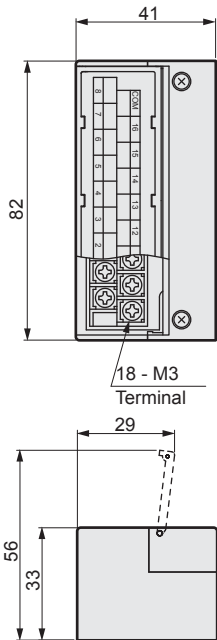
● $\phi 8$ (CD8NO)

● $\phi 10$ (CD10NO)

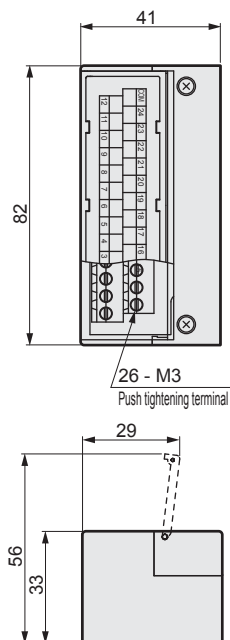


Electrical block part: dimensions

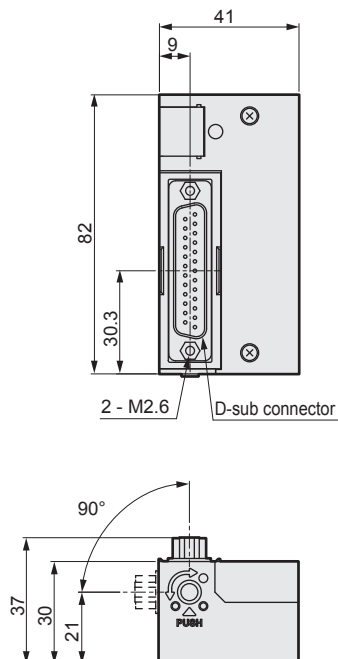
● Common terminal block (M3 thread) T10



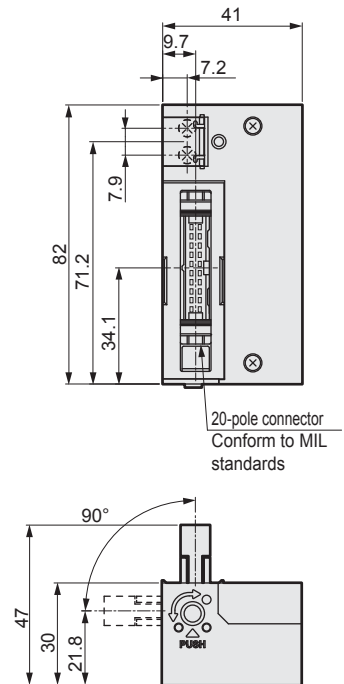
● Common terminal block (push tightening) T11



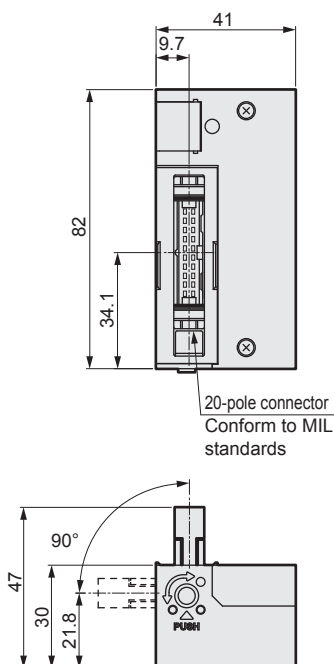
● D-sub connector T30



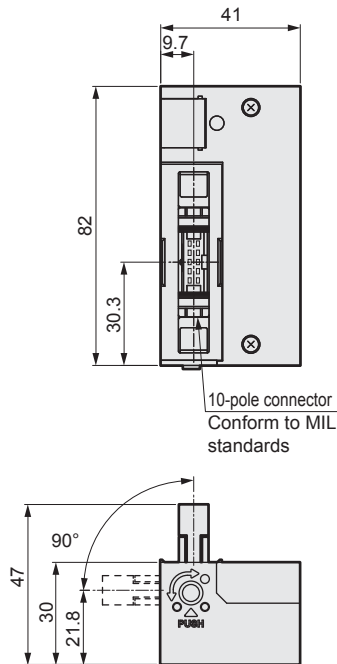
● 20 pin flat cable connector (with power supply terminal) T50



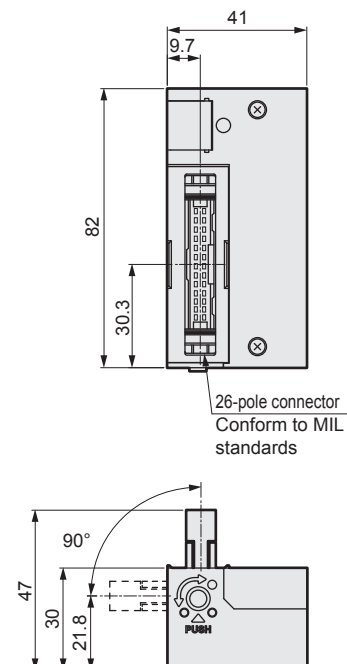
● 20 pin flat cable connector (without power supply terminal) T51



● 10 pin flat cable connector (without power supply terminal) T52



● 26 pin flat cable connector (without power supply terminal) T53



4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GB1, 2, 3-T6D Series

Reduced wiring manifold; base piping; serial transmission

● Discrete serial transmission slave unit

4GR - **OPP3** - **0A**

A Wiring method

Symbol	Descriptions		
A Wiring method			
0A	T6A0	UNIWIRED SYSTEM	8 points
1A	T6A1		16 points
0C	T6C0	CompoBus/S	8 points
1C	T6C1		16 points
0E	T6E0	S-LINK	8 points
1E	T6E1		16 points
1G	T6G1	CC-Link	16 points
0J	T6J0	UNIWIRED H SYSTEM	8 points
1J	T6J1		16 points

● Discrete serial transmission slave unit

4GR - **OPP7** - **2G**

A Wiring method

Symbol	Descriptions		
A Wiring method			
1G	T8G1	CC-Link (Thin type)	16 points
2G	T8G2		32 points
1G-P	T8GP1		16 points
2G-P	T8GP2		32 points
1P	T8P1	PROFIBUS-DP (Thin type)	16 points
2P	T8P2		32 points
1P-P	T8PP1		16 points
2P-P	T8PP2		32 points
1EC	T8EC1	EtherCAT (Thin type)	16 points
2EC	T8EC2		32 points
1EC-P	T8ECP1		16 points
2EC-P	T8ECP2		32 points
1EN	T8EN1	EtherNet/IP (Thin type)	16 points
2EN	T8EN2		32 points
1EN-P	T8ENP1		16 points
2EN-P	T8ENP2		32 points

- 4GAB
- M4GAB
- MN4GAB
- 4GAB Master valve
- 4GD/E
- M4GD/E
- MN4GD/E
- Technical data
- Safety precautions
- Manifold Specifications

MEMO

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

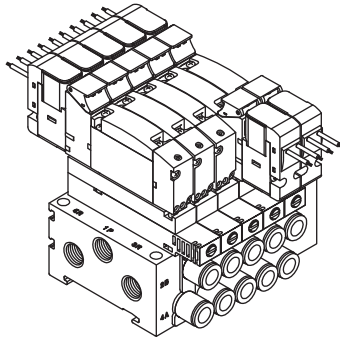
Manifold
Specifications

M4GA1 to 3/M4GB1 to 3 Series

Related products

Related products

● In stop valve spacer



Specifications

Model no.	P→A/B		A/B→R		Weight g
	C (dm ³ /(s/bar))	b	C (dm ³ /(s/bar))	b	
4G*1	0.54	0.03	0.82	0.27	17
4G*2	1.5	0.17	1.6	0.20	63
4G*3	1.9	0.09	2.8	0.16	80

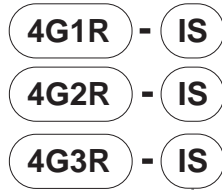
Note 1: These are values when base piping and 2-position valve are mounted.

Note 2: The effective cross-sectional area when discharging residual pressure is 1.0 mm² (reference value).

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

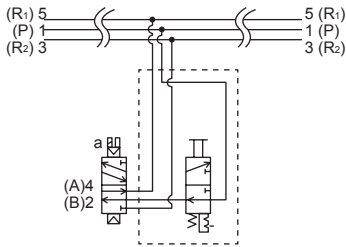
Attached product: PR check valve 2, body gasket 1 (4G*2, 4G*3)

How to order discrete part



In stop valve spacer

JIS symbol



⚠ Note on model no. selection

Note 1: Specify the spacer mounting position and quantity in manifold specifications.

Note 2: If the A/B port fitting is the elbow type (upward), turn the operation part of the in stop valve spacer toward the reverse side (a solenoid side).

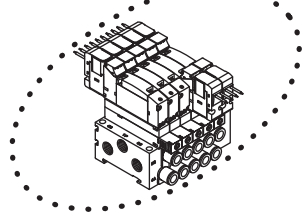
Note 3: If the elbow type (upward) A/B port fitting is used for the reduced wiring manifold, the in stop valve spacer cannot be selected.

Note 4: The in stop valve spacer cannot be used with the external pilot (K).

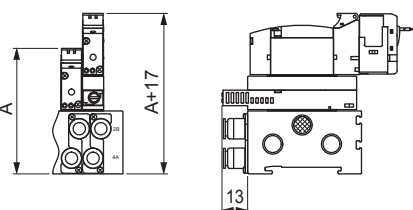
Note 5: When adding to the reduced wiring manifold, the existing electric wire may be too short. Contact CKD for details.

Dimensions

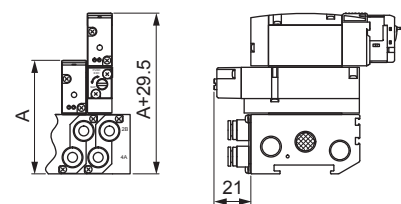
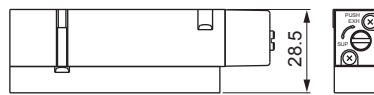
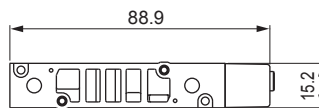
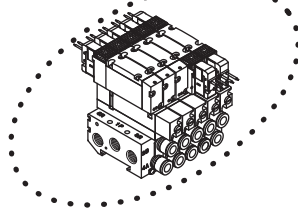
● 4G1



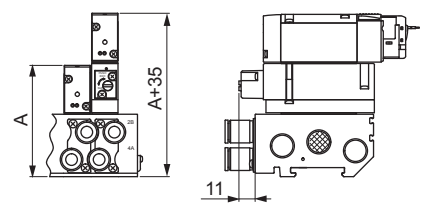
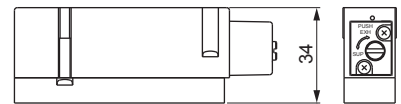
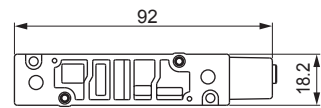
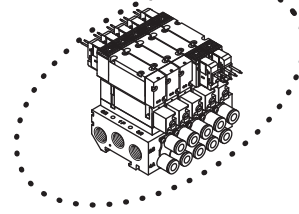
Dimensions when mounted



● 4G2



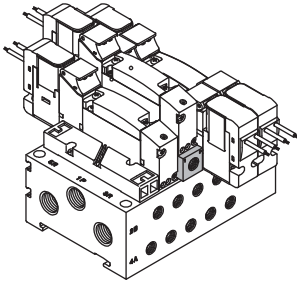
● 4G3



Note: For A dimensions, check the dimensions of respective specifications.

Related products

● Air supply spacer



Specifications

Model no.	P→A/B		A/B→R		Weight g
	C (dm ³ /(s/bar))	b	C (dm ³ /(s/bar))	b	
4G1	0.70	0.23	0.93	0.16	8
4G2	1.6	0.17	1.8	0.16	35
4G3	2.6	0.22	3.1	0.14	56

Note 1: These are values when a valve is mounted.

Note 2: Effective sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

How to order discrete part

● Air supply spacer

Air supply spacer model no.

4G **3** **R** - **P** - **GWS10** **A**

A Air supply spacer model no.

B Port size
Note 1

C Set screw

Valve model no.

Symbol	Descriptions	4GA1	4GB1	4GA2	4GB2	4GA3	4GB3
A Air supply spacer model no.							
1	For 4G1	●					
2	For 4G2			●			
3	For 4G3						●
B Port size							
Blank	M5 thread (4G1), Rc thread (4G2 & 4G3)	①	②	③			
GWS4	φ4 fitting	●					
GWS6	φ6 fitting	●	●				
GWS8	φ8 fitting			●		●	
GWS10	φ10 fitting						●
06N	1/8NPT			●			
08N	1/4NPT						●
06G	G1/8			●			
C Set screw							
Blank		●	●				
A	4GA3 A/B port: Rc1/4 thread					●	Note 2

is not available.

Accessories: 2 installation screws (Note 2), 2 PR check valves, 1 body gasket

⚠ Note on model no. selection

Note 1 Blank indicates ① M5 ② Rc1/8 ③ Rc1/4.

Note 2 Specify "A" only when using with 4GA3*9R-08 for mounting base. (The valve set screw length differs.)

Note 3 Specify the air supply spacer mounting position and quantity in manifold specifications of each catalog.

Note 4 If the A/B port fitting is the elbow type (upward), turn the air supply port of the air supply spacer toward the reverse side (a solenoid side).

Note 5 If the elbow type (upward) A/B port fitting is used for the reduced wiring manifold, the air supply spacer cannot be selected.

Note 6 Combination with the masking plate is not supported.

4G/A/B

M4G/A/B

MN4G/A/B

4G/A/B
Master valve

4G/D/E

M4G/D/E

MN4G/D/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA1 to 3/M4GB1 to 3 Series

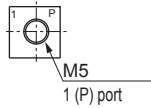
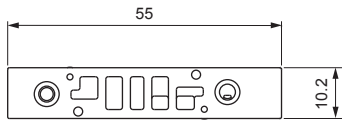
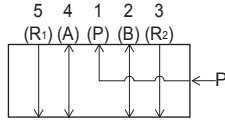
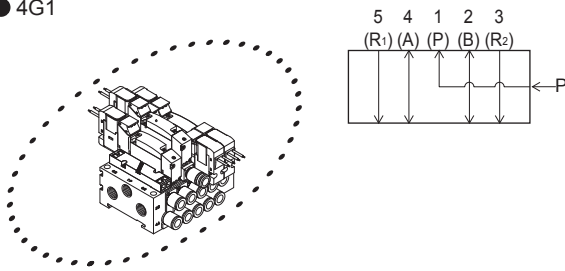
Related products

Related products

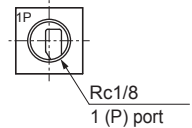
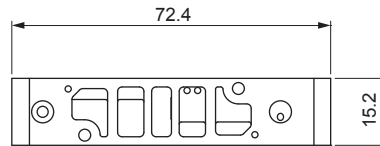
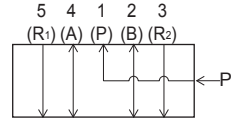
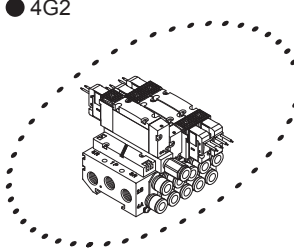
● Air supply spacer

Dimensions

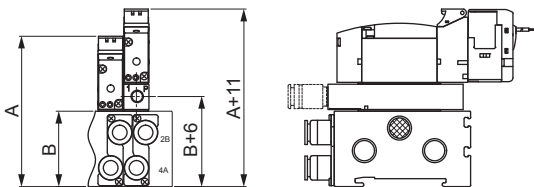
● 4G1



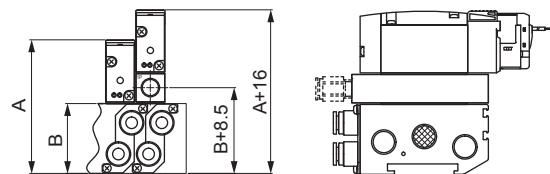
● 4G2



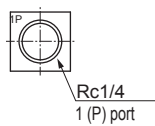
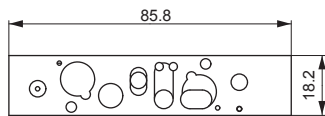
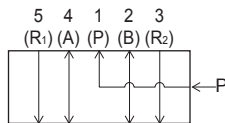
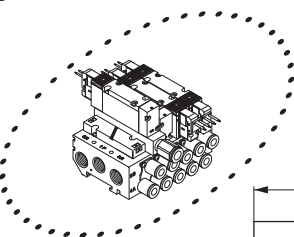
Dimensions when mounted



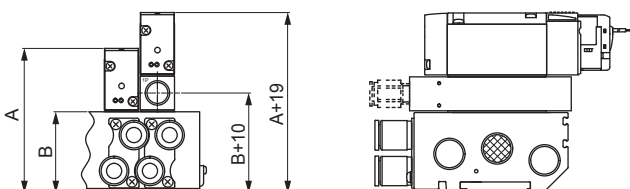
Dimensions when mounted



● 4G3



Dimensions when mounted

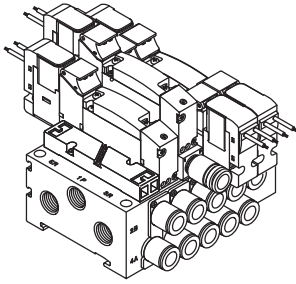


Note: For A, B dimensions, check the dimensions of respective specifications.

4GAB
 M4GA/B
 MN4GA/B
 4GAB
 Master valve
 4GD/E
 M4GD/E
 MN4GD/E
 Technical data
 Safety
 precautions
 Manifold
 Specifications

Related products

● Exhaust spacer



Specifications

Model no.	P→A/B		A/B→R		Weight g
	C (dm ³ /(s/bar))	b	C (dm ³ /(s/bar))	b	
4G1	0.94	0.28	0.68	0.33	7
4G2	1.5	0.24	1.9	0.24	34
4G3	3.4	0.21	2.9	0.27	58

Note 1: These are values when a valve is mounted.

Note 2: Effective sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

How to order discrete part

● Exhaust spacer

Exhaust spacer model no.

4G **3** **R** - **R** - **GWS10** **A**

A Air supply spacer model no.

B Port size
Note 1

C Set screw

Symbol	Descriptions	Valve model no.					
		4GA1	4GB1	4GA2	4GB2	4GA3	4GB3
A Exhaust spacer model no.							
1	For 4G1	●					
2	For 4G2			●			
3	For 4G3						●
B Port size							
Blank	M5 thread (4G1), Rc thread (4G2 & 4G3)	①	②	③			
GWS4	Φ4 fitting	●					
GWS6	Φ6 fitting	●	●				
GWS8	Φ8 fitting			●		●	
GWS10	Φ10 fitting					●	
06N	1/8NPT			●			
06G	G1/8			●			
C Set screw							
Blank		●	●		●		
A	4GA3 A/B port: Rc1/4 thread					●	Note 2

is not available.

Accessories: 2 installation screws (Note 2), 2 PR check valves, 1 body gasket

⚠ Note on model no. selection

Note 1 Blank indicates ① M5 ② Rc1/8 ③ Rc1/4.

Note 2 Specify "A" only when using with 4GA3*9R-08 for mounting base. (The valve set screw length differs.)

Note 3 Refer to manifold specifications in catalogs for the exhaust spacer installation location and amount.

Note 4 If the A/B port fitting is an elbow, the exhaust spacer's operation section will face the reverse side (a solenoid side).

Note 5 When selecting a reduced wiring manifold with an elbow A/B port fitting, the exhaust spacer cannot be used.

Note 6 Combination with the masking plate is not supported.

4G/A/B

M4G/A/B

MN4G/A/B

4G/A/B
Master valve

4G/D/E

M4G/D/E

MN4G/D/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA1 to 3/M4GB1 to 3 Series

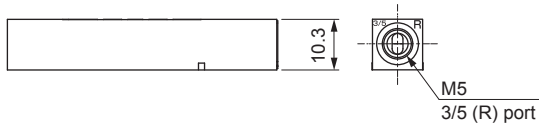
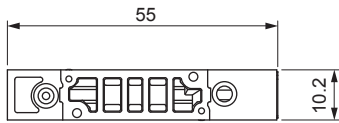
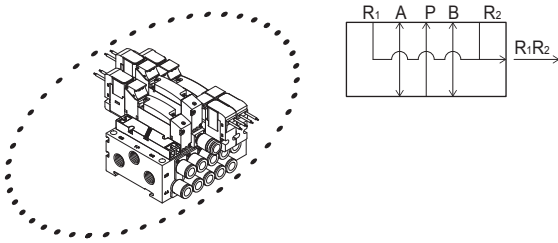
Related products

Related products

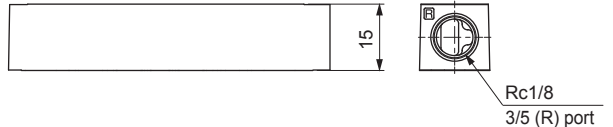
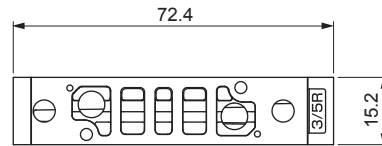
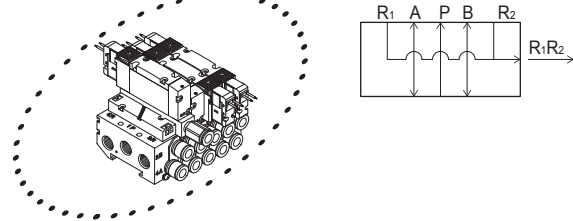
● Exhaust spacer

Dimensions

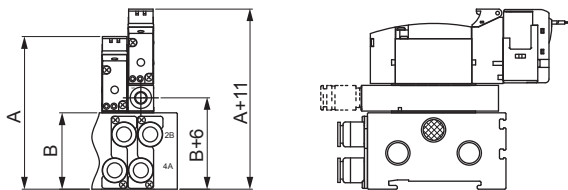
● 4G1



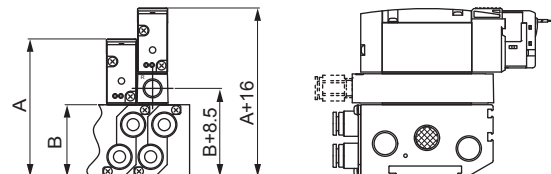
● 4G2



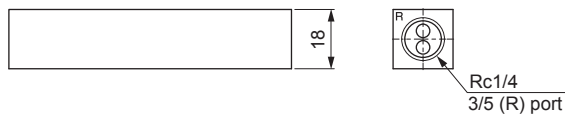
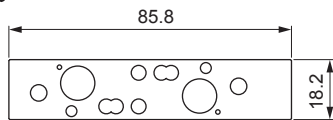
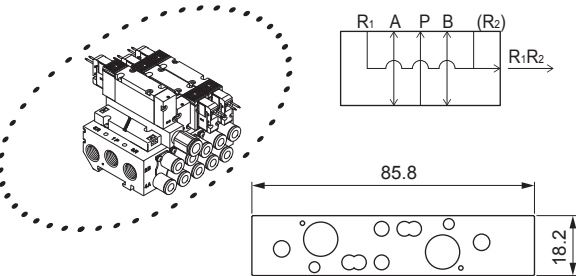
Dimensions when mounted



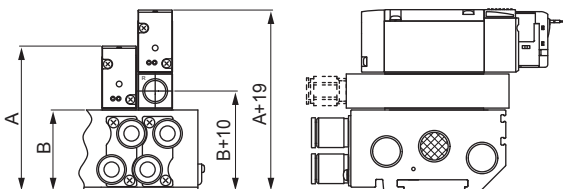
Dimensions when mounted



● 4G3



Dimensions when mounted

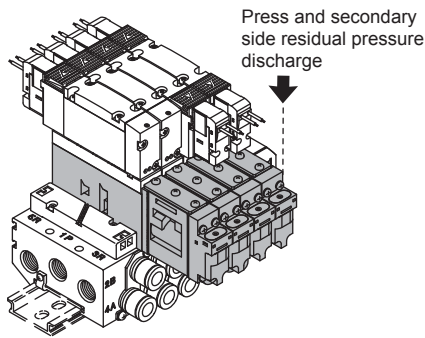


Note: For A, B dimensions, check the dimensions of respective specifications.

4GAB
M4GA/B
MN4GA/B
4GAB
Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety
precautions
Manifold
Specifications

Related products

● Spacer type pilot check valve

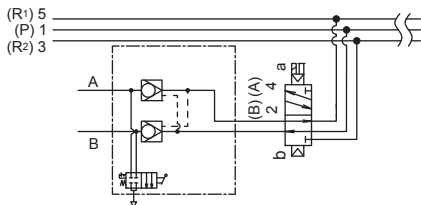


Specifications

Spacer type pilot check valve	4G2R-PC-M
Working fluid	Compressed air
Max. working pressure	MPa 0.7
Min. working pressure	MPa 0.2
Proof pressure	MPa 1.05
Effective sectional area	mm ² 4 (With solenoid valve)
Ambient temperature	°C -5 to 55 (no freezing)
Fluid temperature	°C 5 to 55
Lubrication	Note 1 Not required
Atmosphere	Containing corrosive gas is not permissible
Weight	g 182.5

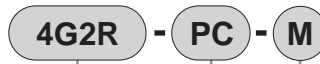
Note 1: Use the turbine oil Class 1 ISO VG32 if lubricated.
Excessive lubrication will lead to unstable operation.

JIS symbol



Note: Please be careful since this may lead to a bad intermediate stop as well as a decline in the used intermediate stop frequency in the diameter of a large cylinder (standard more than φ50) that has almost no diaphragm on the exhaust side (ex: no speed controller, no silencer).

Discrete model no.



Model no.

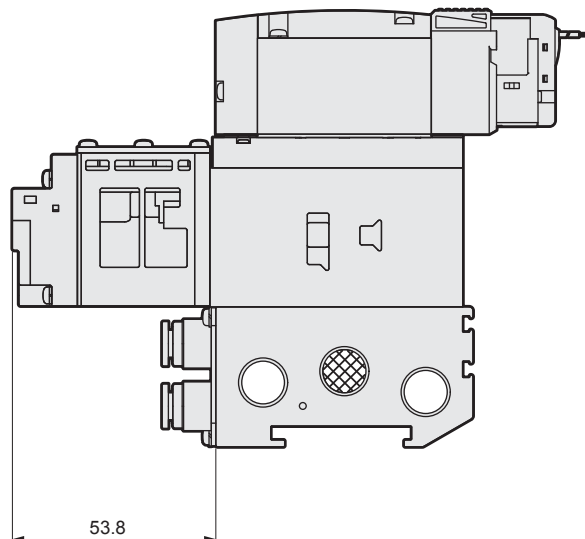
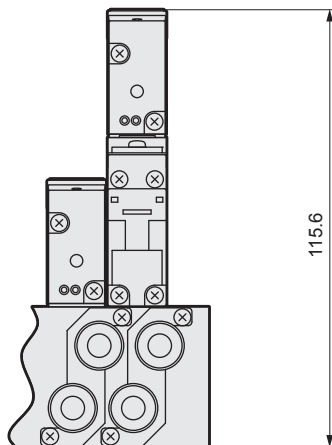
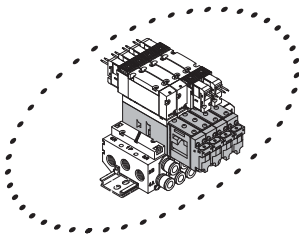
With a residual pressure function
Spacer type pilot check valve

⚠ Note on model no. selection

- Note 1: Specify the spacer mounting location in manifold specifications.
- Note 2: The spacer type pilot check valve cannot be selected in the case of an elbow A/B port fitting.
- Note 3: Stacking multiple spacers is not supported.
- Note 4: The spacer and masking plate can not be combined.
- Note 5: The spacer type pilot check valve that can be installed in the piping system is only the base piping type.

Dimensions

● M4GB2



4G/A/B

M4G/A/B

MN4G/A/B

4G/A/B
Master valve

4G/D/E

M4G/D/E

MN4G/D/E

Technical data

Safety
precautions

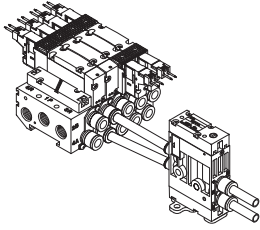
Manifold
Specifications

M4GA1 to 3/M4GB1 to 3 Series

Related products

Related products

● Pilot check valve



How to order

● Discrete model no.

4G2R - PCS - C4 -

● Manifold model no.

M4G2R - PCS - C4 - -

Model no.

Pilot check valve

A Port size
Note 1

B Option
Note 2

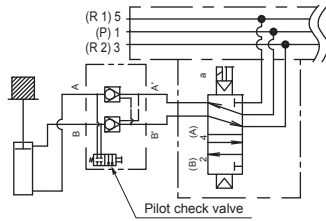
C Station no.

Specifications

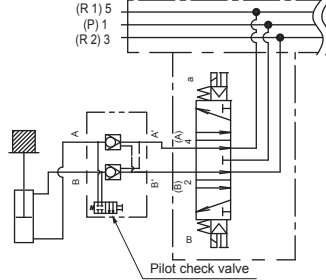
Descriptions	4G2R-PCS-**-*
Effective sectional area mm ²	11
Weight g	200

Symbol	Descriptions	
A Port size		
	Valve side port	Cylinder side port
C4	φ4 push-in fitting	φ4 push-in fitting
C6	φ6 push-in fitting	φ6 push-in fitting
C8	φ8 push-in fitting	φ8 push-in fitting
CL6	φ6 push-in fitting	L type φ6 push-in fitting (upward)
CL8	φ8 push-in fitting	L type φ8 push-in fitting (upward)
B Option		
Blank	None	
F	A/B port filter integrated	
M	Manual non-locking	
D	DIN rail mount type	
C Station no.		
2	2 stations	
to	to	
10	10 stations	

JIS symbol (Position locking)



(Stopping)



Example of leak comparison
All ports closed (solenoid) valve
10 cm³/min or less
Pilot check valve (4G2R-PCS)
0 to 0.3 cm³/min

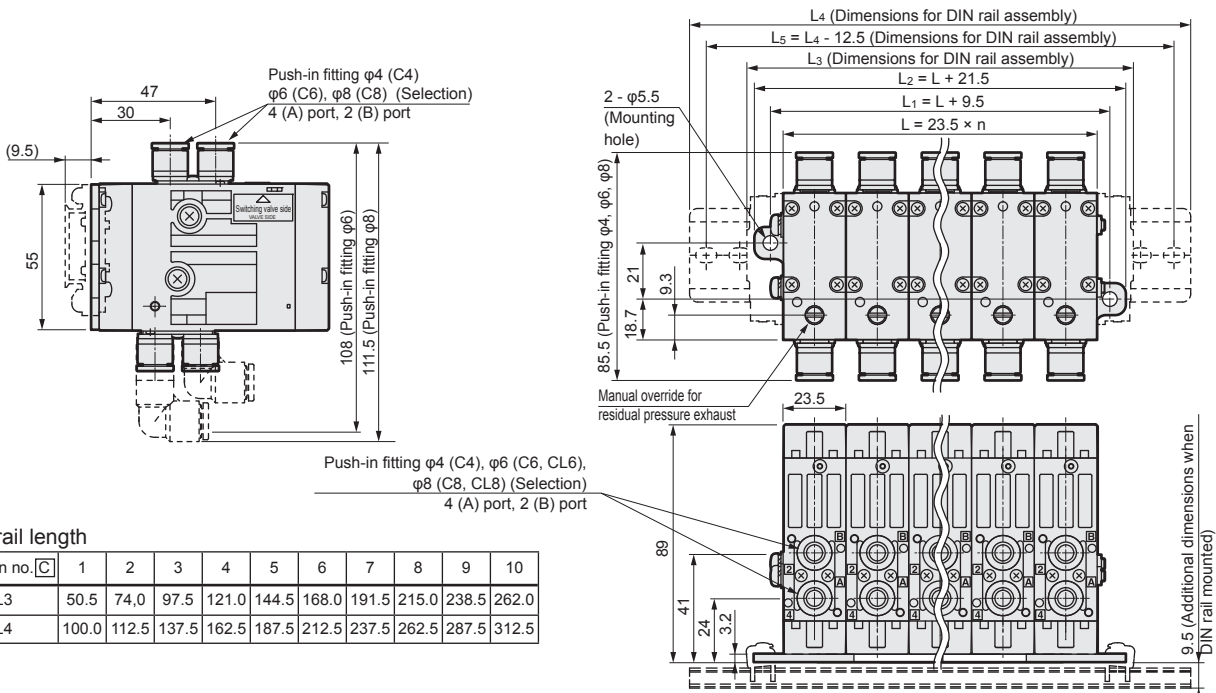
⚠ Depending on use conditions, the pilot check valve body may emit resonance due to the air flow when the cylinder operates, but this is not an abnormality. Adjust the pipe length and bore size in that case.

⚠ Note on model no. selection

Note 1: Contact CKD for information on mixing port sizes.

Note 2: The following applies when blank is selected as an option.
Manual override: Non-locking/locking common, Mounting method: Direct mounting.

Dimensions



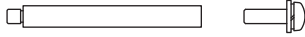
DIN rail length

Station no. C	1	2	3	4	5	6	7	8	9	10
L3	50.5	74.0	97.5	121.0	144.5	168.0	191.5	215.0	238.5	262.0
L4	100.0	112.5	137.5	162.5	187.5	212.5	237.5	262.5	287.5	312.5

Related products

- Tie rod kit (for pilot check valve)
(For manifold connection and expansion)

4G2R - PCS - TR - V1



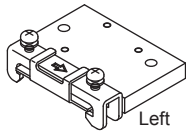
A Type
Note 1

A Type	
V 1	For 1 station
V 2	For 2 station
V 3	For 3 station
V 4	For 4 station
V 5	For 5 station

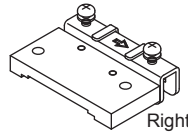
⚠ Note on model no. selection

Note 1: Select the V1 to V5 combination when using six or more stations.

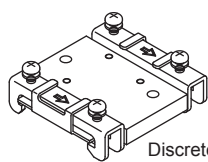
- DIN rail adaptor kit (for pilot check valve)
(The DIN rail adaptor kit is required for the following reassembly)



Left



Right



Discrete

4G2R - PCS - D1

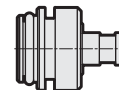
A Type

A Type		DIN rail adaptor kit selection list based on changes in specifications				Descriptions
		Change from mounting plate to DIN rail		Increase/decrease stations with DIN rail mount		
Detail of change	Symbol	1 station	More than 2 stations	More than 2 stations → 1 station	1 station → More than 2 stations	
D1	Right				● (Note 2)	DIN rail adaptor (right) 1, thread 2
D2	Right + left		●			DIN rail adaptor (right) 1, DIN rail adaptor (left) 1, thread 4
D3	Discrete	●		●		DIN rail adaptor (discrete) 1, thread 2

Note 2: When changing from one station to 2 or more stations, purchase the DIN rail adapter for right (D1), and remove the retainer on one side of the current DIN rail adapter kit (D3).

- Push in cartridge fitting
φ1.8 straight type
4G1R - JOINT - CL18

φ1.8 barbed type
4G1R - JOINT - CF

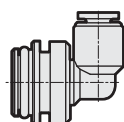


φ1.8L/φ4L/φ6L/φ8L/φ10L type (short elbow type)

4G1R - JOINT - CL18 / CL4 / CL6

4G2R - JOINT - CL6 / CL8

4G3R - JOINT - CL8 / CL10

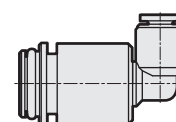


φ1.8L/φ4L/φ6L/φ8L/φ10L type (long elbow type)

4G1R - JOINT - CLL18 / CLL4 / CLL6

4G2R - JOINT - CLL6 / CLL8

4G3R - JOINT - CLL8 / CLL10



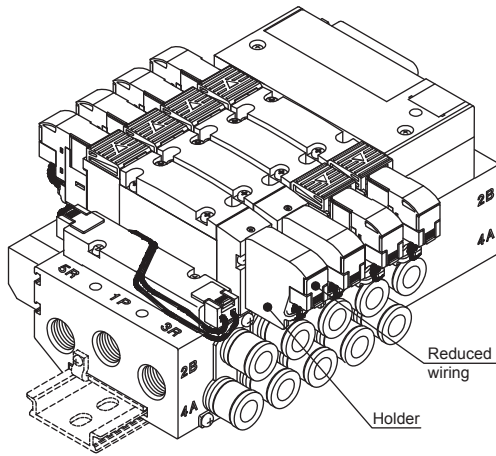
M4GA1 to 3/M4GB1 to 3 Series

Related products

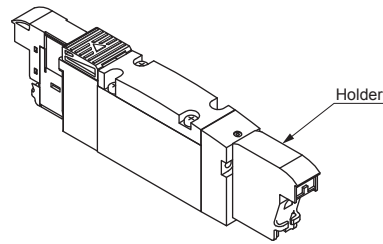
Related products

● Double wiring (single reduced wiring)

Manifold



Discrete valve (A2N)



This comes with a holder for holding the socket assembly.
(The A type socket assembly is not attached.)

If you want to change the valve from a double solenoid to a single solenoid, the unnecessary socket assembly is assembled and held.

The single solenoid valve cap side spare wiring (holder and A type socket assembly) is attached.
If you want to change the valve from the from a single solenoid to a double solenoid, valve change work is easier because there is no need to arrange the A type socket assembly separately.

Example of model no.

● Manifold model no. (example)

M **4GA1** **1** **0 R** - **C6** - **T30** **W1** **H** - **10** - **3**

A Model no.

B Valve Position

C Port size

D Reduced wiring Connection

E Terminal and connector pin array

F Option

G Station no.

H Voltage

Symbol	Descriptions
E	Terminal and connector pin array
W1	Double wiring (With single reduced wiring)

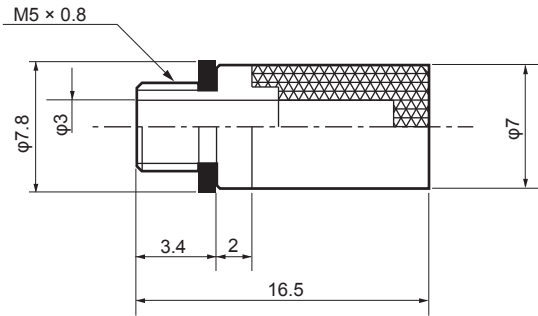
* Refer to How to order of each series for details.

4GAB
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

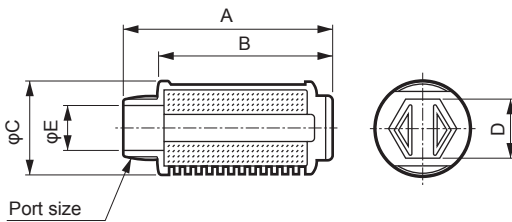
Related products

● Silencer

● SLM-M5



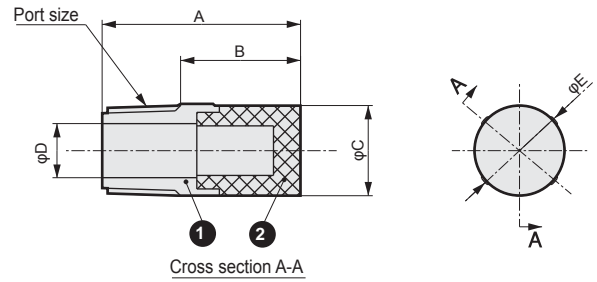
● SLW - 6A, 8A, 10A, 10L



Note 1: For mounting the silencer, check the dimensions in advance.
 Note 2: Use SLW-8S for the M4GA2 DIN rail mount type. Interference occurs if SLW-8A is used.

Symbol Model no.	Large silencing effect dB (A)	Effective sectional area mm ²	A	B	C	D	E	Port size
SLW - 6A	30 or more	10	34.5	28	16.5	10	7	R1/8
SLW - 8A	30 or more	20	44.5	36	20	13	8.5	R1/4
SLW - 10A	30 or more	30	58.5	48.5	25.5	17	12	R3/8
SLW-10L	30 or more	60	68.2	58.4	28	19	12	R3/8

● SLW - 6S, 8S



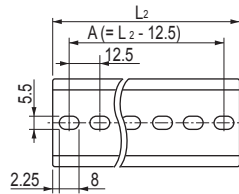
Model no.	Port size	A	B	C	D	E
SLW - 6S	R1/8	22	13.3	10.5	6	10.5
SLW - 8S	R1/4	28	19	14.8	9	15.4

● Plug

Part name	Model no.	Bore diameter available	Appearance
Blanking plug	PG-P2-B	φ1.8	
	GWP4-B	φ4	
	GWP6-B	φ6	
	GWP8-B	φ8	
	GWP10-B	φ12	
Thread plug	4G2R-06P	M5	
	4G1R-M5P	Rc1/8	
	4G3R-08P	Rc1/4	
	4G3R-10P	Rc3/8	
	4G2R-06NP	NPT1/8	
	4G3R-08NP	NPT1/4	
	4G3R-10NP	NPT3/8	
	4G2R-06GP	G1/8	
	4G3R-08GP	G1/4	
4G3R-10GP	G3/8		

● DIN rail

N4GR - BAA



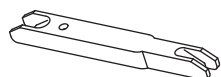
Note 1: Rail lengths not included in the list are available consult factory order product.

L1: Manifold length	L2: Rail length	A: Mounting pitch
35	47.5 or less	87.5
47.5 or more	60 or less	100
60	72.5	112.5
72.5	85	125
85	97.5	137.5
97.5	110	150
110	122.5	162.5
122.5	135	175
135	147.5	187.5
147.5	160	200
160	172.5	212.5
172.5	185	225
185	197.5	237.5
197.5	210	250
210	222.5	262.5
222.5	235	275
235	247.5	287.5
247.5	260	300
260	272.5	312.5
272.5	285	325
285	297.5	337.5
297.5	310	350
310	322.5	362.5
322.5	335	375
335	347.5	387.5
347.5	360	400
360	372.5	412.5
372.5	385	425
385	397.5	437.5
397.5	410	450
410	422.5	462.5
422.5	435	475
435	447.5	487.5
447.5	460	500
460	472.5	512.5
472.5	485	525
485	497.5	537.5
497.5	510	550

When more than 510, round the value with multiple of 12.5.

● Push-in fitting tube remover

For φ1.8/φ4 push-in fitting
4GR-EOT18-4



For φ4/φ6 push-in fitting
4GR-EOT4-6

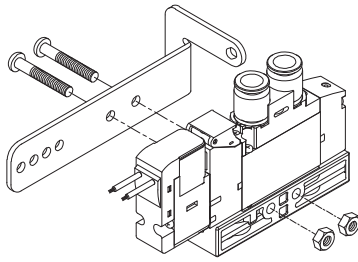
4GAB
M4GA/B
MN4GA/B
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4GA1 to 3/M4GB1 to 3 Series

Related parts

Related parts

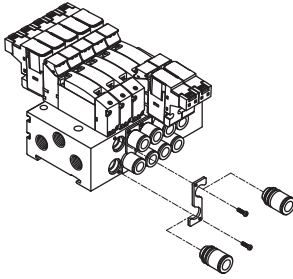
(1) Mounting plate (P) kit



Mounting (P) kit

Model	Kit model no.	Set parts
3GA1 & 4GA1	4G1R-MOUNT-PLATE-KIT	Mounting plate, set screw 2, nut 2 2
3GA2 & 4GA2	4G2R-MOUNT-PLATE-KIT	Mounting plate, set screw 2
3GA3 & 4GA3	4G3R-MOUNT-PLATE-KIT	Mounting plate, set screw 2

(2) Discrete cartridge type push-in fitting related part



Fitting stopper plate kit

Model	Kit model no.
M4G1	4G1R-JNT-STP-PLATE-KIT
M4G2	4G2R-JNT-STP-PLATE-KIT
M4G3	4G3R-JNT-STP-PLATE-KIT

(3) Adaptor related kit

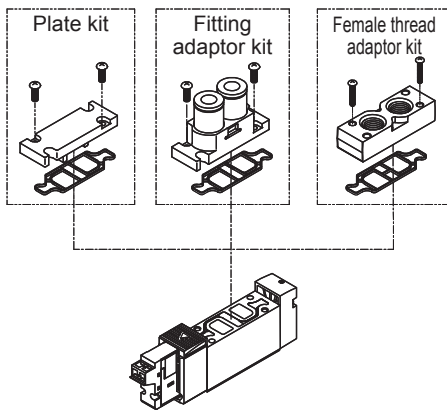


Plate kit

Model	Kit model no.	Set parts
3GB1 & 4GB1	4G1R-PLATE-KIT	Plate, gasket, set screw 2
3GB2 & 4GB2	4G2R-PLATE-KIT	Plate, gasket, set screw 2
4GB3	4G3R-PLATE-KIT	Plate, gasket, set screw 2

Fitting adaptor kit

4GA1 R - JNT - ADAPTOR - KIT - **C4** **N.C.** - **F**

A Model no.

B Port size

C N.C./N.O.

D Option

	A Model no.					
	3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Port size						
CF	●			●		
C18	●			●		
C4	●	●			●	
C6	●	●	●		●	●
C8		●	●		●	●
C10			●			●
C3N	●			●		
C4N	●			●		
C6N		●			●	
C8N		●	●		●	●
C10N			●			●
C N.C./N.O.						
N.C.	●	●	●			
N.O.	●	●	●			
Blank	●	●		●	●	●
D Option						
Blank	●	●	●	●	●	●
F	●	●	●	●	●	●

Female screw adaptor kit

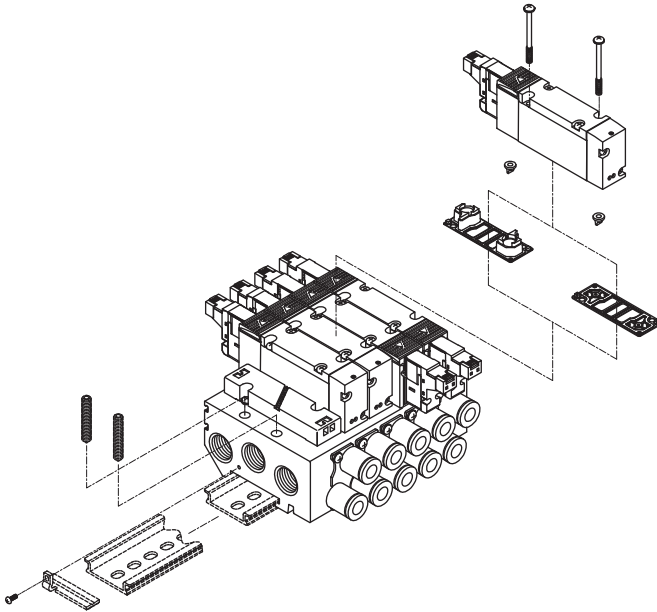
Model	Kit model no.	Set parts
3GA1 & 4GA1	4G1R-FML-ADAPTOR-KIT - Port size - Option	Female screw adaptor, gasket, set screw 2
3GA2 & 4GA2	4G2R-FML-ADAPTOR-KIT - Port size - Option	Female screw adaptor, gasket, set screw 2
3GA3 & 4GA3	4G3R-FML-ADAPTOR-KIT - Port size - Option	Female screw adaptor, gasket, set screw 2, body set screw 2

Note: The fitting adapter (with fitting), gasket and mounting screws (*2) are in a set.

When using an A/B port filter integrated type, specify the **option** in section "F".

Related parts

(4) Manifold related parts



Masking plate kit

Model	Model no.	Descriptions	Remarks
M3G1/M4G1	4G1R-MP	Masking plate Gasket Set screw 2	* 3G3 and 4G3 have two PR check valves.
M3G2/M4G2	4G2R-MP		
M3G3/M4G3	4G3R-MP		

Gasket

Model	Part model no.
3G1 & 4G1	4G1R-GASKET
3G1 & 4G1 (For masking plate)	4G1R-MP-GASKET
3G2 & 4G2	4G2R-GASKET
3G2 & 4G2 (For masking plate)	4G2R-MP-GASKET
3G3 & 4G3	4G3R-GASKET

Gasket with check valve

Model	Part model no.
3G1 & 4G1	4G1R-CHECK-VALVE
3G2 & 4G2	4G2R-CHECK-VALVE
3G3 & 4G3	4G3R-CHECK-VALVE

PR check valve kit (2 per set)

Model	Kit model no.
3G1 & 4G1	4G1R-PR
3G2 & 4G2	4G2R-PR
3G3 & 4G3	4G3R-PR

Set screw (10 per set)

Model	Part model no.
3G1 & 4G1	4G1R-SET-SCREW
3G2 & 4G2	4G2R-SET-SCREW
3G3 & 4G3	4G3R-SET-SCREW
3GA3 & 4GA3 (for 08 port size)	4G3R-SET-SCREW-L

DIN rail kit

Model	Model no.	Descriptions
M4G1	4GA1R-BAA[Length]-[Option]D	DIN rail, set screw 2, Lock nut 2
	4GB1R-BAA[Length]-[Option]D	
M4G2	4GA2R-BAA[Length]-[Option]D	DIN rail/holder 2 Tapping screw 2, Set screw 4
	4GB2R-BAA[Length]-[Option]D	
M4G3	4GA3R-BAA[Length]-[Option]D	
	4GB3R-BAA[Length]-[Option]D	

Specify the length "0" when the DIN rail is not required.
Specify the [Option] "K" when using with the manifold base for external pilot.

Set the DIN rail length, referring to the current manifold dimensions and DIN rail length quick reference list (page 297).

4GAB

M4GAB

MN4GAB

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

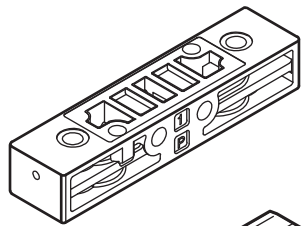
Manifold
Specifications

M4GA1 to 3/M4GB1 to 3 Series

Related parts

Related parts

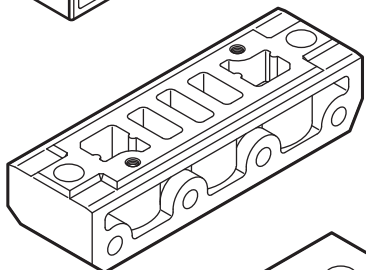
(5) Sub-plate



4GA piping adaptor

4G1 R - ADAPTOR - M5 - []

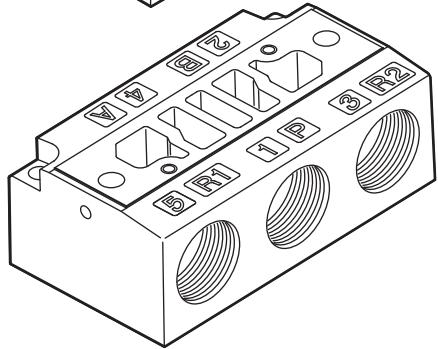
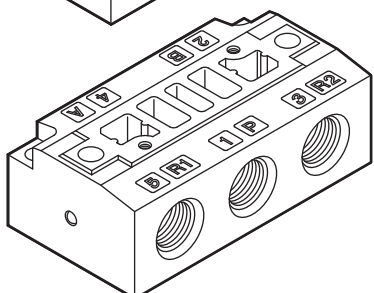
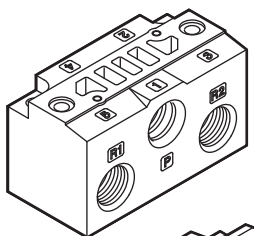
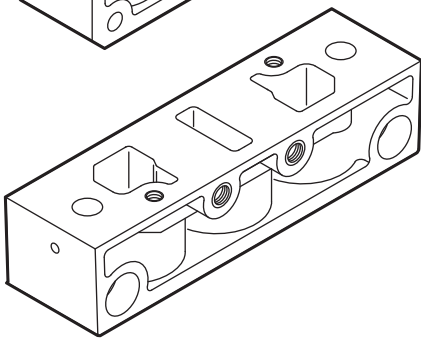
A Model no.



4GB Discrete sub-plate

4G1 R - SUB - BASE - 06 - []

A Model no.



B Port size

C Option

		A Model no.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Port size (P/R1/R2 port)							
M5	M5	●			●		
06	Rc1/8		●			●	
08	Rc1/4			●			●
06N	1/8NPT		●			●	
08N	1/4NPT			○			○
06G	G1/8		●			●	
C Option							
P	Mounting plate	●	●	●	●	●	●

● is not available.
○ Contact CKD for price and availability.

B Port size

C Option

		A Model no.				
		3GB1	3GB2	4GB1	4GB2	4GB3
B Port size (A/B/P/R1/R2 port)						
06	Rc1/8	●		●		
08	Rc1/4		●		●	●
10	Rc3/8					●
06N	1/8NPT	○		○		
08N	1/4NPT		○		○	○
10N	3/8NPT					○
06G	G1/8	○		○		
08G	G1/4		○		○	
C Option						
F	A/B port filter integrated Note 1	●	●	●	●	●

Note 1: The P port has a filter built inside as a standard.

● is not available.
○ Contact CKD for price and availability.

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

Related parts

(6) Manifold sub-plate kit individual wiring type

● M4GA Sub-plate

M4GA1R-00- - 2

A Model no.

B Port size

C Option

D Station no.

Symbol	Descriptions
A Model No.	
M4GA1	Metal base 4G1 size base piping
M4GA2	Metal base 4G2 size base piping
M4GA3	Metal base 4G3 size base piping
B Port size	
00	M5/Rc
00N	NPT
00G	G screw
C Option	
Blank	
K	External pilot
D Station no.	
2	2 stations
to	to
20	Refer to the specifications page for the max. station no.

● M4GB1 Sub-plate

M4GB1R-CL4- - D - 2

A Port size

B Option

C Mount type

D Station no.

Symbol	Descriptions	
A Port size		
Port	4 (A) /2 (B) port	P/R1/R2 port
CF	φ1.8 barbed fitting (applicable tube UP-9102-**)	Rc1/8
C18	φ1.8 push-in fitting (applicable tube UP-9402-**)	
C4	φ4 push-in fitting	
C6	φ6 push-in fitting	
C8	φ8 push-in fitting Note 1	
CL18	L type φ1.8 push-in fitting (upward) (applicable tube UP-9402-**) Note 1	
CL4	L type φ4 push-in fitting (upward)	
CL6	L type φ6 push-in fitting (upward)	
CD18	L type φ1.8 push-in fitting (downward) (applicable tube UP-9402-**) Note 1	
CD4	L type φ4 push-in fitting (downward)	
CD6	L type φ6 push-in fitting (downward)	
M5	M5	
Port	4 (A) /2 (B) port	P/R1/R2 port
C3N	φ1/8 inch push-in fitting	1/8NPT
C4N	φ5/32 inch push-in fitting	
CL3N	L type φ1/8 inch push-in fitting (upward) Note 1	
CL4N	L type φ5/32 inch push-in fitting (upward) Note 1	
Port	4 (A) /2 (B) port	P/R1/R2 port
C4G	φ4 push-in fitting	G1/8
C6G	φ6 push-in fitting	
CL4G	L type φ4 push-in fitting (upward) Note 1	
CL6G	L type φ6 push-in fitting (upward) Note 1	
B Option		
Blank		
K	External pilot	
F	A/B port filter integrated	
C Mount type		
Blank	Direct mount type	
D	DIN rail mount type Note 2	
D Station no.		
2	2 stations	
to	to	
20	Refer to the specifications page for the max. station no.	

Note 1: This is a available consult factory order.

Note 2: The DIN rail kit needs to be prepared separately.

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA1 to 3/M4GB1 to 3 Series

Related parts

Related parts

(6) Manifold sub-plate kit individual wiring type

● M4GB2/M4GB3 Sub-plate

M4GB2 R - **CL4** - **2**

B Port size

C Option

D Station no.

Symbol		Descriptions		A Model no.	
				M4GB2	M4GB3
B Port size				P/R1/R2 port (1) = Rc1/4 (2) = Rc3/8	
Port	4 (A) /2 (B) port				
C4	φ4 push-in fitting		①		
C6	φ6 push-in fitting		①	②	
C8	φ8 push-in fitting		①	②	
C10	φ10 push-in fitting Note 1		①	②	
CL6	L type φ6 push-in fitting (upward)		①		
CL8	L type φ8 push-in fitting (upward)		①	②	
CL10	L type φ10 push-in fitting (upward)			②	
CD6	L type φ6 push-in fitting (downward)		①		
CD8	L type φ8 push-in fitting (downward)		①	②	
CD10	L type φ10 push-in fitting (downward)			②	
06	Rc1/8		①		
08	Rc1/4			②	
P/R1/R2 port (3) = 1/4NPT (4) = 3/8NPT					
Port	4 (A) /2 (B) port				
C6N	φ1/4 inch push-in fitting		③		
C8N	φ5/16 inch push-in fitting		③	④	
C10	φ3/8 inch push-in fitting			④	
CL6N	L type φ1/4 inch push-in fitting (upward) Note 1		③		
CL8N	L type φ5/16 inch push-in fitting (upward) Note 1		③		
06N	1/8NPT		③		
08N	1/4NPT Note 1			④	
P/R1/R2 port (5) = G1/4					
Port	4 (A) /2 (B) port				
C4G	φ4 push-in fitting		⑤		
C6G	φ6 push-in fitting		⑤		
C8G	φ8 push-in fitting		⑤		
CL6G	L type φ6 push-in fitting (upward) Note 1		⑤		
CL8G	L type φ8 push-in fitting (upward) Note 1		⑤		
06N	G1/8		⑤		

C Option	
Blank	
K	External pilot
F	A/B port filter integrated

D Station no.	
2	2 stations
to	to
20	Refer to the specifications page for the max. station no.

Note 1: This is a available consult factory order.

Related parts

(7) Manifold sub-plate kit reduced wiring type

● M4GA Sub-plate

M4GA1 R-00- - - 2

A Model no.

B Reduced wiring

C Option

D Mount type

E Station no.

Symbol	Descriptions		
A Model No.			
M4GA1	Metal base	4G1 size	base piping
M4GA2	Metal base	4G2 size	base piping
M4GA3	Metal base	4G3 size	base piping
B Reduced wiring			
T10	Common terminal block (M3 thread)		Left side specifications
T10R			Right side specifications
T11	Common terminal block (push tightening)		Left side specifications
T11R			Right side specifications
T30	D sub-connector		Left side specifications
T30R			Right side specifications
T50	20 pin flat cable connector (with power supply terminal)		Left side specifications
T50R			Right side specifications
T51	20 pin flat cable connector (without power supply terminal)		Left side specifications
T51R			Right side specifications
T52	10 pin flat cable connector (without power supply terminal)		Left side specifications
T52R			Right side specifications
T53	26 pin flat cable connector (without power supply terminal)		Left side specifications
T53R			Right side specifications
T56	20 pin flat cable connector (without power supply terminal) For serial transmission slave unit OPP3 connection		Left side specifications
T8	For serial transmission slave unit OPP7 connection		Left side specifications
C Option			
Blank			
K	External pilot		
D Mount type Note 1			
Blank	Direct mount type		
D	DIN rail mount type		
E Station no.			
2	2 stations		
to	to		
20	Refer to the specifications page for the max. station no.		

Note 1: In the case of T8, please select the mount type.
Items other than the T8 have no symbol.

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4GA1 to 3/M4GB1 to 3 Series

Related parts

Related parts

(7) Manifold sub-plate kit reduced wiring type

● M4GB Sub-plate

M4GB1 R - **CL4** - **T10** - ○ - ○ - **2**

A Model no.

B Port size

C Reduced wiring

D Option

E Mount type

F Station no.

		A Model no.		
		M4GB1	M4GB2	M4GB3
B Port size		P/R1/R2 port		
Port		(1) = Rc1/8 (2) = Rc1/4 (3) = Rc3/8		
4 (A) /2 (B) port				
CF	φ1.8 barbed fitting (applicable tube UP-9102-**)	①		
C18	φ1.8 push-in fitting (applicable tube UP-9402-**)	①		
C4	φ4 push-in fitting	①	②	
C6	φ6 push-in fitting	①	②	③
C8	φ8 push-in fitting	①	②	③
C10	φ10 push-in fitting		②	③
CL18	L type φ1.8 push-in fitting (upward) (applicable tube UP-9402-**)	①		
CL4	L type φ4 push-in fitting (upward)	①		
CL6	L type φ6 push-in fitting (upward)	①	②	
CL8	L type φ8 push-in fitting (upward)		②	③
CL10	L type φ10 push-in fitting (upward)			③
CD18	L type φ1.8 push-in fitting (downward) (applicable tube UP-9402-**)	①		
CD4	L type φ4 push-in fitting (downward)	①		
CD6	L type φ6 push-in fitting (downward)	①	②	
CD8	L type φ8 push-in fitting (downward)		②	③
CD10	L type φ10 push-in fitting (downward)			③
M5	M5	①		
06	Rc1/8		②	
08	Rc1/4			③

Symbol	Descriptions			
CF	φ1.8 barbed fitting (applicable tube UP-9102-**)			
C18	φ1.8 push-in fitting (applicable tube UP-9402-**)			
C4	φ4 push-in fitting			
C6	φ6 push-in fitting			
C8	φ8 push-in fitting			
C10	φ10 push-in fitting			
CL18	L type φ1.8 push-in fitting (upward) (applicable tube UP-9402-**)			
CL4	L type φ4 push-in fitting (upward)			
CL6	L type φ6 push-in fitting (upward)			
CL8	L type φ8 push-in fitting (upward)			
CL10	L type φ10 push-in fitting (upward)			
CD18	L type φ1.8 push-in fitting (downward) (applicable tube UP-9402-**)			
CD4	L type φ4 push-in fitting (downward)			
CD6	L type φ6 push-in fitting (downward)			
CD8	L type φ8 push-in fitting (downward)			
CD10	L type φ10 push-in fitting (downward)			
M5	M5			
06	Rc1/8			
08	Rc1/4			

C Reduced wiring connection		
T10	Common terminal block (M3 thread)	Left side specifications
T10R		Right side specifications
T11	Common terminal block (push tightening)	Left side specifications
T11R		Right side specifications
T30	D sub-connector	Left side specifications
T30R		Right side specifications
T50	20 pin flat cable connector (with power supply terminal)	Left side specifications
T50R		Right side specifications
T51	20 pin flat cable connector (without power supply terminal)	Left side specifications
T51R		Right side specifications
T52	10 pin flat cable connector (without power supply terminal)	Left side specifications
T52R		Right side specifications
T53	26 pin flat cable connector (without power supply terminal)	Left side specifications
T53R		Right side specifications
T56	20 pin flat cable connector (without power supply terminal) For serial transmission slave unit OPP3 connection	Left side specifications
T8	For serial transmission slave unit OPP7 connection	Left side specifications

D Option	
Blank	
K	External pilot
F	A/B port filter integrated

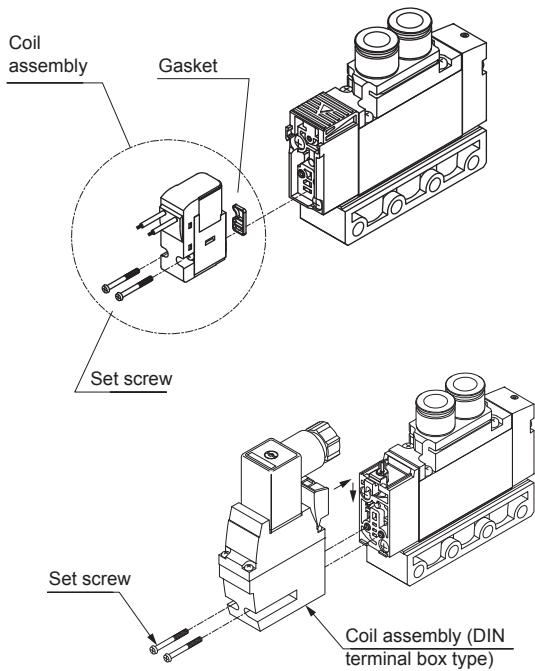
E Mount type		Note 1
Blank	Direct mount type	
D	DIN rail mount type	

F Station no.	
2	2 stations
to	to
20	Refer to the specifications page for the max. station no.

Note 1: In the case of T8, please select the mount type.
Items other than the T8 have no symbol.

Related parts

(8) Coil assembly



Coil assembly

No.	Parts name	Model no.
1	Coil assembly	4GR- Electric wire Connection - * - COIL - Voltage

Blank: Standard
 A: Ozone specifications
 S: Surgeless Note 1
 E: Low heat and energy saving circuit Note 1, Note 2
 E*: E type connector type
 E*J: Socket with cover type
 B*: DIN terminal box type
 Blank : Grommet lead wire
 B includes the DIN terminal box

Note 1 Only the E2* type, E2* J type connector and 12/24 VDC are supported. In addition, the surgeless "S" and low heat energy-saving circuit "E" cannot be selected at the same time.

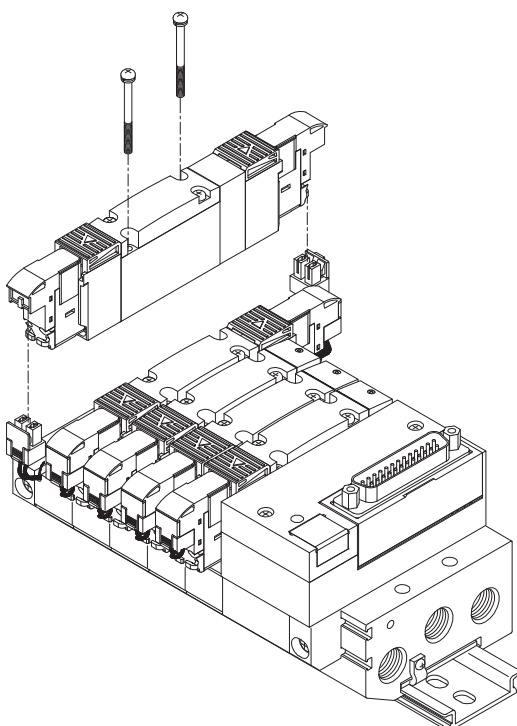
Note 2 This is surgeless specifications.

Coil parts

Part model no.
4GR-COIL-GASKET
4GR-COIL-SET-SCREW

Note) There is no compatibility between the DIN terminal box type and other coil assemblies.

(9) Lead wire related parts



socket assembly

No.	Parts name	Model no.
2	E type connector socket assembly	4GR-SOCKET-ASSY-E** - Voltage
3	Socket assembly with cover	4GR-SOCKET-ASSY-E**J
4	DIN terminal box assembly	4GR-TERMINAL-BOX - Voltage

Socket set

Part model no.
4GR-SOCKET-SET

A type connector socket assembly

Part model no.
4G[*1]R-SOCKET-ASSY-A[*2][*3]-[*4]

- *1 Series flow rate size
- *2 Blank: Left side, R: Right side
- *3 A: aSOL side, B: bSOL side
- *4 Row no.

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

M4GA1 to 3/M4GB1 to 3 Series

How to prepare metal base M4G series manifold specifications sheet

● Manifold model no. (example)

M 4 G^A_B 1 8 0R- CX - T30 - 9 - 3

Type of solenoid valve Valve Position Port size Electrical connections Terminal connector pin array Station no. Voltage

Cautions for fitting mix CX

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

Available cartridge fitting

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

* A/B port fitting mix with the body piping type is not supported. The 4G1 C8 and 4G2 C10 are corresponding to built-to-order manufacturing only for the base piping type. The fitting mix CX corresponds only to a combination of the C8 and X (plug) for the 4G1 and C10 and X (plug) for the 4G2.

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

Indicate "X" for a plug

Indicate "CX" when changing the fitting combination

Using the base piping type M4GB*10 as a 3 port valve

This can be used as the N.O./N.C. type by attaching a plug cartridge on one side of the A/B port. Indicate "X" in the fitting CX column.

Switching method	Plug mounting port
N.C. (normally closed)	B
N.O. (normally open)	A

When selecting female thread specifications, indicate the required number of plugs in the "Thread plug" column at the end.

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

Elbow type specifications

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

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

There are manifold specifications for each model. Fill out the applicable specifications.

- Individual wiring...M4G^A_B1 (page 200), M4G^A_B2 (page 201), M4G^A_B3 (page 203)
- Reduced wiring
 - Common terminal block (T1*), D sub-connector (T30): M4G^A_B1 (page 203), M4G^A_B2 (page 204), M4G^A_B3 (page 205)
 - Flat cable connector (T5*): M4G^A_B1 (page 206), M4G^A_B2 (page 207), M4G^A_B3 (page 208)
 - Serial transmission (T6*): M4G^A_B1 (page 209), M4G^A_B2 (page 210), M4G^A_B3 (page 211)
 - Serial transmission (T8*): M4G^A_B1 (page 212), M4G^A_B2 (page 213), M4G^A_B3 (page 214)

Check if the tube remover (standard attached product) is not required.

A tube punching tool is not attached to the M4GB1* OR-C8.

Note 1: For mounting the silencer, check the dimensions in advance.

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

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GDIE
M4GDIE
MN4GDIE
Technical data
Safety precautions
Manifold Specifications

M4GA1 to 3/M4GB1 to 3 Series

How to fill out wiring specifications form

This is not required for standard wiring and double wiring.

● Wiring specifications (example)

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

Connector pin no.		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			a														
3	5				a													
16	6					a												
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)																		

*: When T50 type wiring is used, the COM polarity is + (plus).
 *: When T50 wiring is used, connector pin no. 9, 10, 19, and 20 cannot be specified because they are used for the external input power supply.
 *: Wiring is sequential from connector pin no. 1 in standard wiring. Contact CKD for the special wiring order.

Cautions for reserved wiring

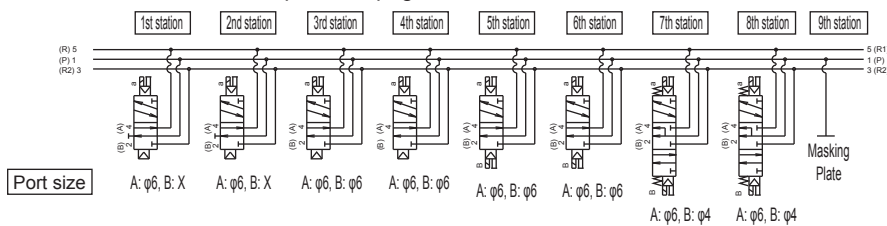
(1) Reserved wire(s) is/are provided on the masking plate for the reduced wiring manifold. (refer to page 188)
 The number of reserved wires can be specified by selecting the masking plate in specifications.

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

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

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

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



* The manifold station no. is set in order from left with the piping port facing forward.

4GAB

M4GA/B

MN4GA/B

4GAB Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

M4G1 individual wiring

M4G_B^A1 manifold specifications

Date of issue / /

Your company name

Contact

Order no.

● Contact ● Quantity set(s) ● Delivery date month day

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

● Manifold model no.

M **G_B^A1** **0R-** - - - -

Type of solenoid valve Valve Position Port size Electrical connections Other options Mount type 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: <input type="text"/> 1 <input type="text"/> 9R-																																			
4G: <input type="text"/> 1 <input type="text"/> 9R-																																			
4G: <input type="text"/> 1 <input type="text"/> 9R-																																			
4G: <input type="text"/> 1 <input type="text"/> 9R-																																			
3G: <input type="text"/> 1 <input type="text"/> 9R-																																			
3G: <input type="text"/> 1 <input type="text"/> 9R-																																			
Masking plate 4G1R-MP-																																			
Air supply spacer 4G1R-P-																																			
In stop valve spacer 4G1R-IS																																			
Exhaust spacer 4G1R-R-																																			
Mounting rail L _z = <input type="text"/> *Fill in the integral multiple of 12.5.	Attached Part	Blanking plug		Thread plug				Silencer																											
		PG-P2-B		GWP4-B		4G1R-M5P		SLW-6S		SLW-6A																									
		GWP6-B		GWP8-B																															
		Push-in fitting tube remover (standard)		Not required (check)																															

* A tube punching tool is not attached to the M4GB1 C8.

4GAB
 M4GAB
 MN4GAB
 4GAB
 Master valve
 4GD/E
 M4GD/E
 MN4GD/E
 Technical data
 Safety precautions
 Manifold Specifications

M4G2 individual wiring

M4G^A_B2 manifold specifications

Date of issue / /

Your company name _____

● Contact ● Quantity set(s) ● Delivery date month day

Slip No. _____ Order No. _____

Contact _____

Order no. _____

● Manifold model no.

M **G**^A_B**2** **OR-** - - - - - - **V**

Type of solenoid valve Valve Position Port size Electrical connections Other options Mount type 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 <input type="text"/> 2 <input type="text"/> 9R- <input type="text"/>																													
4G <input type="text"/> 2 <input type="text"/> 9R- <input type="text"/>																													
4G <input type="text"/> 2 <input type="text"/> 9R- <input type="text"/>																													
4G <input type="text"/> 2 <input type="text"/> 9R- <input type="text"/>																													
4G <input type="text"/> 2 <input type="text"/> 9R- <input type="text"/>																													
3G <input type="text"/> 2 <input type="text"/> 9R- <input type="text"/>																													
3G <input type="text"/> 2 <input type="text"/> 9R- <input type="text"/>																													
Masking plate 4G2R-MP-																													
Air supply spacer 4G2R-P-																													
In stop valve spacer 4G2R-IS																													
Exhaust spacer 4G2R-R																													
Spacer type pilot check valve 4G2R-PC-M*																													
Mounting Rail	L ₂ = <input type="text"/> *Fill in the integral multiple of 12.5.	Attached Part	Blanking plug						Thread plug						Silencer														
			GWP4-B						GWP6-B						4G2R-06P						SLW-8S						SLW-8A		
			GWP8-B						GWP10-B																				

* Available only for B type.

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4G3 individual wiring

M4G^A_B3 manifold specifications

Date of issue / /

Your company name _____

● Contact ● Quantity set(s) ● Delivery date month day

Contact _____

Slip No. _____ Order No. _____

Order no. _____

● Manifold model no.

M **G^A_B3** **OR-** - - - -

Type of solenoid valve Valve Position Port size Electrical connections Other options Mount type 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	:3	9R-																												
4G	:3	9R-																												
4G	:3	9R-																												
4G	:3	9R-																												
3GA3		9R-																												
3GA3		9R-																												
Masking plate 4G3R-MP-																														
Air supply spacer 4G3R-P-																														
In stop valve spacer 4G3R-IS																														
Exhaust spacer 4G3R-R-																														
Mounting Rail	L ₂ = <input type="text"/> <small>*Fill in the integral multiple of 12.5.</small>	Attached Part	Blanking plug					Thread plug			Silencer																			
			GWP6-B					GWP8-B			GWP10-B					4G3R-08P					SLW-10A					SLW-10L				

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety precautions

Manifold Specifications

M4G2 Reduced wiring

M4G^A_B 2-T1, 3 manifold specifications

Date of issue / /

Your company name

Contact

Order no.

● Contact ● Quantity set(s) ● Delivery date month day

Slip No. Order No.

● Manifold model no.

M **G^A_B 2** **OR-** - - - - -

Type of solenoid valve Valve Position Port size Reduced wiring Terminal connector pin array Option Mount type 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: 2 9R-																											
4G: 2 9R-																											
4G: 2 9R-																											
4G: 2 9R-																											
3G: 2 9R-																											
3G: 2 9R-																											
Masking plate 4G2R-MP (S)																											
Masking plate 4G2R-MP (D)																											
Air supply spacer 4G2R-P-																											
In stop valve spacer 4G2R-IS																											
Exhaust spacer 4G2R-R-																											
Spacer type pilot check valve 4G2R-PC-M*																											

Mounting rail	L2= <input type="text"/>	Accessories	Blanking plug				Thread plug		Silencer	
			GWP4-B	GWP6-B	GWP8-B	GWP10-B	4G2R-06P	SLW-8S	SLW-8A	
			Cable with D-sub connector				4GR-CABLE-D0*.*			

* Available only for B type.

● Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra 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																								
15	15	8																								
16	16	21																								
COM	17	9																								
COM	18	22																								
	19	10																								
	20	23																								
	21	11																								
	22	24																								
	23	12																								
	24	25																								
	COM	13 (COM)																								
	COM																									

4GAB
 M4GAB
 MN4GAB
 4GAB Master valve
 4GD/E
 M4GD/E
 MN4GD/E
 Technical data
 Safety precautions
 Manifold specifications

M4G3 Reduced wiring

M4G^A_B3-T1, 3 manifold specifications

Date of issue / /

Your company name

● Contact ● Quantity set(s) ● Delivery date month day

Contact

Slip No. Order No.

Order no.

● Manifold model no.

M **G^A_B3** **OR-** - - - -

Type of solenoid valve Valve Position Port size Reduced wiring Terminal connector pin array Option Mount type 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: 3 9R-																											
4G: 3 9R-																											
4G: 3 9R-																											
4G: 3 9R-																											
4G: 3 9R-																											
3GA3 9R-																											
3GA3 9R-																											
Masking plate 4G3R-MP (S) -																											
Masking plate 4G3R-MP (D) -																											
Air supply spacer 4G3R-P-																											
In stop valve spacer 4G3R-IS																											
Exhaust spacer 4G3R-R-																											
Mounting rail	L2 = <input type="text"/> *Fill in the integral multiple of 12.5.	Accessories	Blanking plug				Thread plug				Silencer																
			GWP6-B	GWP8-B	GWP10-B		4G3R-08P				SLW-10A				SLW-10L												
			Cable with D-sub connector				4GR-CABLE-D0*.*																				

● Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra 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																								
15	15	8																								
16	16	21																								
COM	17	9																								
COM	18	22																								
	19	10																								
	20	23																								
	21	11																								
	22	24																								
	23	12																								
	24	25																								
	COM	13 (COM)																								
	COM																									

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4G1 Reduced wiring

M4G^A_B 1-T5 manifold specification sheet

Date of issue / /

Your company name

Contact

Order no.

● Contact ● Quantity set(s) ● Delivery date month day

Slip No. Order No.

● Manifold model no.

M **G^A_B1** **OR-** - - - - -

Type of solenoid valve Valve Position Port size Reduced wiring Terminal connector pin array Option Mount type 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 1 9R-																											
4G 1 9R-																											
4G 1 9R-																											
4G 1 9R-																											
3G 1 9R-																											
3G 1 9R-																											
Masking plate 4G1R-MP (S) -																											
Masking plate 4G1R-MP (D) -																											
Air supply spacer 4G1R-P-																											
In stop valve spacer 4G1R-IS																											
Exhaust spacer 4G1R-R-																											
Mounting Rail	L _z = <input type="text"/> *Fill in the integral multiple of 12.5.	Attached Part	Blanking plug				Thread plug				Silencer																
			PG-P2-B				GWP4-B				4G1R-M5P				SLW-6S				SLW-6A								
			GWP6-B				GWP8-B																				
			Push-in fitting tube remover (standard)				Not required (check)																				

* A tube punching tool is not attached to the M4GB1 C8.

● Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra cables)

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

*: When T50 wiring is used, COM polarity will be + (plus).

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

4GAB
 M4GAB
 MN4GAB
 4GAB Master valve
 4GD/E
 M4GD/E
 MN4GD/E
 Technical data
 Safety precautions
 Manifold Specifications

M4G2 Reduced wiring

M4G^A_B 2-T5 manifold specification sheet

Date of issue / /

Your company name

● Contact ● Quantity set(s) ● Delivery date month day

Slip No. Order No.

Contact

Order no.

● Manifold model no.

M **G^A_B2** **0R-** - - - -

Type of solenoid valve Valve Position Port size Reduced wiring Terminal connector pin array Option Mount type 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 2 9R-																											
4G 2 9R-																											
4G 2 9R-																											
4G 2 9R-																											
3G 2 9R-																											
3G 2 9R-																											
Masking plate 4G2R-MP (S) -																											
Masking plate 4G2R-MP (D) -																											
Air supply spacer 4G2R-P-																											
In stop valve spacer 4G2R-IS																											
Exhaust spacer 4G2R-R-																											
Spacer type pilot check valve 4G2R-PC-M*																											
Mounting Rail	L ₂ = 	Attached Part	Blanking plug						Thread plug						Silencer												
			GWP4-B			GWP6-B			4G2R-06P			SLW-8S			SLW-8A												
			GWP8-B			GWP10-B																					

* Available only for B type.

● **Wiring specifications** (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra cables)

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

*: When T50 wiring is used, COM polarity will be + (plus).
 *: When T50 wiring is used, connector pin no. 9, 10, 19, and 20 cannot be specified because they are used for the external input power supply.

4GAB
M4GAB
MN4GAB
4GAB Master valve
4GD/E
M4GD/E
MN4GD/E
Technical data
Safety precautions
Manifold Specifications

M4G3 Reduced wiring

M4G^A_B 3-T5 manifold specification sheet

Date of issue / /

Your company name

Contact

Order no.

● Contact ● Quantity set(s) ● Delivery date month day

Slip No. Order No.

● Manifold model no.

M **G^A_B3** **OR-** - - -

Type of solenoid valve Valve Position Port size Reduced wiring Terminal connector pin array Option Mount type 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 <input type="text"/> 3 <input type="text"/> 9R- <input type="text"/>																													
4G <input type="text"/> 3 <input type="text"/> 9R- <input type="text"/>																													
4G <input type="text"/> 3 <input type="text"/> 9R- <input type="text"/>																													
4G <input type="text"/> 3 <input type="text"/> 9R- <input type="text"/>																													
3GA3 <input type="text"/>																													
3GA3 <input type="text"/>																													
Masking plate 4G3R-MP (S) - <input type="text"/>																													
Masking plate 4G3R-MP (D) - <input type="text"/>																													
Air supply spacer 4G3R-P- <input type="text"/>																													
In stop valve spacer 4G3R-IS <input type="text"/>																													
Exhaust spacer 4G3R-R- <input type="text"/>																													
Mounting Rail	L _z = <input type="text"/> <small>*Fill in the integral multiple of 12.5.</small>	Attached Part	Blanking plug			Thread plug			Silencer																				
			GWP6-B	GWP8-B	GWP10-B	4G3R-08P	SLW-10A	SLW-10L																					

● Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra cables)

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

*: When T50 wiring is used, COM polarity will be + (plus).
 *: When T50 wiring is used, connector pin no. 9, 10, 19, and 20 cannot be specified because they are used for the external input power supply.

M4G1 Serial transmission type

M4G^A_B 1-T6D Manifold specifications

Date of issue / /

Your company name

● Contact ● Quantity set(s) ● Delivery date month day

Slip No. Order No.

Contact

Order no.

● Manifold model no.

M **G^A_B1** **0R-** - **D-** - **3**

Type of solenoid valve Valve Position Port size Serial transmission Terminal and connector pin array 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	
4G	1	9R																	
4G	1	9R																	
4G	1	9R																	
4G	1	9R																	
4G	1	9R																	
3G	1	9R																	
3G	1	9R																	
Masking plate 4G1R-MP (S) -																			
Masking plate 4G1R-MP (D) -																			
Air supply spacer 4G1R-P-																			
In stop valve spacer 4G1R-IS																			
Exhaust spacer 4G1R-R-																			
Mounting Rail	L ₂ = <input type="text"/> <small>*Fill in the integral multiple of 12.5.</small>	Attached Part	Blanking plug				Thread plug				Silencer								
			PG-P2-B		GWP4-B		4G1R-M5P		SLW-6S		SLW-6A								
			GWP6-B		GWP8-B														
			Push-in fitting tube remover (standard) Not required (check)																

* A tube punching tool is not attached to the M4GB1 C8.

● Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra cables)

Connector pin no.	T6*	Installation position																
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
	1																	
	2																	
	3																	
T6A0: UNIWIRES SYSTEM 8 points	4																	
	5																	
T6A1: UNIWIRES SYSTEM 16 points	6																	
	7																	
T6C0: CompoBus/S 8 points	8																	
	9																	
T6C1: CompoBus/S 16 points	10 COM																	
	11																	
T6G1: CC-Link 16 points	12																	
	13																	
T6E0: S-LINK 8 points	14																	
	15																	
T6E1: S-LINK 16 points	16																	
	17																	
T6J0: UNIWIRES H SYSTEM 8 points	18																	
	19																	
T6J1: UNIWIRES H SYSTEM 16 points	20 COM																	

4GAB
 M4GA/B
 MN4GA/B
 4GAB Master valve
 4G/D/E
 M4G/D/E
 MN4G/D/E
 Technical data
 Safety precautions
 Manifold specifications

M4G2 Serial transmission type

M4G^A_B2-T6D Manifold specifications

Date of issue / /

Your company name

● Contact ● Quantity set(s) ● Delivery date month day

Contact

Slip No. Order No.

Order no.

● Manifold model no.

M **G^A_B2** **0R-** - **D** - - **3**

Type of solenoid valve Valve Position Port size Serial transmission Terminal and connector pin array 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			
4G	2	9R-																			
4G	2	9R-																			
4G	2	9R-																			
4G	2	9R-																			
3G	2	9R-																			
3G	2	9R-																			
Masking plate 4G2R-MP (S)																					
Masking plate 4G2R-MP (D)																					
Air supply spacer 4G2R-P-																					
In stop valve spacer 4G2R-IS																					
Exhaust spacer 4G2R-R-																					
Spacer type pilot check valve 4G2R-PC-M																					
Mounting Rail	L ₂ = <input type="text"/> <small>*Fill in the integral multiple of 12.5.</small>	Attached Part	Blanking plug				Thread plug				Silencer										
			GWP4-B		GWP6-B		4G2R-06P		SLW-8S		SLW-8A										
			GWP8-B		GWP10-B																

● Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra cables)

Connector pin no.		Installation position															
T6*		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1																
	2																
	3																
T6A0: UNIWIRE SYSTEM 8 points	4																
	5																
T6A1: UNIWIRE SYSTEM 16 points	6																
	7																
T6C0: CompoBus/S 8 points	8																
	9																
T6C1: CompoBus/S 16 points	10 COM																
T6G1: CC-Link 16 points	11																
	12																
T6E0: S-LINK 8 points	13																
	14																
T6E1: S-LINK 16 points	15																
	16																
T6J0: UNIWIRE H SYSTEM 8 points	17																
	18																
T6J1: UNIWIRE H SYSTEM 16 points	19																
	20 COM																

4GAB
 M4GAB
 MN4GAB
 4GAB Master valve
 4GD/E
 M4GD/E
 MN4GD/E
 Technical data
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M4G3 Serial transmission type

M4G^A_B3-T6D Manifold specifications

Date of issue / /

Your company name

● Contact ● Quantity set(s) ● Delivery date month day

Slip No. Order No.

Contact

Order no.

● Manifold model no.

M **G^A_B3** **OR-** - **D** - - **3**

Type of solenoid valve Valve Position Port size Serial transmission Terminal and connector pin array 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			
4G: 3 9R-																					
4G: 3 9R-																					
4G: 3 9R-																					
4G: 3 9R-																					
3GA3 9R-																					
3GA3 9R-																					
Masking plate 4G3R-MP (S) -																					
Masking plate 4G3R-MP (D) -																					
Air supply spacer 4G3R-P-																					
In stop valve spacer 4G3R-IS																					
Exhaust spacer 4G3R-R-																					
Mounting Rail L2 = <input type="text"/> *Fill in the integral multiple of 12.5.	Attached Part	Blanking plug						Thread plug				Silencer									
		GWP6-B	GWP8-B	GWP10-B	4G3R-08P	SLW-10A	SLW-10L														

● Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra cables)

Connector pin no. T6*	Installation position															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1																
2																
3																
4																
T6A0: UNIWIRESYSTEM 8 points																
5																
T6A1: UNIWIRESYSTEM 16 points																
6																
T6C0: CompoBus/S 8 points																
7																
8																
T6C1: CompoBus/S 16 points																
9																
T6G1: CC-Link 16 points																
10 COM																
T6E0: S-LINK 8 points																
11																
T6E1: S-LINK 16 points																
12																
13																
T6J0: UNIWIRESYSTEM H 8 points																
14																
T6J1: UNIWIRESYSTEM H 16 points																
15																
16																
17																
18																
19																
20 COM																

M4G2 Serial transmission type Thin type

M4G_B^A2-T8 manifold specification sheet

Date of issue / /

Your company name

● Contact ● Quantity set(s) ● Delivery date month day

Slip No. Order No.

Contact

Order no.

● Manifold model no.

M **G_B^A2** **OR-** - - - - - - - **3**

Type of solenoid valve Valve Position Port size Serial transmission Terminal and connector pin array Option Mount type 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	
4G	2	9R																					
4G	2	9R																					
4G	2	9R																					
4G	2	9R																					
4G	2	9R																					
3G	2	9R																					
3G	2	9R																					
Masking plate 4G2R-MP (S) -																							
Masking plate 4G2R-MP (D) -																							
Air supply spacer 4G2R-P-																							
In stop valve spacer 4G2R-IS																							
Exhaust spacer 4G2R-R-																							
Spacer type pilot check valve 4G2R-PC-M																							
Mounting Rail	L ₂ = <small>*Fill in the integral multiple of 12.5.</small>	Attached Part	Blanking plug				Thread plug				Silencer												
			GWP4-B		GWP6-B		4G2R-06P		SLW-8S		SLW-8A												
				GWP8-B		GWP10-B																	

● Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra cables)

Connector pin no.				Installation position																					
T8*				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20		
T8G1	CC-Link	NPN	16 points	1																					
			32 points	2																					
			16 points	3																					
				32 points	4																				
T8GP1	PROFIBUS-DP	NPN	16 points	5																					
			32 points	6																					
T8GP2	PROFIBUS-DP	PNP	16 points	7																					
			32 points	8																					
T8P1	PROFIBUS-DP	NPN	16 points	9																					
			32 points	10																					
T8P2	PROFIBUS-DP	PNP	16 points	11																					
			32 points	12																					
T8PP1	PROFIBUS-DP	NPN	16 points	13																					
			32 points	14																					
T8PP2	PROFIBUS-DP	PNP	16 points	15																					
			32 points	16																					
T8EC1	EtherCAT	NPN	16 points	17																					
			32 points	18																					
T8EC2	EtherCAT	PNP	16 points	19																					
			32 points	20																					
T8ECP1	EtherCAT	NPN	16 points	21																					
			32 points	22																					
T8ECP2	EtherCAT	PNP	16 points	23																					
			32 points	24																					
T8EN1	EtherNet/IP	NPN	16 points	25																					
			32 points	26																					
T8EN2	EtherNet/IP	PNP	16 points	27																					
			32 points	28																					
T8ENP1	EtherNet/IP	NPN	16 points	29																					
			32 points	30																					
T8ENP2	EtherNet/IP	PNP	16 points	31																					
			32 points	32																					

4GAB

M4GA/B

MN4GA/B

4GAB
Master valve

4GD/E

M4GD/E

MN4GD/E

Technical data

Safety
precautions

Manifold
Specifications

M4G3 Serial transmission type Thin type

M4G^A_B3-T8 manifold specification sheet

Date of issue / /

Your company name

Contact Quantity set(s) Delivery date month day
 Slip No. _____ Order No. _____

Contact _____
 Order no. _____

Manifold model no.
M **G^A_B3** **OR-** - - **3**
 Type of solenoid valve Valve Position Port size Serial transmission Terminal and connector pin array Option Mount type 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			
4G	3	9R-																					
4G	3	9R-																					
4G	3	9R-																					
4G	3	9R-																					
3GA3		9R-																					
3GA3		9R-																					
Masking plate 4G3R-MP (S) -																							
Masking plate 4G3R-MP (D) -																							
Air supply spacer 4G3R-P-																							
In stop valve spacer 4G3R-IS																							
Exhaust spacer 4G3R-R-																							
Mounting Rail	L ₂ = <input type="text"/>	Attached Part	Blanking plug				Thread plug				Silencer												
			GWP6-B	GWP8-B	GWP10-B	4G3R-08P	SLW-10A	SLW-10L															

Wiring specifications (This is not required for standard wiring and double wiring. Complete these specifications when designating the wiring sequence and extra cables)

Connector pin no.				Installation position																
T8*				1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	
T8G1	CC-Link	NPN	16 points	1																
			32 points	2																
T8G2			16 points	3																
			32 points	4																
T8GP1			16 points	5																
			32 points	6																
T8GP2			16 points	7																
			32 points	8																
T8P1	PROFIBUS-DP	NPN	16 points	9																
			32 points	10																
T8P2			16 points	11																
			32 points	12																
T8PP1			16 points	13																
			32 points	14																
T8PP2			16 points	15																
			32 points	16																
T8EC1	EtherCAT	NPN	16 points	17																
			32 points	18																
T8EC2			16 points	19																
			32 points	20																
T8ECP1			16 points	21																
			32 points	22																
T8ECP2			16 points	23																
			32 points	24																
T8EN1	EtherNet/IP	NPN	16 points	25																
			32 points	26																
T8EN2			16 points	27																
			32 points	28																
T8ENP1			16 points	29																
			32 points	30																
T8ENP2			16 points	31																
			32 points	32																