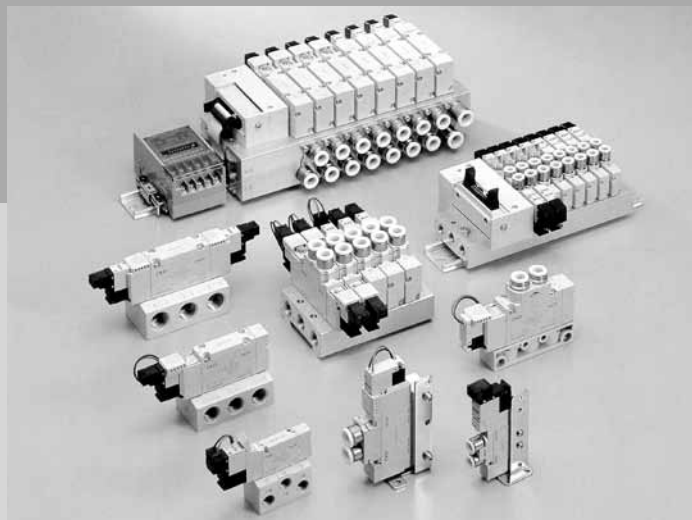


4GA1 to 3/4GB1 to 3

3, 5 port pilot operated valve

Metal base



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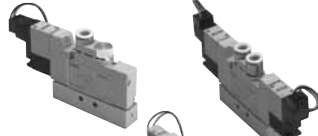
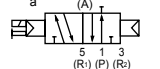
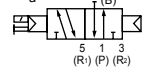
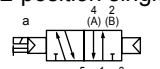
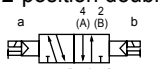
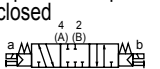
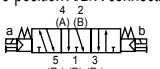
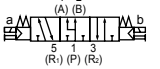
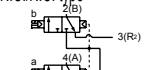
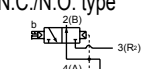
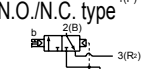
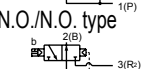
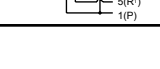

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

Series variation

4GA1 to 3/4GB1 to 3 Series

* Refer to page 299 for a block manifold.
* Refer to page 407 for a master valve.

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

	Appearance	Model no.	Position Number of solenoid valves JIS symbol	Valve performance		Voltage (v)							
				Flow rate characteristics C (dm ³ /(s·bar)) Note 1	Applicable cylinder diameter (φ)								
Discrete	 3GA110-E* 4GA120-E*	Body piping	3 port	● 3 port valve 2-position single N.C. type 	0.66 to 0.70 2.2 to 2.7	20 to 40 40 to 80	AC100 Note 2 DC24 DC12 Note 2. Grommet lead wire specifications are only for 24/12 VDC.						
			Base piping	5 port	2-position single N.O. type 	0.66 to 0.70 2.4 to 2.7		20 to 40 40 to 80					
				5 port	● 5 port valve 2-position single 	3.2 to 4.0 1.0 to 1.3		63 to 100 20 to 40					
					Individual wiring manifold (metal base)	Body piping		Direct mount type		0.66 to 1.0 1.7 to 2.5	20 to 40 40 to 80	AC100 Note 2 DC24 DC12 Note 2. Grommet lead wire specifications are only for 24/12 VDC.	
									DIN rail mount type (-D)		0.66 to 1.0 1.7 to 2.5		20 to 40 40 to 80
										Base piping	Direct mount type		
	DIN rail mount type (-D)					2.6 to 3.3 1.6 to 2.4	63 to 100 40 to 80						
		Reduced wiring manifold (metal base)	Body piping			Direct mount type		2.6 to 3.3 0.66 to 1.0	63 to 100 20 to 40				DC24 DC12 DC24 DC24 DC24 DC24
				DIN rail mount type			Common terminal block (-T1*) D sub-connector (-T30) Flat cable connector (-T5*)		2.5 to 3.3 0.66 to 1.0	63 to 100 20 to 40			
	Base piping				DIN rail mount type			Common terminal block (-T1*) D sub-connector (-T30) Flat cable connector (-T5*)		1.7 to 2.5 0.66 to 1.0	40 to 80 20 to 40		
		DIN rail mount type	Common terminal block (-T1*) D sub-connector (-T30) Flat cable connector (-T5*)						2.5 to 3.3 0.67 to 1.0	63 to 100 20 to 40			
				DIN rail mount type		Common terminal block (-T1*) D sub-connector (-T30) Flat cable connector (-T5*)			2.6 to 3.3 1.6 to 2.4	63 to 100 40 to 80			
Serial transmission (-T6*D)					0.67 to 1.0 1.6 to 2.4		20 to 40 40 to 80						
	Serial transmission (-T6*D)		0.67 to 1.0 2.6 to 3.3		20 to 40 63 to 100								

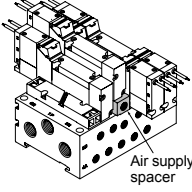
4GA1 to 3/4GB1 to 3 Series

	Electrical connections				Manual operating device	Other options
	Discrete valve/individual wiring manifold		Reduced wiring manifold			
4GA/B	Blank Grommet lead wire 	E3 E type connector with socket/terminal	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
4GA4/B4	● Lead wire length 300 mm 				(standard) 	 Provided as standard for pilot exhaust
MN4GA/B	Blank Grommet lead wire 	E3 E type connector with socket/terminal	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
4GA/B (Master)	● Lead wire length 300 mm 				(standard) 	 Provided as standard for pilot exhaust
MN3E MN4E	Blank Grommet lead wire 	E3 E type connector with socket/terminal	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
W4GA/B2	● Lead wire length 300 mm 				(standard) 	 Provided as standard for pilot exhaust
W4GB4	Blank Grommet lead wire 	E3 E type connector with socket/terminal	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
4TB	● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm 	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)	Blank Non-locking/locking common type	P Mounting plate
4L2-4/LMF0	● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm 	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)	Blank Non-locking/locking common type	P Mounting plate
MN3S0 MN4S0	Blank Grommet lead wire 	E3 E type connector with socket/terminal	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
4SA/B0	● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm 	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)	Blank Non-locking/locking common type	H With check valve
4KA/B	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) 	T6*0 Serial transmission type (8 points) 	(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 OFF	K External pilot
4KA/B (Master)	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) 	T6*0 Serial transmission type (8 points) 	(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 OFF	K External pilot
4F	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) 	T6*0 Serial transmission type (8 points) 	(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 OFF	K External pilot
4F (Master)	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) 	T6*0 Serial transmission type (8 points) 	(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 OFF	K External pilot
PV5G GMF	E1 E type connector with socket/terminal	B DIN terminal box 	T30R D sub-connector type (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	A Ozone/cutting oil proof
PV5 GMF	E1 E type connector with socket/terminal	B DIN terminal box 	T30R D sub-connector type (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	A Ozone/cutting oil proof
PV5S-0	E1 E type connector with socket/terminal	B DIN terminal box 	T30R D sub-connector type (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	A Ozone/cutting oil proof
3QR 3QB	E2 E type connector	E0*J EJ type connector	T50 Flat cable power supply with terminal (left side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	A Ozone/cutting oil proof
3MA/B0	E2 E type connector	E0*J EJ type connector	T50 Flat cable power supply with terminal (left side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	A Ozone/cutting oil proof
3PA/B	E2 E type connector	E0*J EJ type connector	T50 Flat cable power supply with terminal (left side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	A Ozone/cutting oil proof
P/M/B	E2 E type connector	E0*J EJ type connector	T50 Flat cable power supply with terminal (left side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	A Ozone/cutting oil proof
NP/NAP NVP	E2 E type connector	E0*J EJ type connector	T50 Flat cable power supply with terminal (left side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	A Ozone/cutting oil proof
4F*0E	● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm 	E0*J EJ type connector	T50 Flat cable power supply with terminal (left side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated
HMV HSV	● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm 	E0*J EJ type connector	T50 Flat cable power supply with terminal (left side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated
2QV 3QV	E2N E type connector without socket	E2*J EJ type connector	T50R Flat cable power supply with terminal (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated
SKH	E2N E type connector without socket	E2*J EJ type connector	T50R Flat cable power supply with terminal (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated
PCD	E2N E type connector without socket	E2*J EJ type connector	T50R Flat cable power supply with terminal (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated
Silencer	E2N E type connector without socket	E2*J EJ type connector	T50R Flat cable power supply with terminal (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated
Total air system	E2N E type connector without socket	E2*J EJ type connector	T50R Flat cable power supply with terminal (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated
Total air system (Gamma)	E2N E type connector without socket	E2*J EJ type connector	T50R Flat cable power supply with terminal (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated
Ending	E2N E type connector without socket	E2*J EJ type connector	T50R Flat cable power supply with terminal (right side) 	T6*1 Serial transmission type (16 points) 	M Non-locking 	F A/B port filter integrated

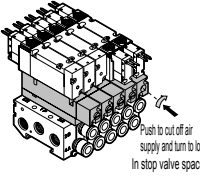
Electric connection circuit diagram

Other options

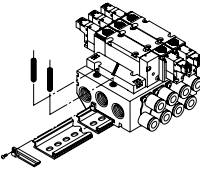
Z1 Air supply spacer

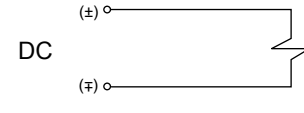
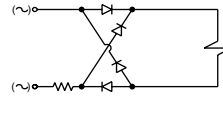
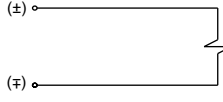
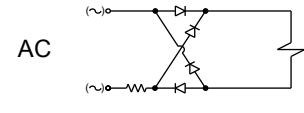
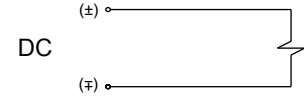
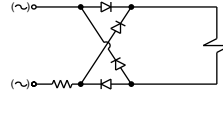
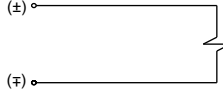
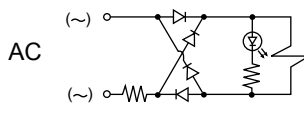
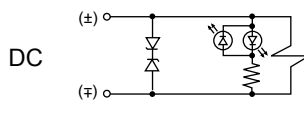
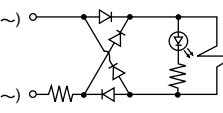
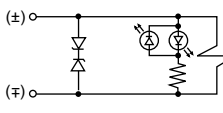
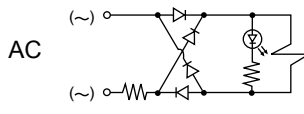
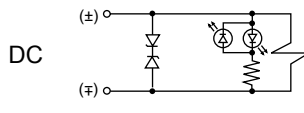
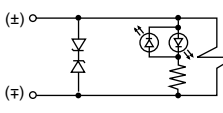
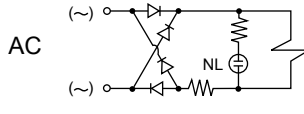
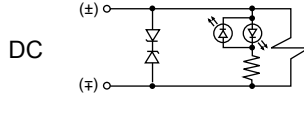


Z2 In stop valve spacer



D DIN rail mount



Electrical connections (wiring method)		(B): Without lead wire (W): With lead wire (L): With light (S): With surge suppressor (N): Without socket	
Blank (W)	Grommet lead wire	E0 E0*J (W)	E type connector/EJ type connector
	DC 		AC  DC 
E0N (N)	E type connector	E1 (B)	E type connector
	AC  DC 		AC  DC 
E2 E2*J (W L S)	E type connector/EJ type connector	E2N (L S N)	E type connector
	AC  DC 		AC  DC 
E3 (B L S)	E type connector	A2N (L S N)	A type connector
	AC  DC 		DC 
B (W L S)	DIN terminal box	*Zener diode is used for a surge suppressor.	
	AC  DC 		

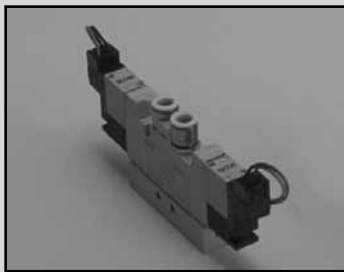
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

Discontinue

Discrete valve body piping

3GA1, 2, 3/4GA1, 2, 3 Series

● Applicable cylinder bore size: ϕ 20 to ϕ 100

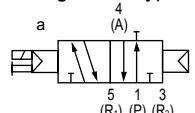


Refer to Ending for details.

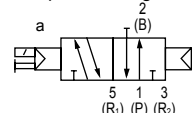


JIS symbol

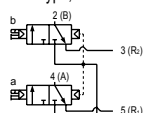
● 3 port valve 2-position single N.C. type



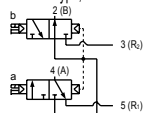
2-position single N.O. type



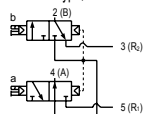
● Dual 3 port valve integrated type (A side valve: N.C. type, B side valve: N.C. type)



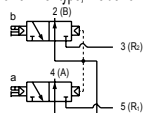
(A side valve: N.C. type, B side valve: N.O. type)



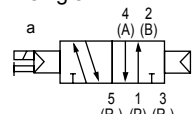
(A side valve: N.O. type, B side valve: N.C. type)



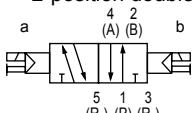
(A side valve: N.O. type, B side valve: N.O. type)



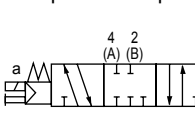
● 5 port valve 2-position single



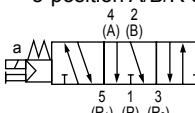
2-position double



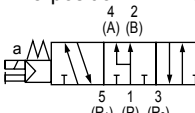
3-position all ports closed



3-position A/B/R connection



3-position P/A/B connection



Common specifications

Descriptions	
Valve type and operation	Pilot operated type 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 fixing.

Electrical specification

Descriptions	Rated	
	DC	12, 24
voltage V	AC	100
Voltage fluctuation range	±10%	
Holding current Note 3 A	24 VDC	0.023 (0.025)
	12 VDC	0.046 (0.050)
	100 VAC	0.010 (0.012)
Power consumption	24 VDC	0.55 (0.6)
Note 3 W	12 VDC	0.55 (0.6)
Apparent power VA	100 VAC	1.0 (1.2)
Thermal class	B	
Temperature rise °C	50	
Surge suppressor	Option	
Indicator	Light (option)	

Note 3 Values in () apply when a light is attached.

Individual specifications

Descriptions	3GA1	3GA2	3GA3	4GA1	4GA2	4GA3	
Port size	A/B port	Barbed fitting ϕ 1.8 push-in fitting ϕ 1.8 ϕ 4 ϕ 6 M5	Push-in fitting ϕ 4 ϕ 6 ϕ 8 Rc1/8	Push-in fitting ϕ 6 ϕ 8 ϕ 10 Rc1/4	Barbed fitting ϕ 1.8 push-in fitting ϕ 1.8 ϕ 4 ϕ 6 M5	Push-in fitting ϕ 4 ϕ 6 ϕ 8 Rc1/8	Push-in fitting ϕ 6 ϕ 8 ϕ 10 Rc1/4
	P/R1/R2 port	M5	Rc1/8	Rc1/4	M5	Rc1/8	Rc1/4

G and NPT threads are available for piping port. Contact CKD for details.

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													
	2-position Single		12	12	19	19	25	28	12	12	19	19	25	28
	2-position 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	58 (44)	115 (85)	162 (120)	58 (44)	120 (90)	171 (129)
			E type connector	60 (46)	117 (87)	164 (122)	60 (46)	122 (92)	173 (131)
			DIN terminal box	-	137 (107)	184 (142)	-	142 (112)	193 (151)
		Double	Grommet lead wire	-	-	-	73 (59)	135 (105)	187 (141)
			E type connector	-	-	-	77 (63)	139 (109)	191 (145)
			DIN terminal box	-	-	-	-	179 (149)	231 (185)
	3-position	All ports closed	Grommet lead wire	-	-	-	75 (61)	147 (117)	196 (154)
			E type connector	-	-	-	79 (65)	151 (121)	200 (158)
			DIN terminal box	-	-	-	-	191 (161)	240 (198)

• 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.

Flow characteristics

Model no.	Solenoid position	P→A/B		A/B→R1/R2		
		C [dm ³ / (s·bar)]	b	C [dm ³ / (s·bar)]	b	
3GA1	2-position	1.2	0.47	0.70	0.39	
	Dual 3 port valve integrated type	0.98	0.45	0.66	0.38	
3GA2	2-position	2.4	0.33	2.7	0.28	
	Dual 3 port valve integrated type	1.8	0.29	2.2	0.34	
3GA3	2-position	3.4	0.29	3.9	0.27	
4GA1	2-position	1.2	0.47	0.70	0.39	
	3-position	All ports closed	1.1	0.39	0.66	0.29
		ABR connection	1.1	0.33	0.68	0.31
		PAB connection	1.3	0.61	0.67	0.43
4GA2	2-position	2.4	0.33	2.7	0.28	
	3-position	All ports closed	2.2	0.28	2.4	0.27
		ABR connection	2.3	0.26	2.7	0.32
		PAB connection	2.5	0.38	2.4	0.33
4GA3	2-position	3.4	0.29	3.9	0.27	
	3-position	All ports closed	3.1	0.27	3.2	0.32
		ABR connection	3.1	0.33	4.0	0.25
		PAB connection	3.5	0.43	3.3	0.39

Note 1: Effective cross-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 12.

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

- 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**

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

3GA1, 2, 3/4GA1, 2, 3 Series

Discrete valve; body piping

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

How to order

4GA1 1 0 - C6 - E2 - 1

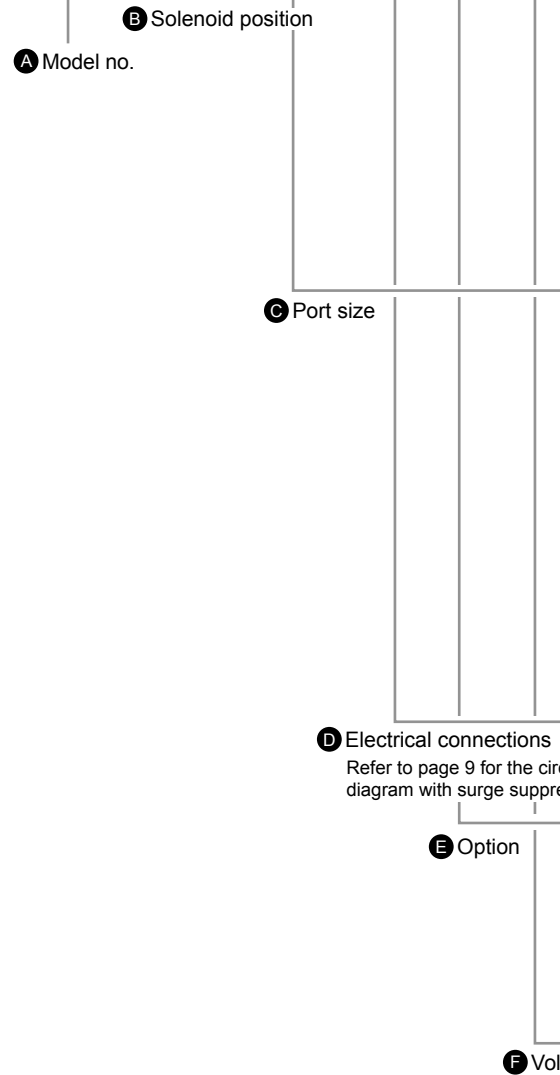
3GA1 1 0 - C6 - E2 - 1

Discrete valve for mounting base

4GA1 1 9 - C6 - E2 H - 3

Discrete 3 port valve for mounting base

3GA1 1 9 - C6 - E2 H - 3



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

Symbol	Descriptions	3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Solenoid 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 2	●	●				
67	Dual 3 port valve integrated type Note 2	A side valve: Normally closed					
		B side valve: Normally closed					
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	A/B port	P/R1/R2 port (1) = M5 (2) = Rc1/8 (3) = Rc1/4					
C18	φ 1.8 push-in fitting for fiber tube (applicable tube UP-9402-**)	(1)			(1)		
C4	φ 4 push-in fitting	(1)	(2)		(1)	(2)	
C6	φ 6 push-in fitting	(1)	(2)	(3)	(1)	(2)	(3)
C8	φ 8 push-in fitting		(2)	(3)		(2)	(3)
C10	φ 10 push-in fitting			(3)			(3)
CF	φ 1.8 barbed fitting for fiber tube (applicable tube UP-9102-**)	(1)			(1)		
M5	M5	(1)			(1)		
06	Rc1/8		(2)			(2)	
08	Rc1/4			(3)			(3)
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 3)	●	●	●	●	●	●
P	Mounting plate (Note 4)	●	●	●	●	●	●
A	Ozone/Cutting oil proof	●	●	●	●	●	●
F	P/A/B port filter integrated	●	●	●	●	●	●
F Voltage							
1	100 VAC (rectifier integrated)	●	●	●	●	●	●
3	24 VDC	●	●	●	●	●	●
4	12 VDC	●	●	●	●	●	●

is not available.

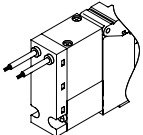
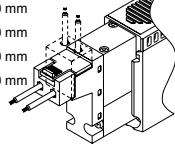
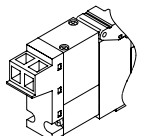
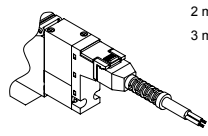
⚠ Note on model no. selection

- 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 3-position all ports closed and PAB connection are not provided with check valve. Refer to page 439 for details on check valve.
- Note 4 Installation is not possible when using the double solenoid with a DIN terminal or 100 VAC.

(Electrical connection list)

		A model no.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
D Electrical connections							
Blank	Grommet lead wire (300 mm)	Note 5	●	●	●	●	●
B	DIN terminal box (Pg7)	with surge suppressor/light	●	●	●	●	●
E type connector (upward/lateral direction common)							
E0	Lead wire (300 mm)		●	●	●	●	●
E00	Lead wire (500 mm)		●	●	●	●	●
E01	Lead wire (1000 mm)		●	●	●	●	●
E02	Lead wire (2000 mm)		●	●	●	●	●
E03	Lead wire (3000 mm)		●	●	●	●	●
E2	Lead wire (300 mm)	with surge suppressor/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	●	●	●	●	●
E0N	Without lead wire (without socket)		●	●	●	●	●
E2N	Without lead wire (without socket)	with surge suppressor/light	●	●	●	●	●
E3	Without lead wire (with socket/terminal)	with surge suppressor/light	●	●	●	●	●
E1	Without lead wire (with socket/terminal)		●	●	●	●	●
EJ type connector (socket with cover, upward/lateral direction common)							
E01J	Lead wire (1000 mm)		●	●	●	●	●
E02J	Lead wire (2000 mm)		●	●	●	●	●
E03J	Lead wire (3000 mm)		●	●	●	●	●
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 5 Grommet lead wire specifications are available only for 24 and 12 VDC.

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

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

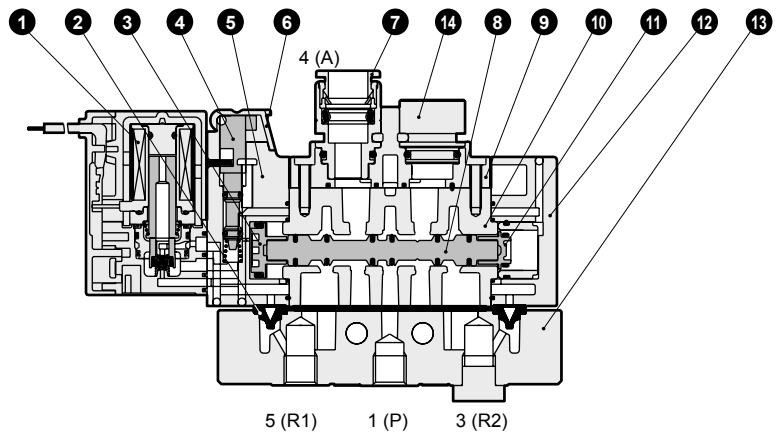
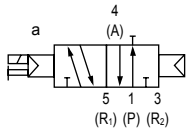
3GA1 Series

Discrete valve; body piping

Internal structure and parts list

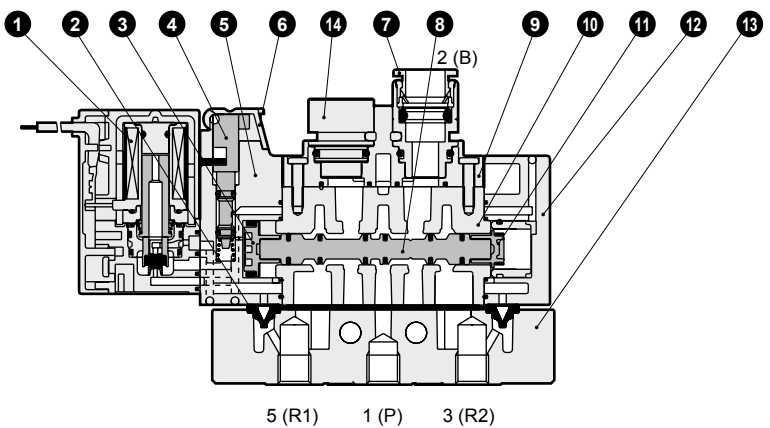
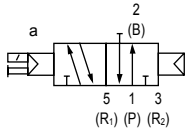
3GA110-C*

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



3GA1110-C*

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

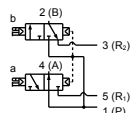
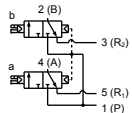


3GA110-C*

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

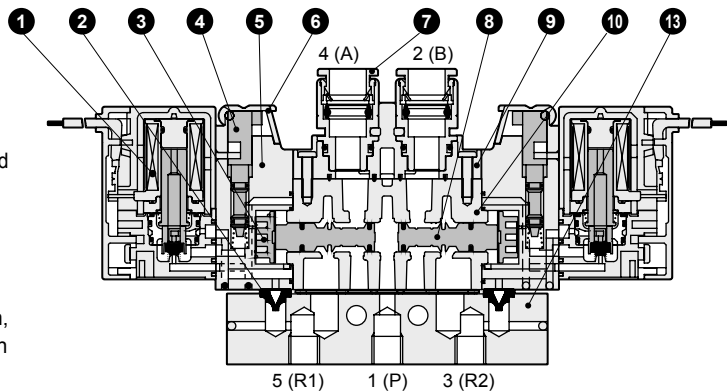
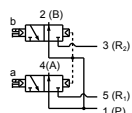
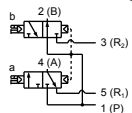
A side valve: Normally closed,
B side valve: Normally closed

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
3	Piston D assembly	-
4	Manual operating device	Resin
5	Piston room	Resin
6	Manual protection cover	Resin
7	Cartridge type push-in fitting or barbed fitting	-
8	Spool assembly	-
9	Fitting adaptor	Resin
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adaptor	Aluminum alloy die-casting
14	Plug cartridge	Aluminum

Parts list

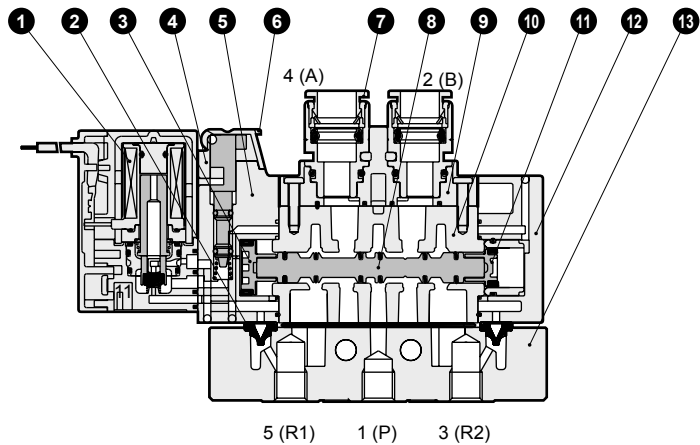
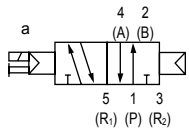
No.	Parts name	Model no.
1	Coil assembly	4G - [Electrical connections] - * - COIL - [Voltage]
7	Cartridge type push-in fitting and related parts	φ 1.8 straight type 4G1-JOINT-C18
7		φ 1.8 barbed type 4G1-JOINT-CF
7		φ 4 straight type 4G1-JOINT-C4
7		φ 6 straight type 4G1-JOINT-C6
	Plug cartridge	4G1-JOINT-CPG

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

Internal structure and parts list

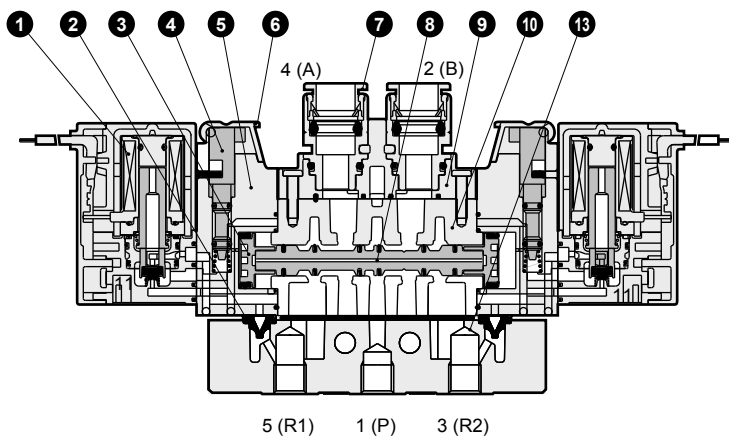
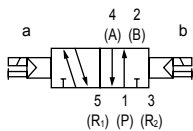
4GA110-C*

● 2-position single grommet lead wire (blank)



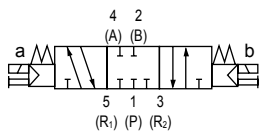
4GA120-C*

● 2-position double grommet lead wire (blank)

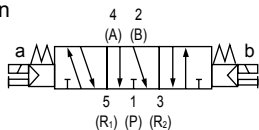


4GA1³/₅0-C*

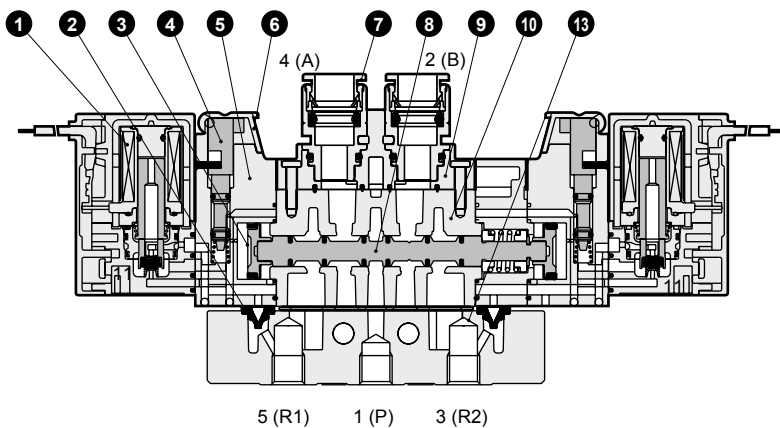
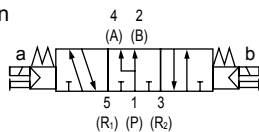
● 3-position grommet lead wire (blank) all ports closed



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	Resin
5	Piston room	Resin
6	Manual protection cover	Resin
7	Cartridge type push-in fitting or barbed fitting	-
8	Spool assembly	-
9	Fitting adaptor	Resin
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adaptor	Aluminum alloy die-casting
14	Plug cartridge	Aluminum

Parts list

No.	Parts name	Model no.
1	Coil assembly	4G - [Electrical connections] - * - COIL - [Voltage]
7	Cartridge type push-in fitting and related parts	φ 1.8 straight type 4G1-JOINT-C18
		φ 1.8 barbed type 4G1-JOINT-CF
		φ 4 straight type 4G1-JOINT-C4
		φ 6 straight type 4G1-JOINT-C6
		Plug cartridge 4G1-JOINT-CPG

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

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

3GA2/3 Series

Discrete valve; body piping

4GA/
B

Internal structure and parts list

M4GA/
B

3GA210/3GA310-C*

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

4GA4/
B4

MN4GA/
B

4GA/B
(Master)

MN3E
MN4E

W4GA/
B2

W4GB4

4TB

4L2-4/
LMF0

MN3S0
MN4S0

4SA/
B0

4KA/
B

4KA/B
(Master)

4F

4F
(Master)

PV5G
GMF

PV5
GMF

PV5S-
0

3QR
3QB

3MA/
B0

3PA/
B

P/M/B

NP/NAP
NVP

4F*0E

HMV
HSV

2QV
3QV

SKH

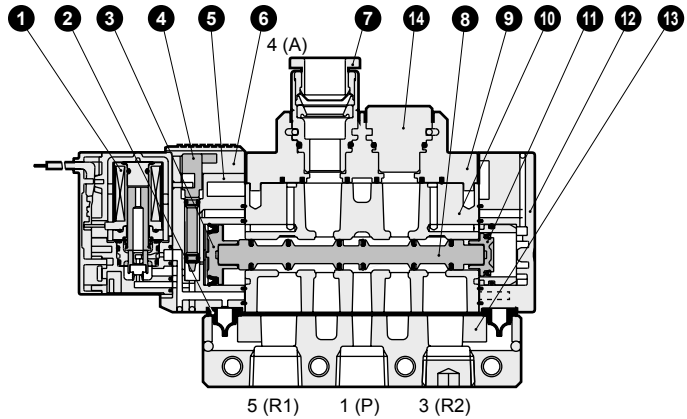
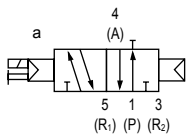
PCD

Silencer

Total air
system

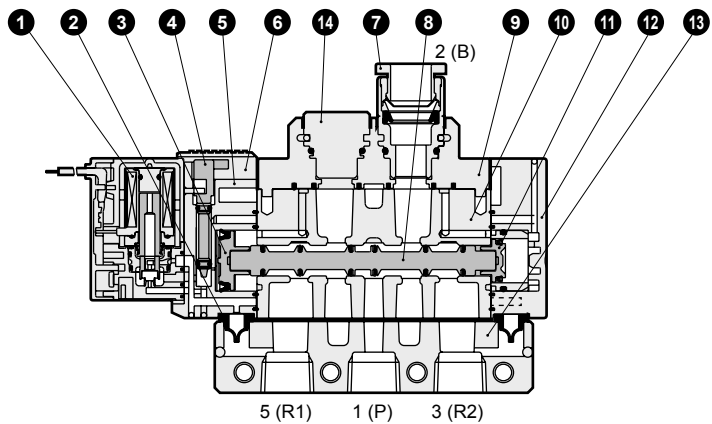
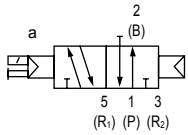
Total air system
(Gamma)

Ending



3GA2110/3GA3110-C*

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

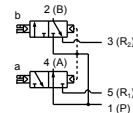
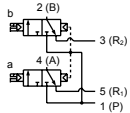


3GA2⁶⁶₆₇⁷⁶₇₇ 0-C*

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

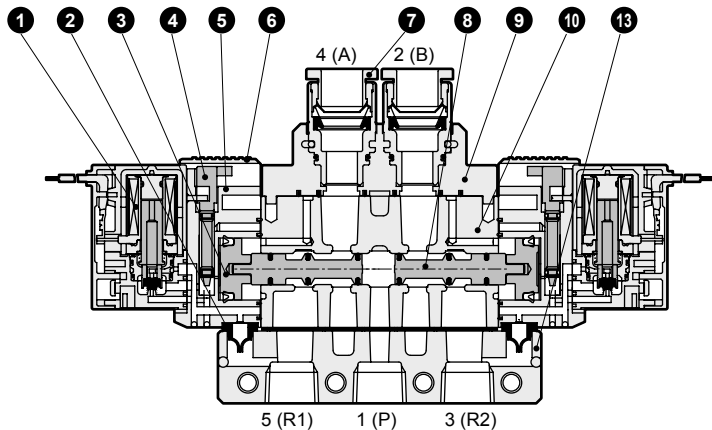
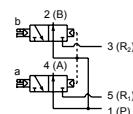
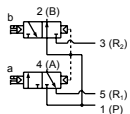
A side valve: Normally closed,
B side valve: Normally closed

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
3	Piston assembly	-
4	Manual operating device	Resin
5	Piston room	Resin
6	Manual protection cover	Resin
7	Cartridge type push-in fitting	-
8	Spool assembly	-
9	Fitting adaptor	Resin
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adaptor	Aluminum alloy die-casting
14	Plug cartridge	Aluminum

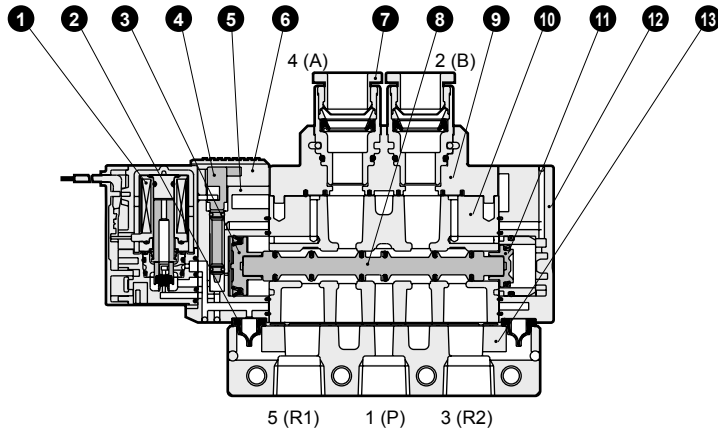
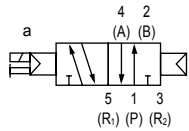
Parts list

No.	Parts name	Model no.	
1	Coil assembly	4G - [Electrical connections] - * - COIL - [Voltage] Blank: Standard A: Ozone specifications Blank: Grommet lead wire	
7	Cartridge type push-in fitting and related parts	3G2	
		φ 4 straight type	4G2-JOINT-C4
		φ 6 straight type	4G2-JOINT-C6
		φ 8 straight type	4G2-JOINT-C8
3G3	Cartridge type push-in fitting and related parts	Plug cartridge	4G2-JOINT-CPG
		φ 6 straight type	4G3-JOINT-C6
		φ 8 straight type	4G3-JOINT-C8
		φ 10 straight type	4G3-JOINT-C10
	Plug cartridge	4G3-JOINT-CPG	

Internal structure and parts list

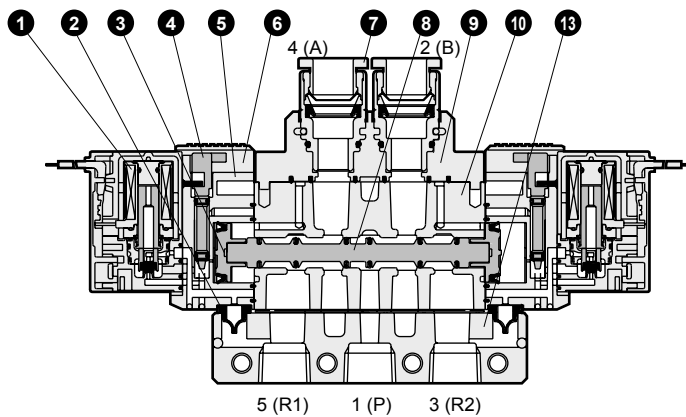
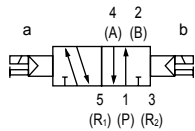
4GA210/4GA310-C*

● 2-position single grommet lead wire (blank)



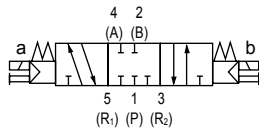
4GA220/4GA320-C*

● 2-position double grommet lead wire (blank)

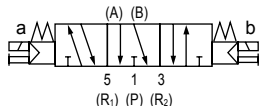


4GA2^{3/4}0/4GA3^{3/4}0-C*

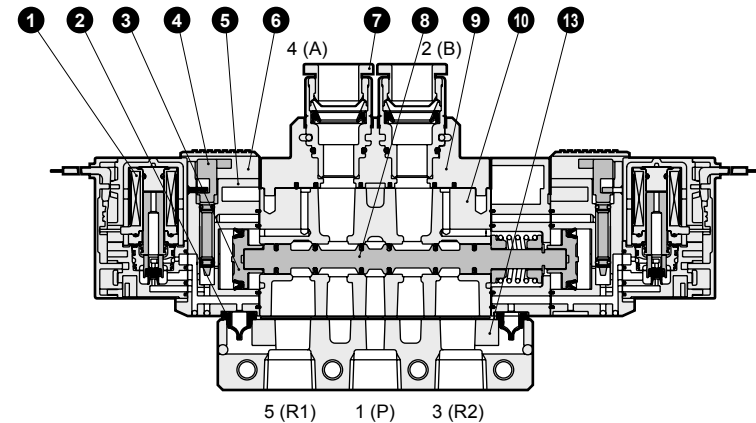
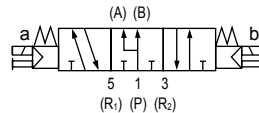
● 3-position grommet lead wire (blank) all ports closed



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	Resin
5	Piston room	Resin
6	Manual protection cover	Resin
7	Cartridge type push-in fitting	-
8	Spool assembly	-
9	Fitting adaptor	Resin
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adaptor	Aluminum alloy die-casting
14	Plug cartridge	Aluminum

Parts list

No.	Parts name	Model no.		
1	Coil assembly	4G - [Electrical connections] - * - COIL - [Voltage]		
		Blank: Standard A: Ozone specifications Blank: Grommet lead wire		
7	Cartridge type push-in fitting and related parts	4G2		
			φ 4 straight type	4G2-JOINT-C4
			φ 6 straight type	4G2-JOINT-C6
		φ 8 straight type	4G2-JOINT-C8	
		Plug cartridge	4G2-JOINT-CPG	
		4G3	φ 6 straight type	4G3-JOINT-C6
φ 8 straight type	4G3-JOINT-C8			
φ 10 straight type	4G3-JOINT-C10			
	Plug cartridge	4G3-JOINT-CPG		

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

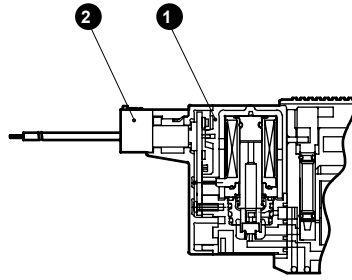
3GA1, 2, 3/4GA1, 2, 3 Series

Discrete valve; body piping

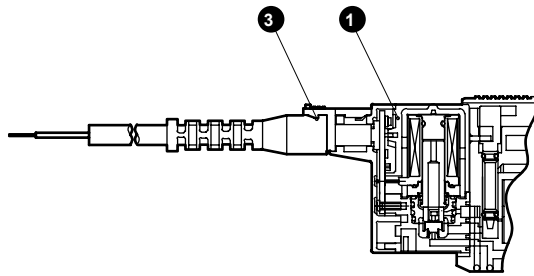
Internal structure and parts list (electrical connections section)

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

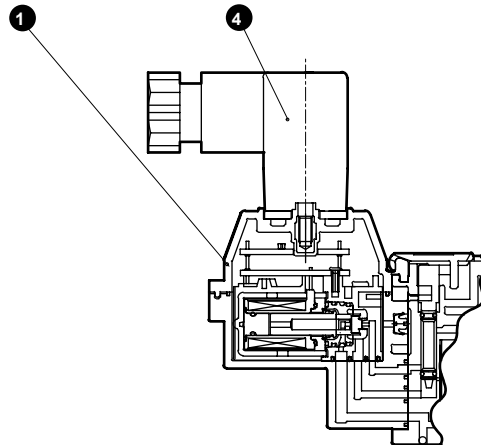
● E type connector type E**



● 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	4G-[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
2	E type connector socket assembly	4G-SOCKET-ASSY-E**-[Voltage]
3	Socket assembly with cover	4G-SOCKET-ASSY-E**J
4	DIN terminal box assembly	4G-TERMINAL-BOX-[Voltage]

MEMO

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

3GA1 Series

Discrete valve; body piping

Dimensions

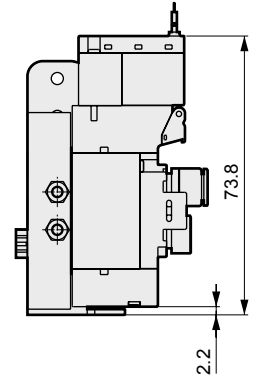
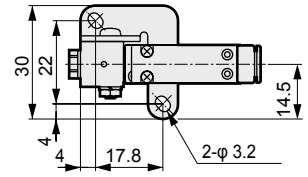
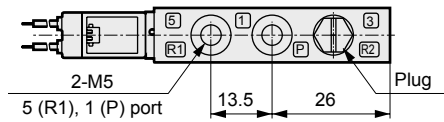
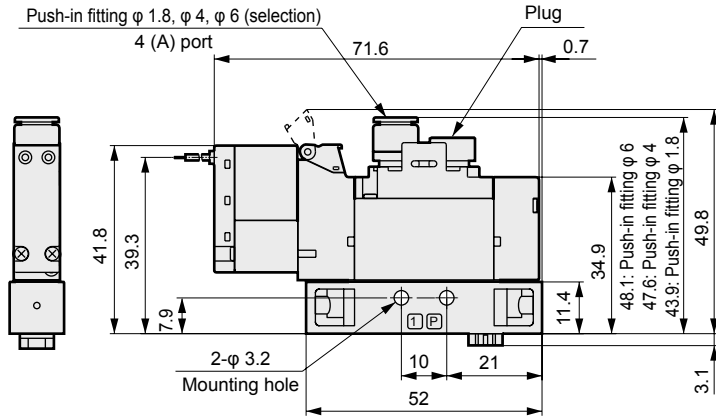
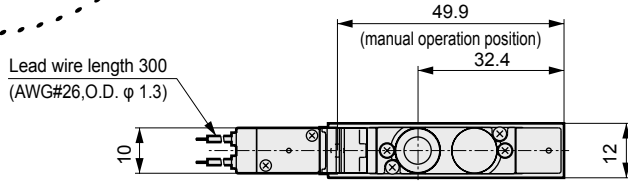
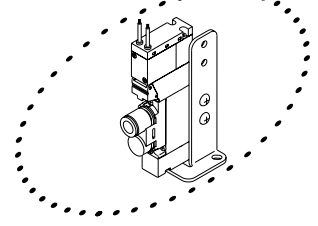
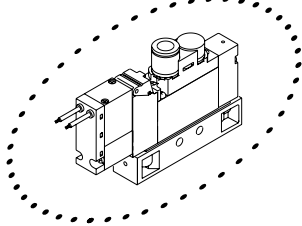


3GA110

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

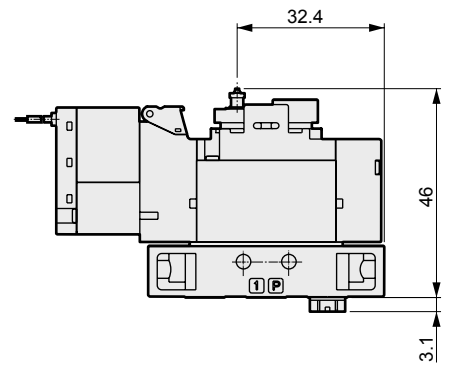
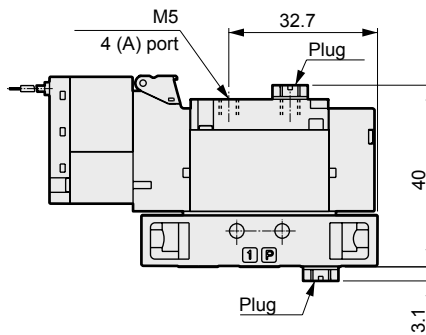
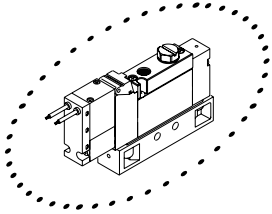
● Mounting plate type (P)

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



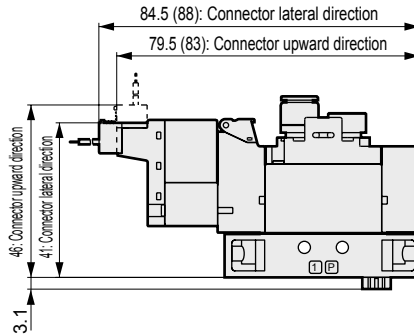
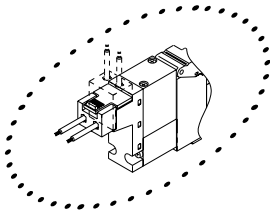
● M5 female thread type (M5)

● φ 1.8 barbed fitting type (CF)



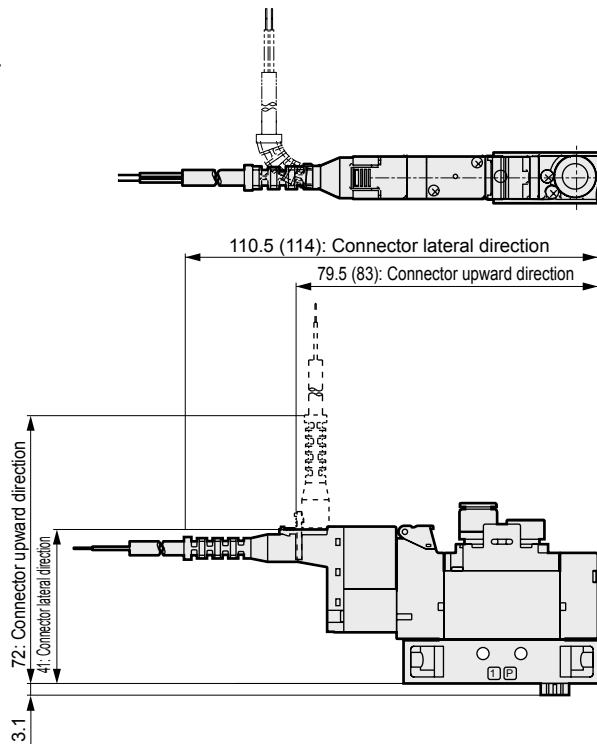
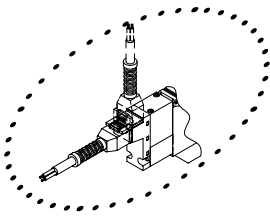
Dimensions

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

3GA1 Series

Discrete valve; body piping

Dimensions

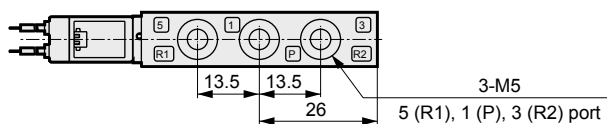
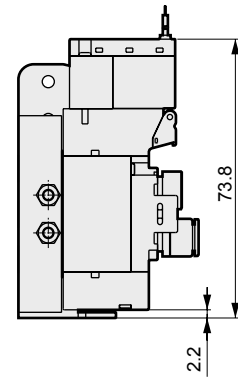
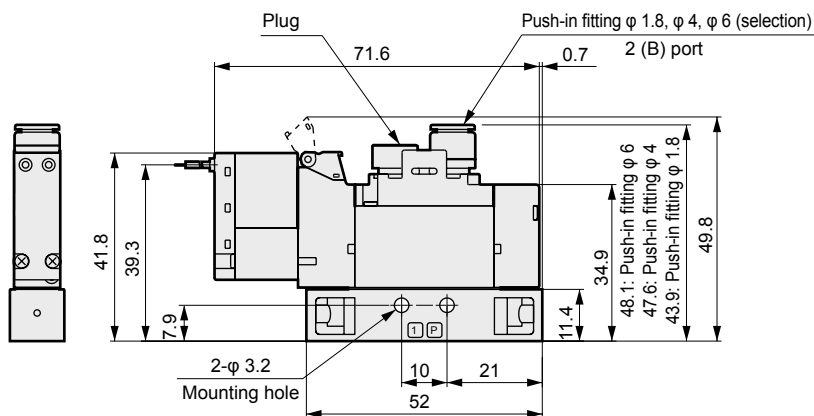
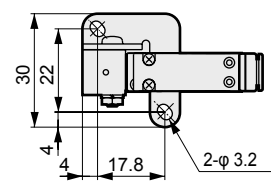
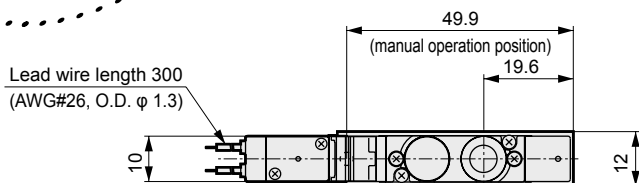
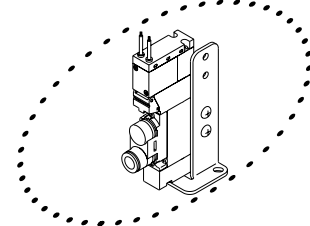
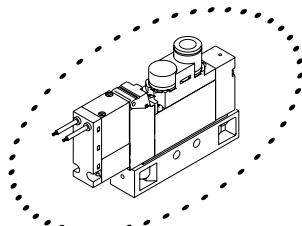


- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

3GA1110

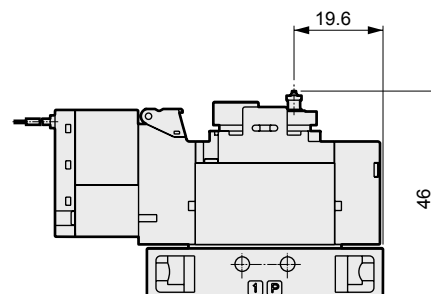
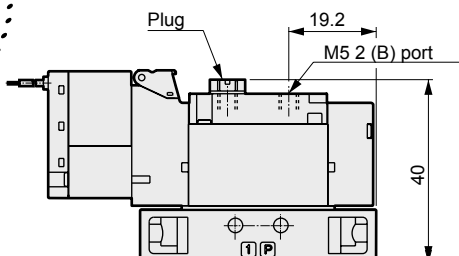
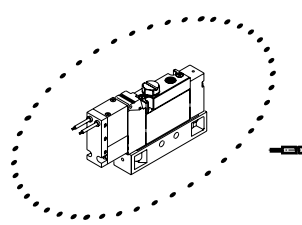
● 2-position single normally open grommet lead wire (blank)

● Mounting plate type (P)



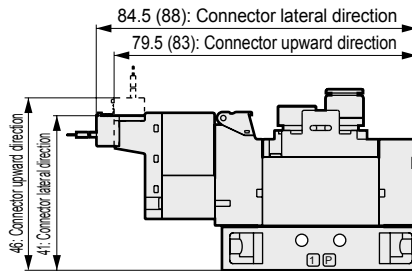
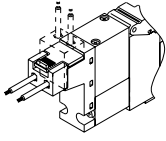
● M5 female thread type (M5)

● ϕ 1.8 barbed fitting type (CF)



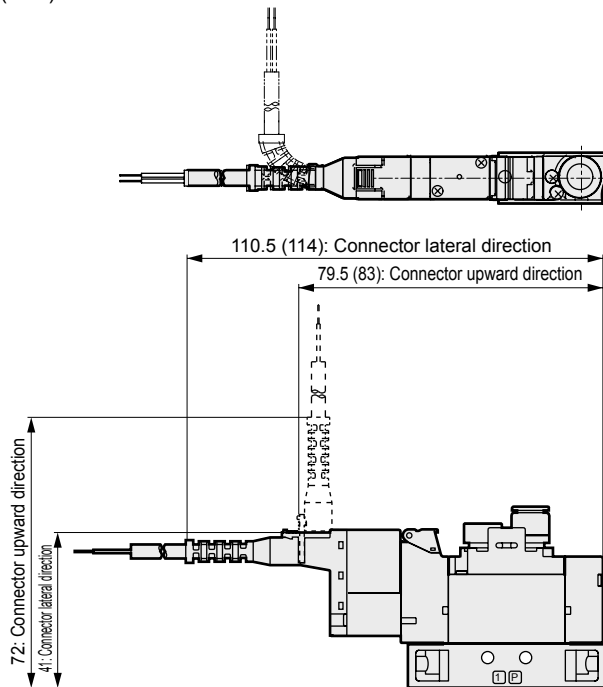
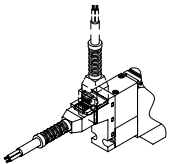
Dimensions

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

3GA2 Series

Discrete valve; body piping

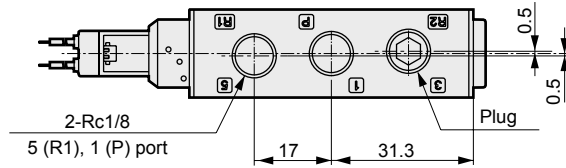
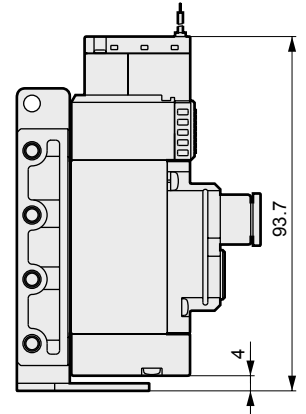
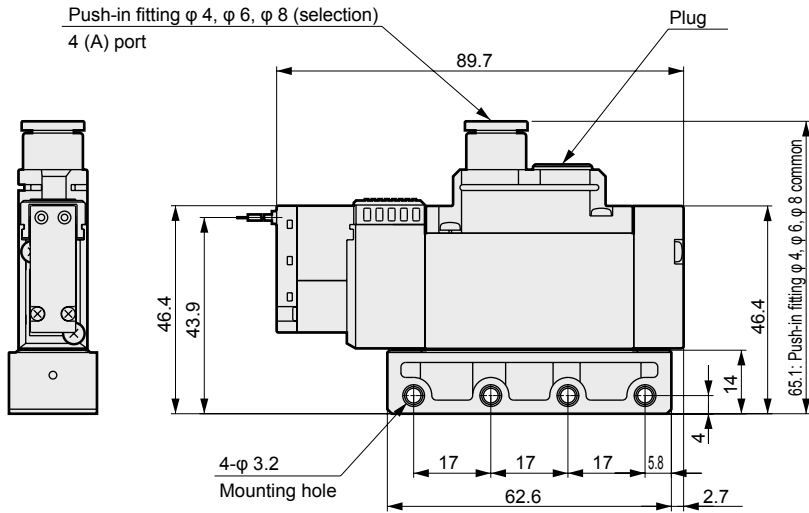
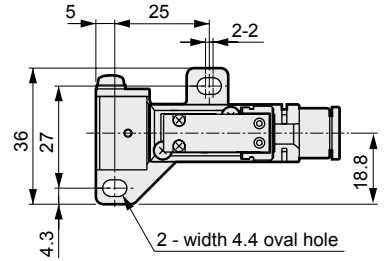
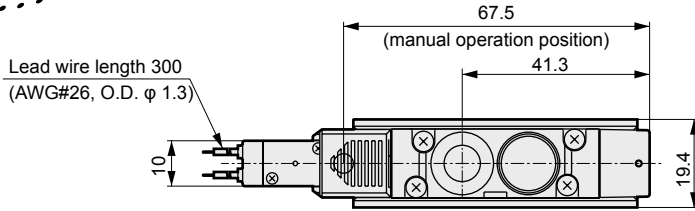
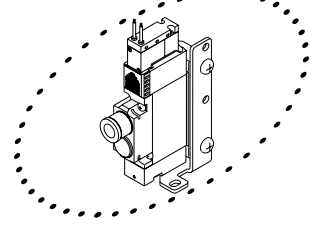
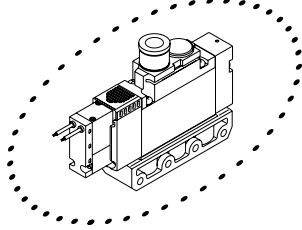
Dimensions



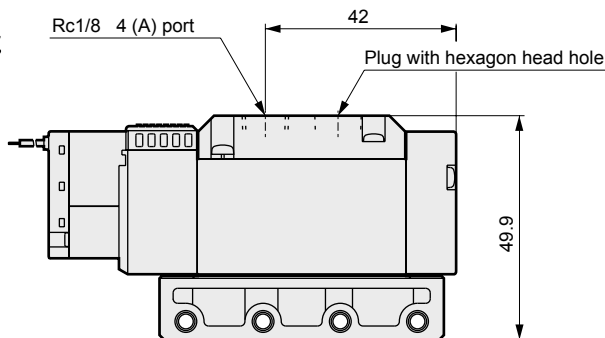
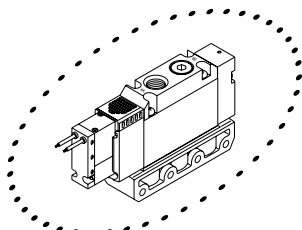
3GA210

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

● Mounting plate type (P)

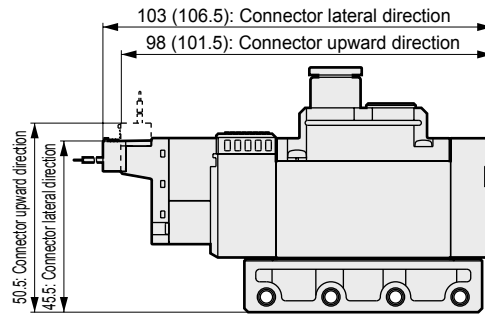
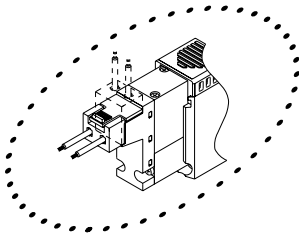


● Rc1/8 female thread type (06)



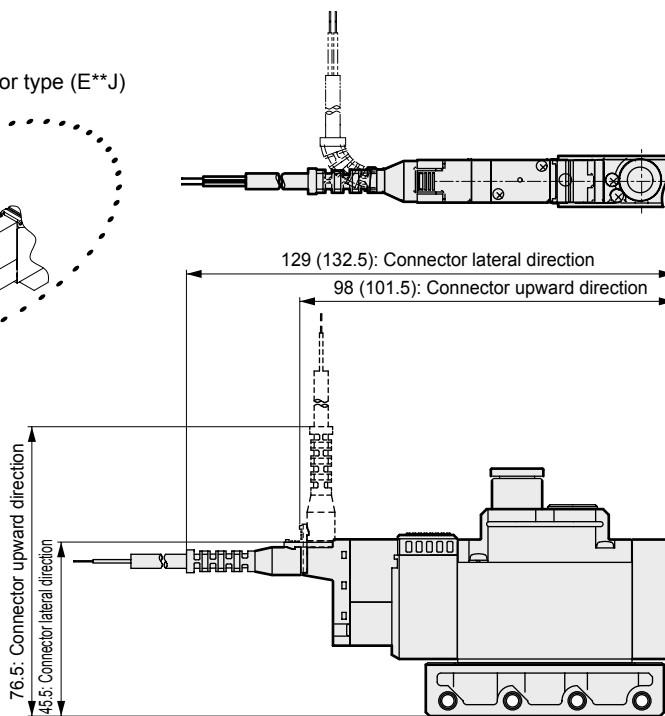
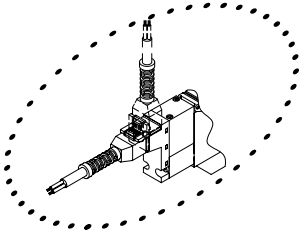
Dimensions

● E type connector type (E)



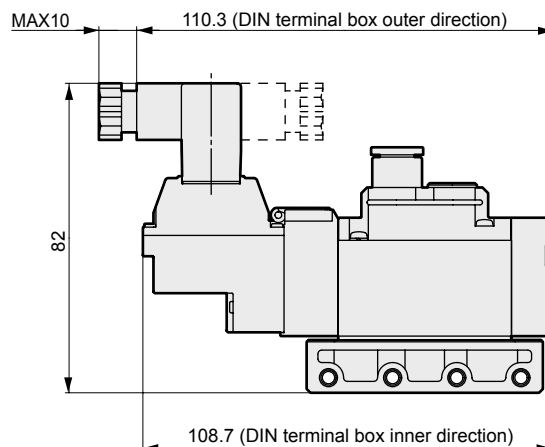
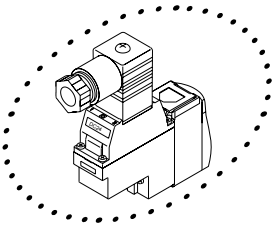
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



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

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

3GA2 Series

Discrete valve; body piping

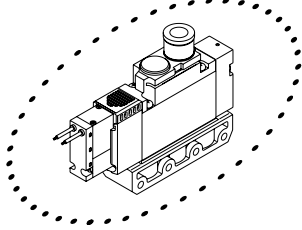
Dimensions



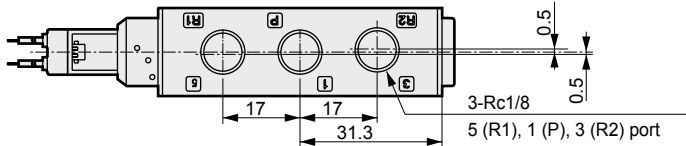
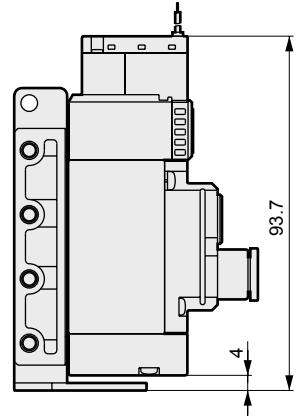
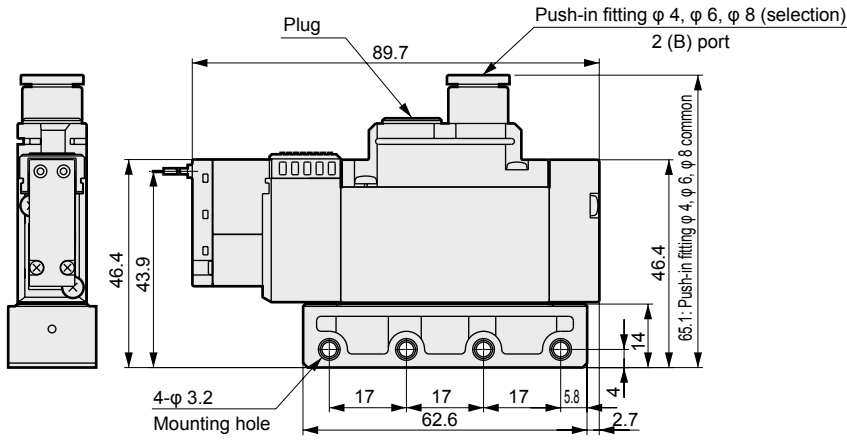
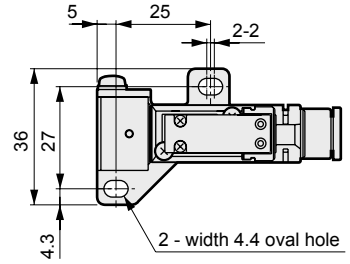
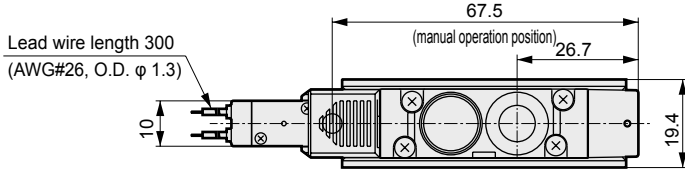
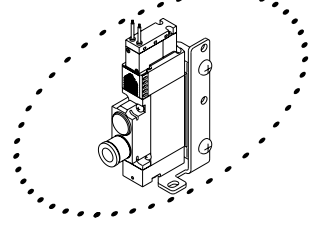
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

3GA2110

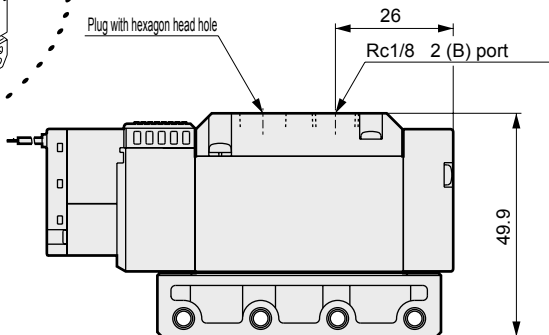
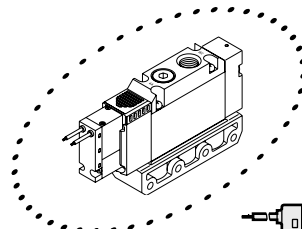
● 2-position single normally open grommet lead wire (blank)



● Mounting plate type (P)

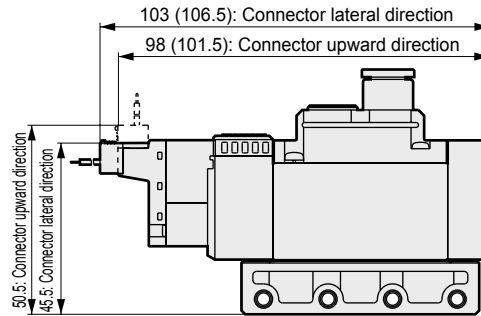
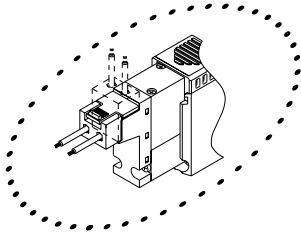


● Rc1/8 female thread type (06)



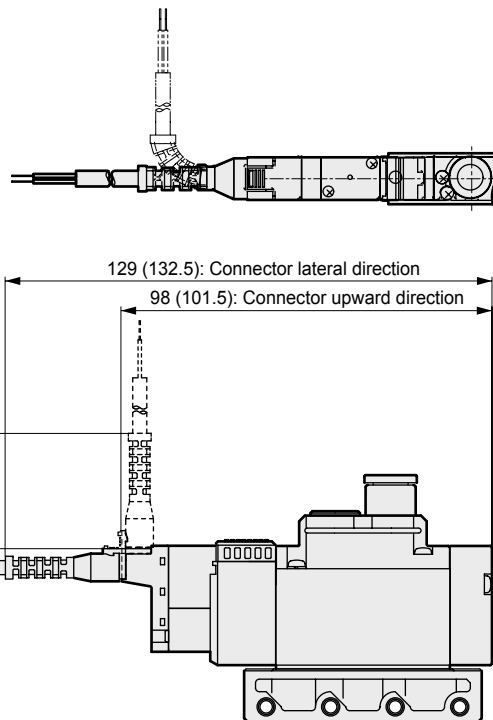
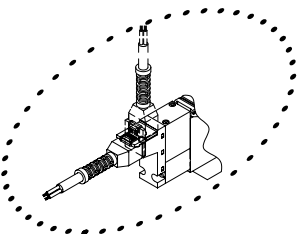
Dimensions

● E type connector type (E)



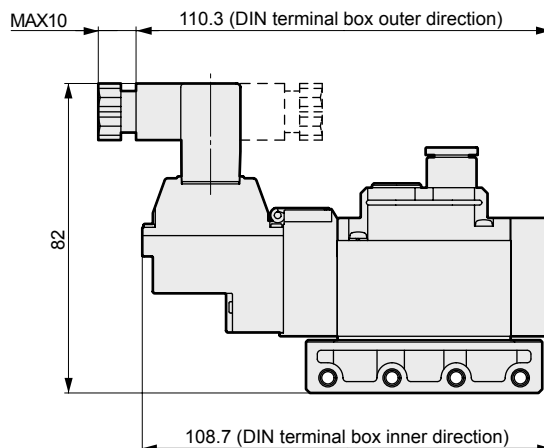
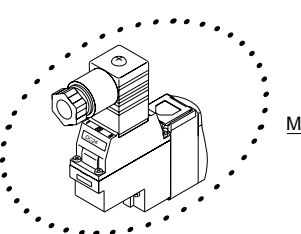
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



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

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

3GA3 Series

Discrete valve; body piping

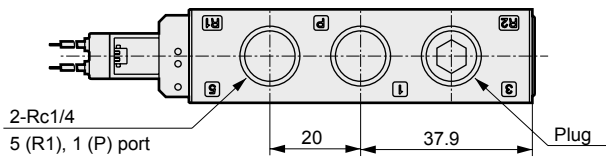
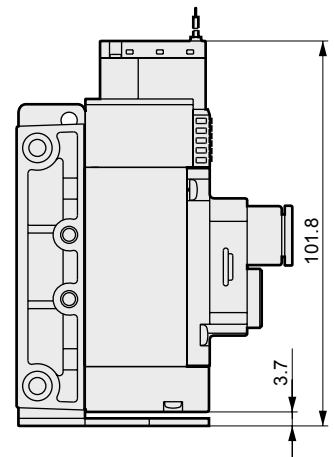
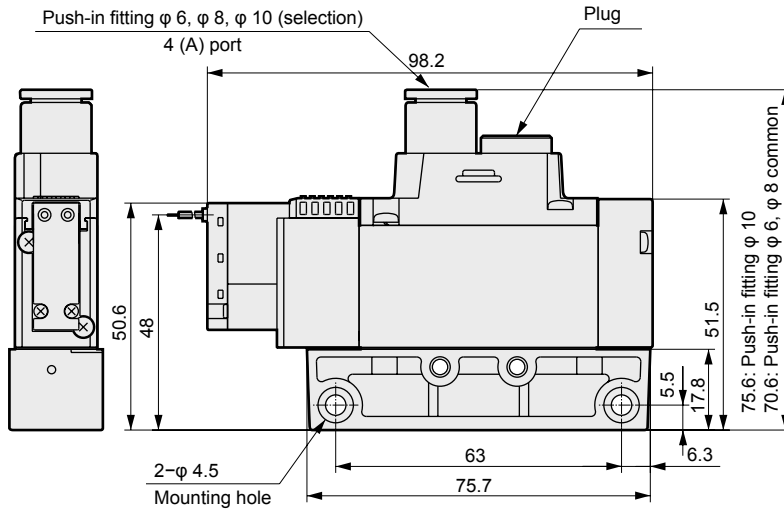
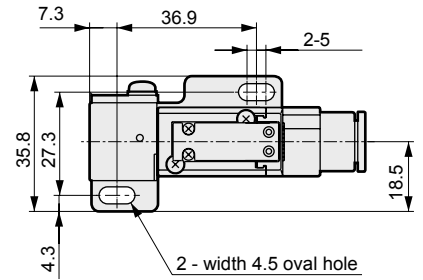
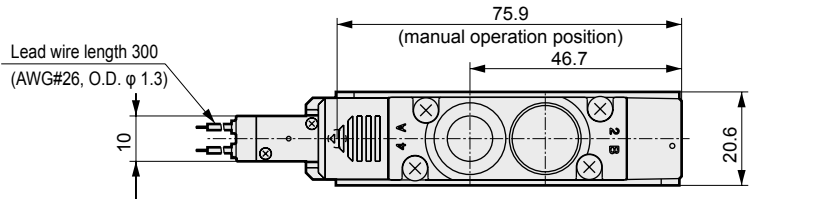
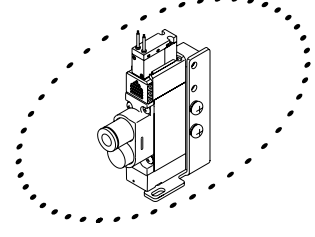
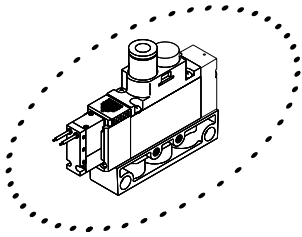
Dimensions



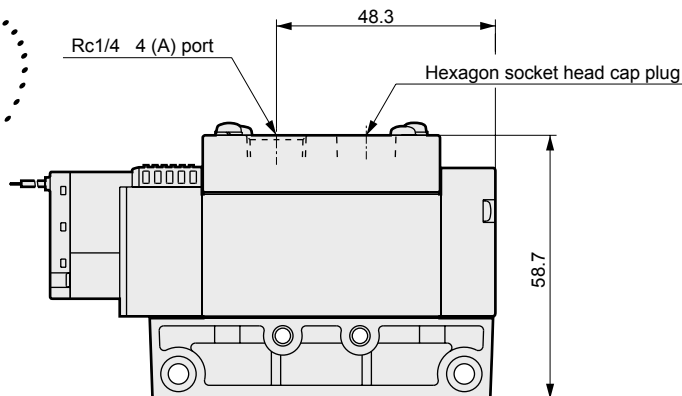
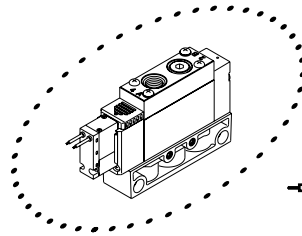
3GA310

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

● Mounting plate type (P)

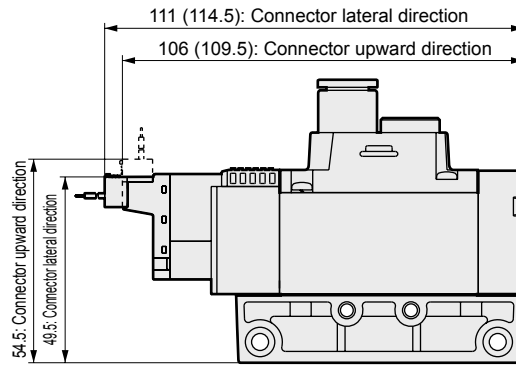
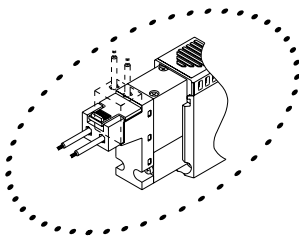


● RC1/4 female thread type (08)



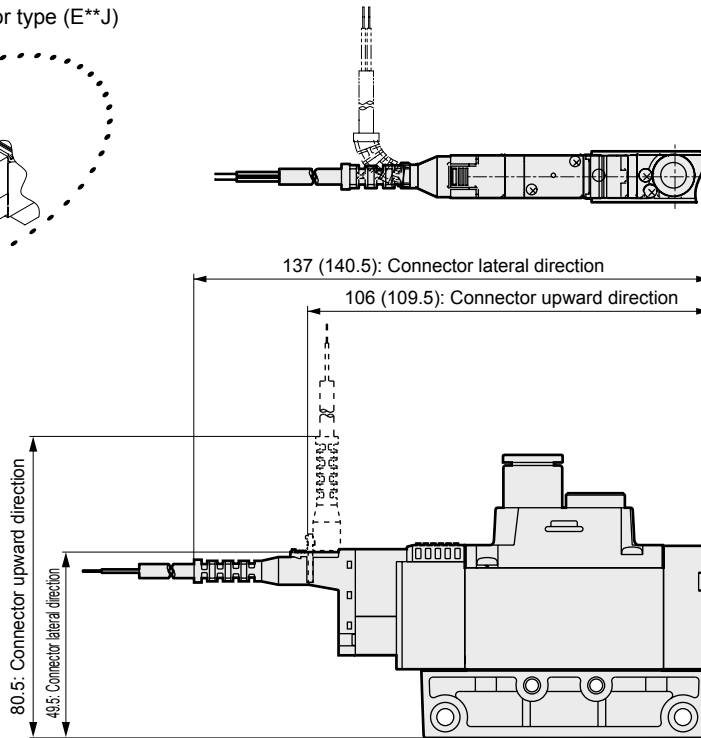
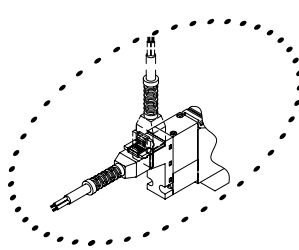
Dimensions

● E type connector type (E)



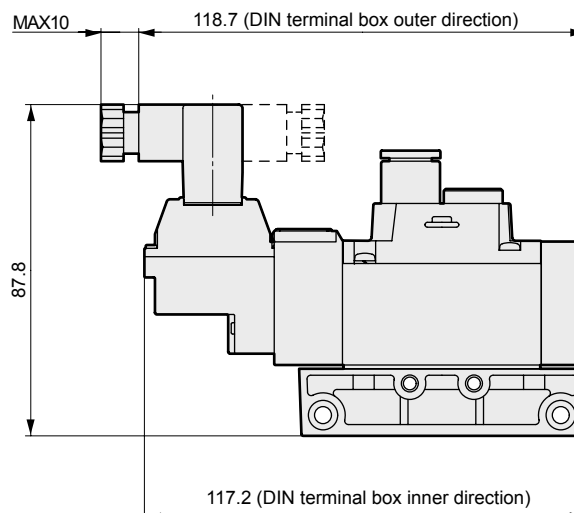
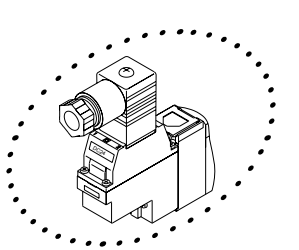
Note: Values in () apply for 100 VAC

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

3GA3 Series

Discrete valve; body piping

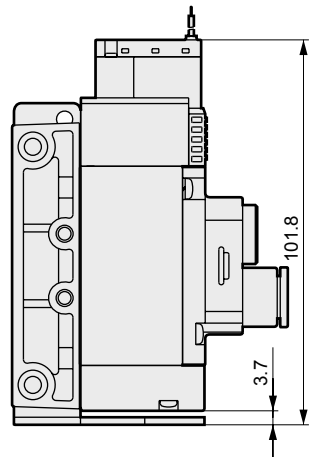
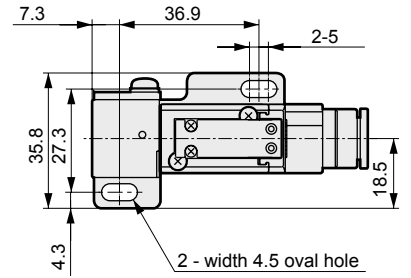
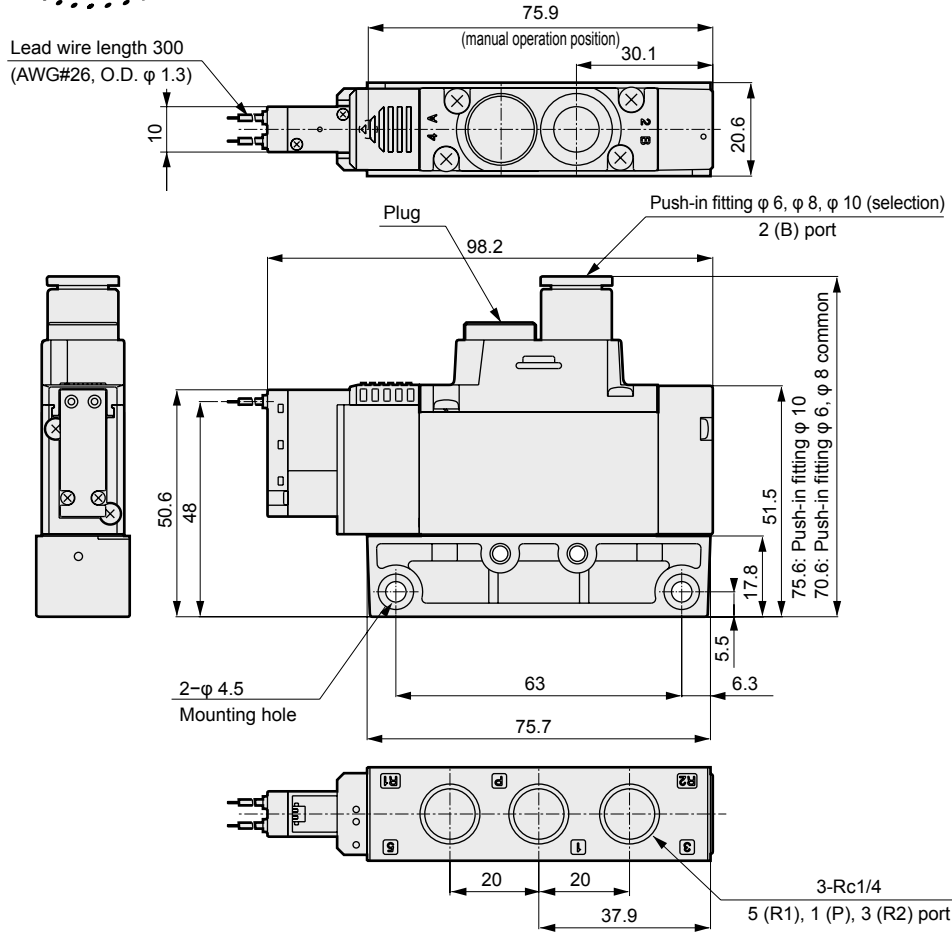
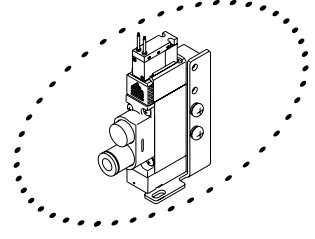
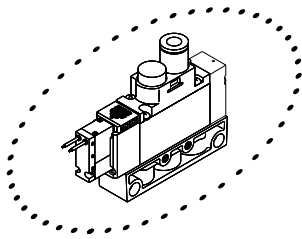
Dimensions



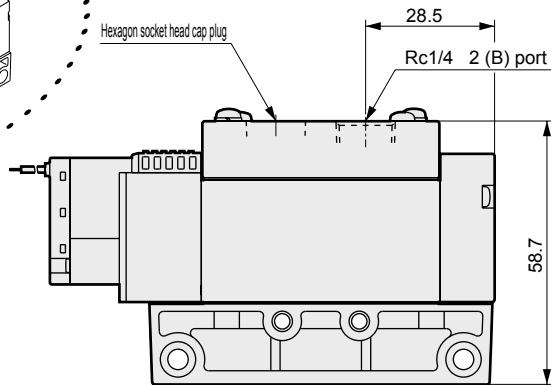
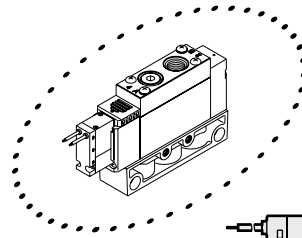
3GA3110

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

● Mounting plate type (P)

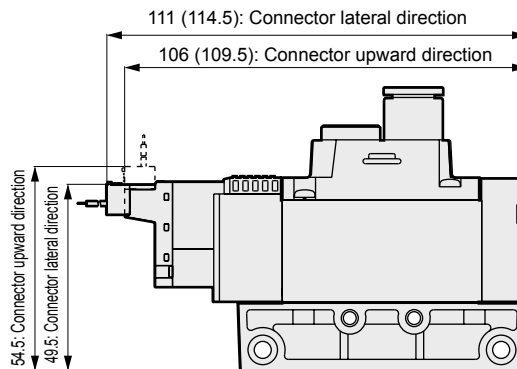
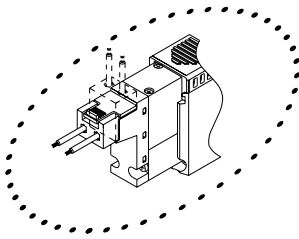


● RC1/4 female thread type (08)



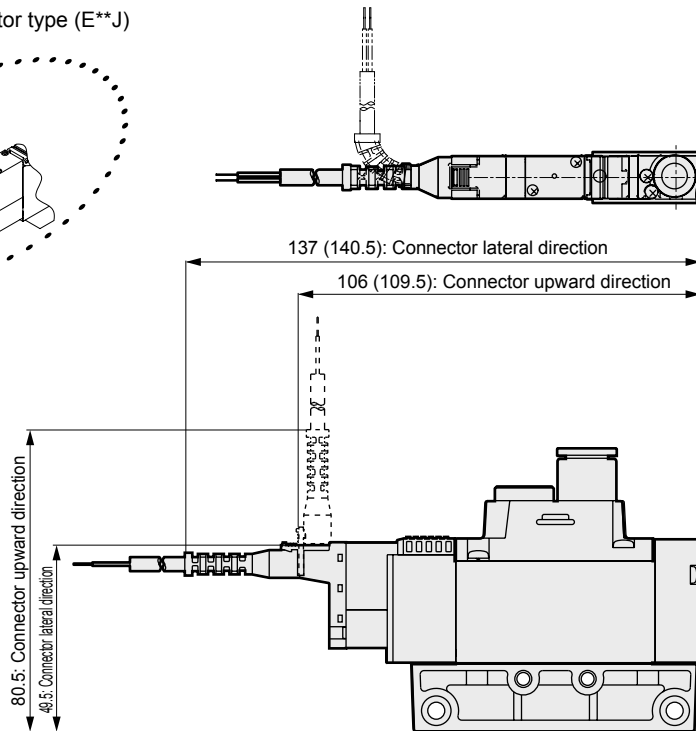
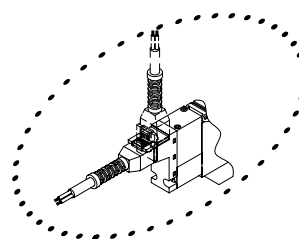
Dimensions

● E type connector type (E)



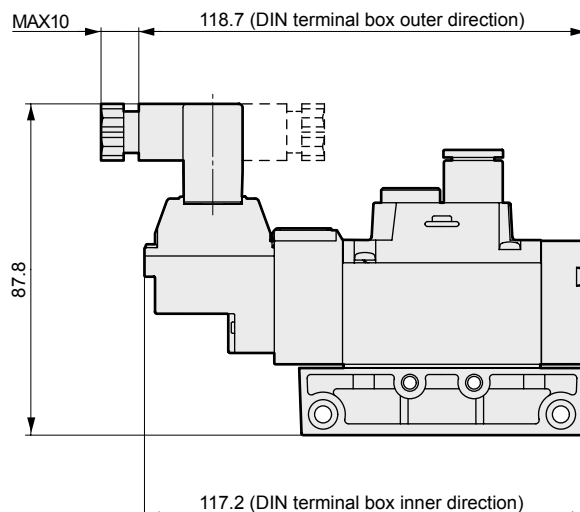
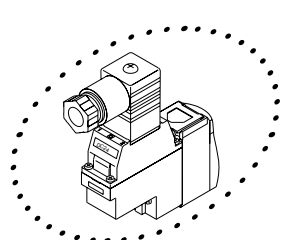
Note: Values in () apply for 100 VAC

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA1 Series

Discrete valve; body piping

Dimensions



4GA/B

M4GA/B

4GA4/B4

MN4GA/B

4GA/B (Master)

MN3E
MN4E

W4GA/B2

W4GB4

4TB

4L2-4/LMFO

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B (Master)

4F

4F (Master)

PV5G
GMF

PV5
GMF

PV5S-0

3QR
3QB

3MA/B0

3PA/B

P/M/B

NP/NAP
NVP

4F*0E

HMV
HSV

2QV
3QV

SKH

PCD

Silencer

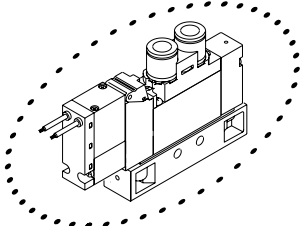
Total air system

Total air system (Gamma)

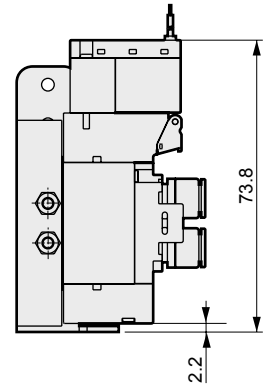
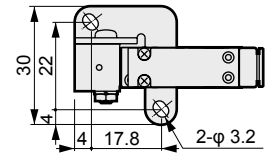
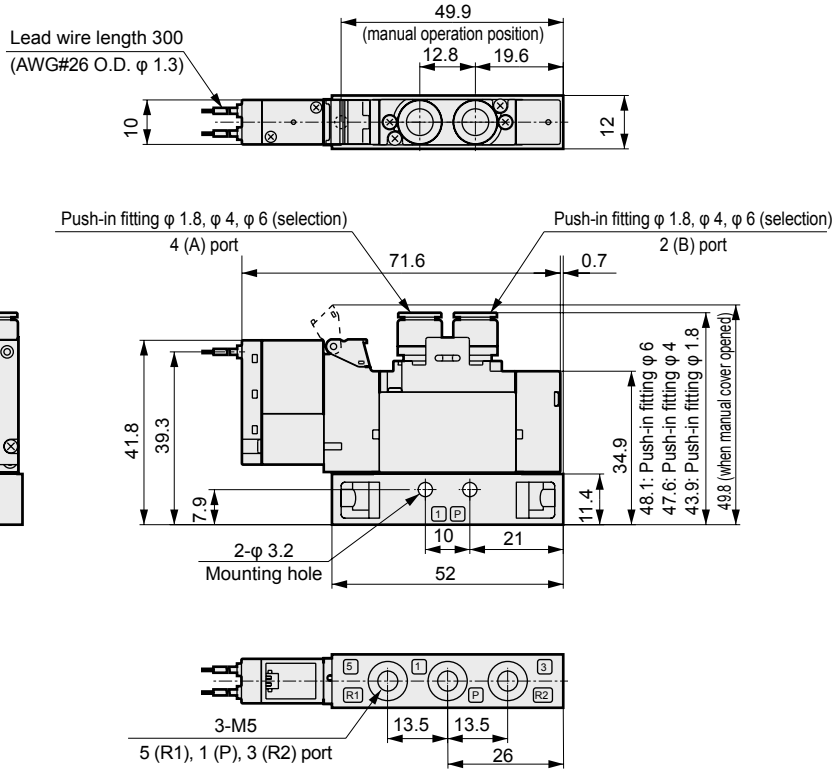
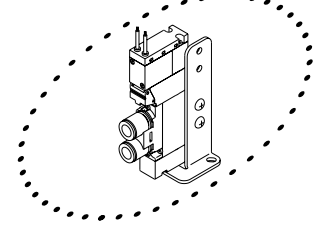
Ending

4GA110

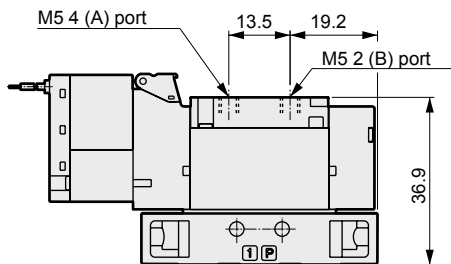
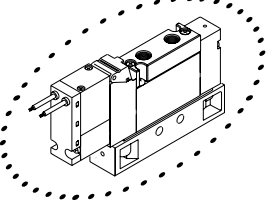
● 2-position single grommet lead wire (blank)



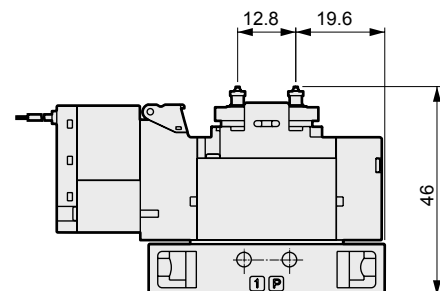
● Mounting plate type (P)



● M5 female thread type (M5)

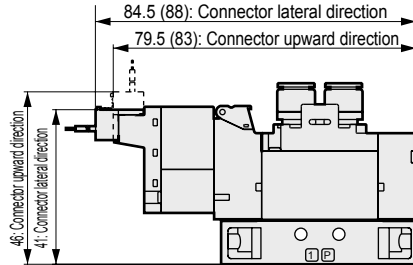
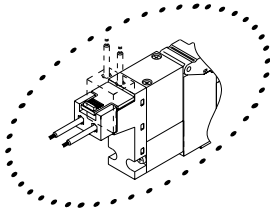


● ϕ 1.8 barbed fitting type (CF)



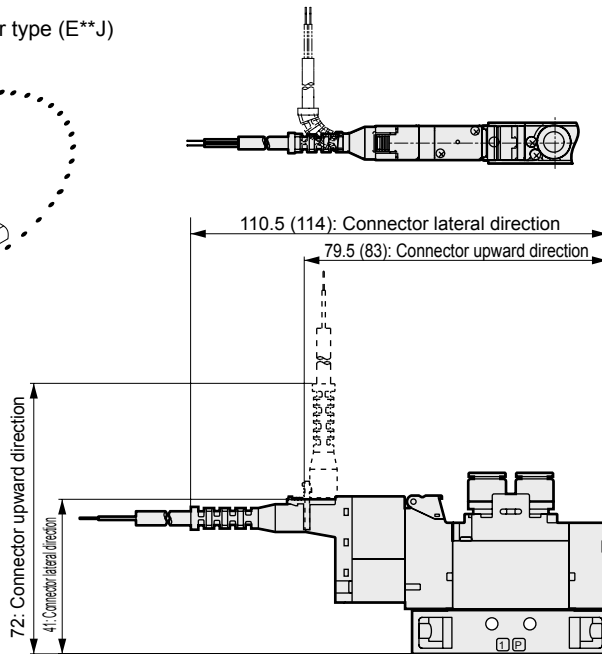
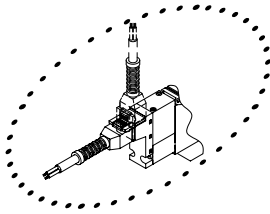
Dimensions

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA1 Series

Discrete valve; body piping

Dimensions



4GA/B

M4GA/B

4GA4/B4

MN4GA/B

4GA/B (Master)

MN3E
MN4E

W4GA/B2

W4GB4

4TB

4L2-4/
LMF0

MN3S0
MN4S0

4SA/B0

4KA/B

4KA/B (Master)

4F

4F (Master)

PV5G
GMF

PV5
GMF

PV5S-
0

3QR
3QB

3MA/
B0

3PA/
B

P/M/B

NP/NAP
NVP

4F*0E

HMV
HSV

2QV
3QV

SKH

PCD

Silencer

Total air
system

Total air system
(Gamma)

Ending

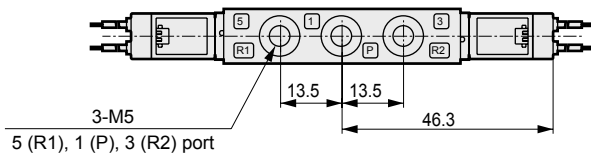
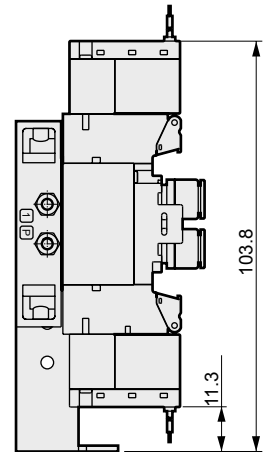
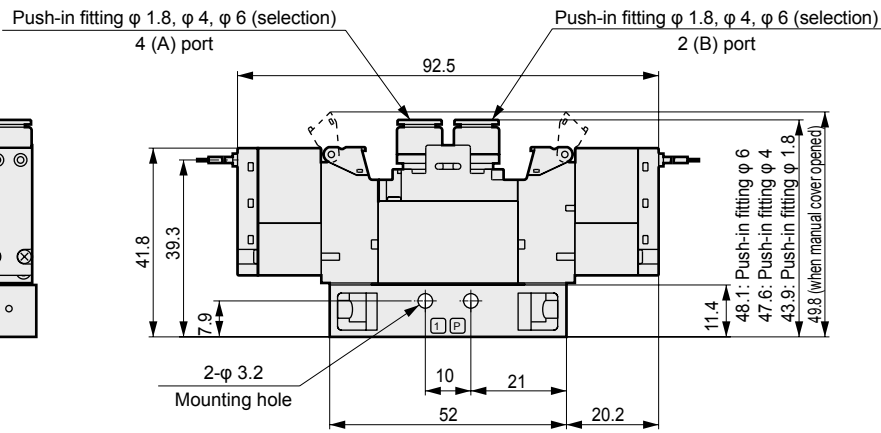
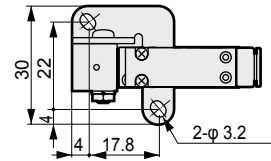
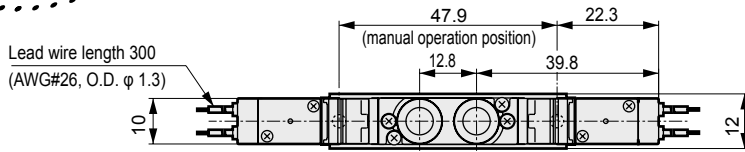
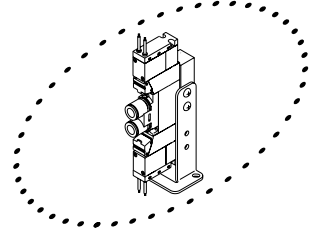
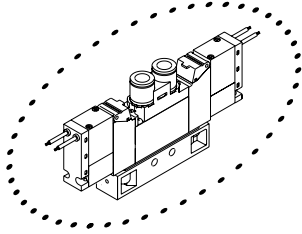
4GA120

- 2-position double grommet lead wire (blank)

3GA1660, 3GA1670, 3GA1760, 3GA1770

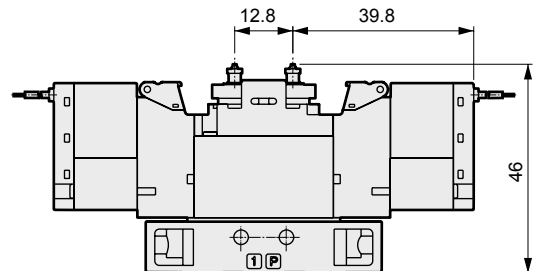
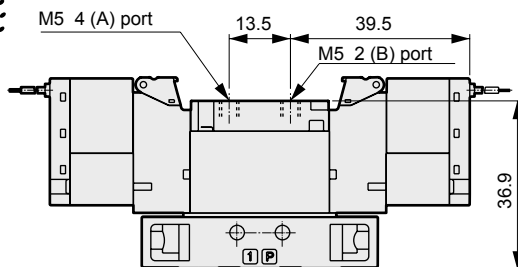
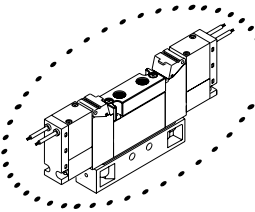
- Dual 3 port valve integrated type grommet lead wire (blank)

- Mounting plate type (P)



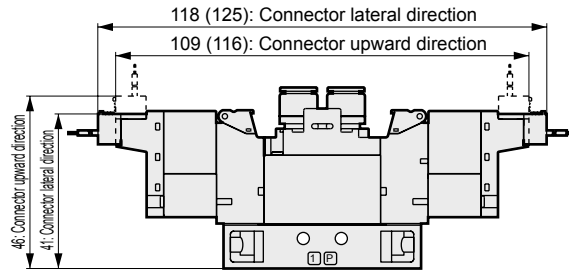
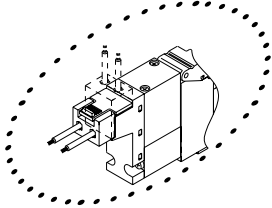
- M5 female thread type (M5)

- φ 1.8 barbed fitting type (CF)



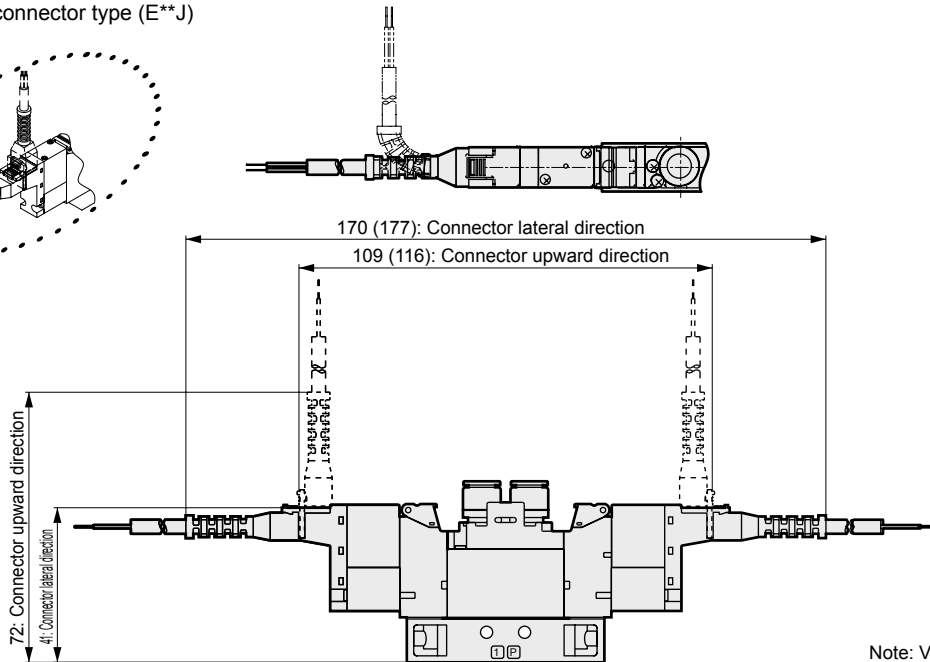
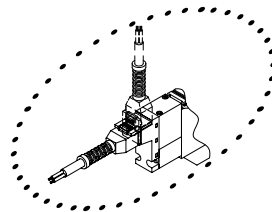
Dimensions

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA1 Series

Discrete valve; body piping

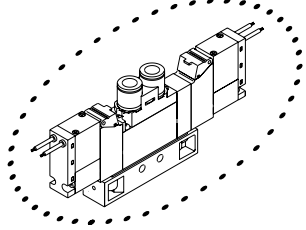
Dimensions



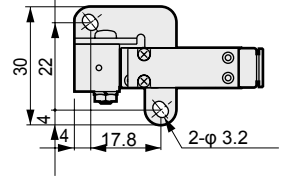
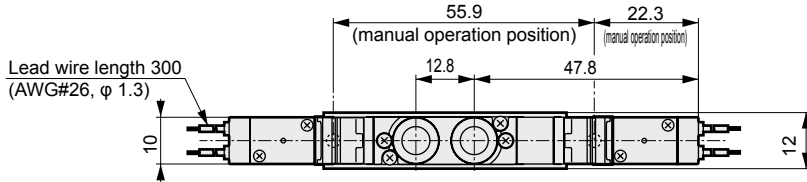
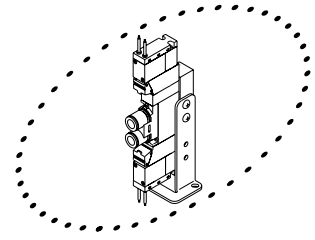
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA1³0

● 3 position grommet lead wire (blank)

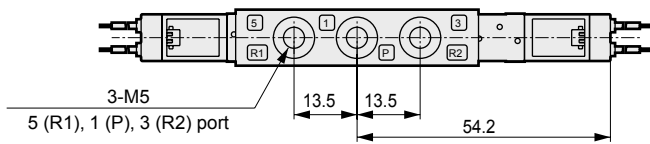
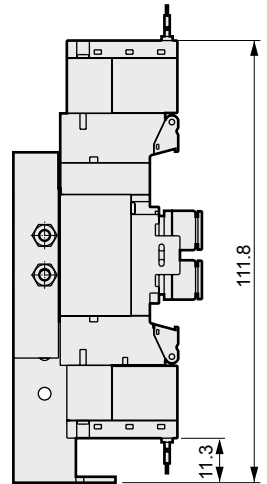
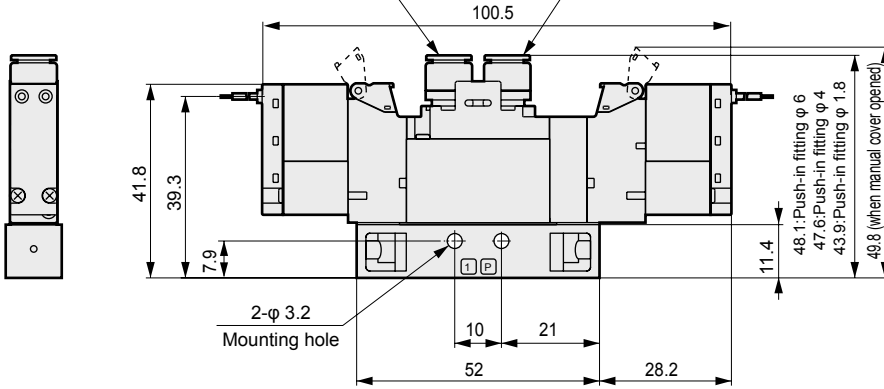


● Mounting plate type (P)

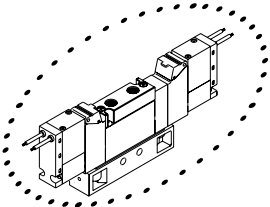


Push-in fitting φ 1.8, φ 4, φ 6 (selection)
4 (A) port

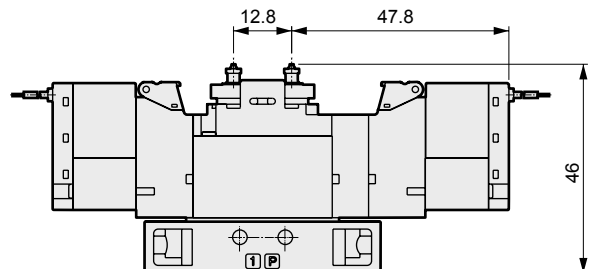
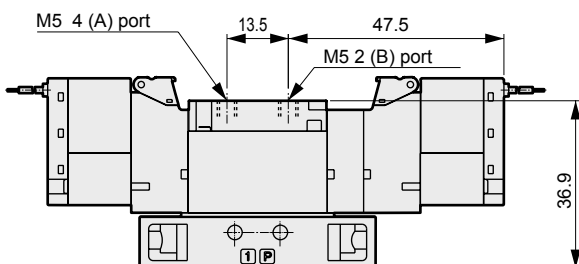
Push-in fitting φ 1.8, φ 4, φ 6 (selection)
2 (B) port



● M5 female thread type (M5)

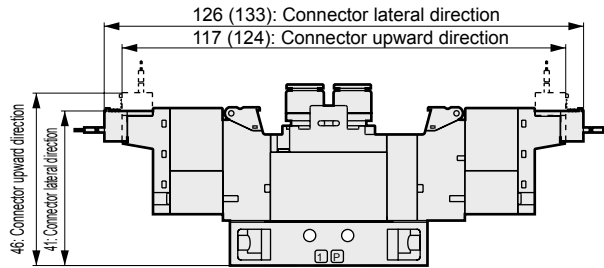
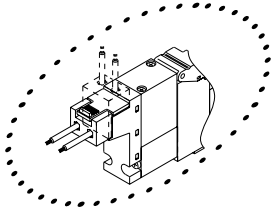


● φ 1.8 barbed fitting type (CF)



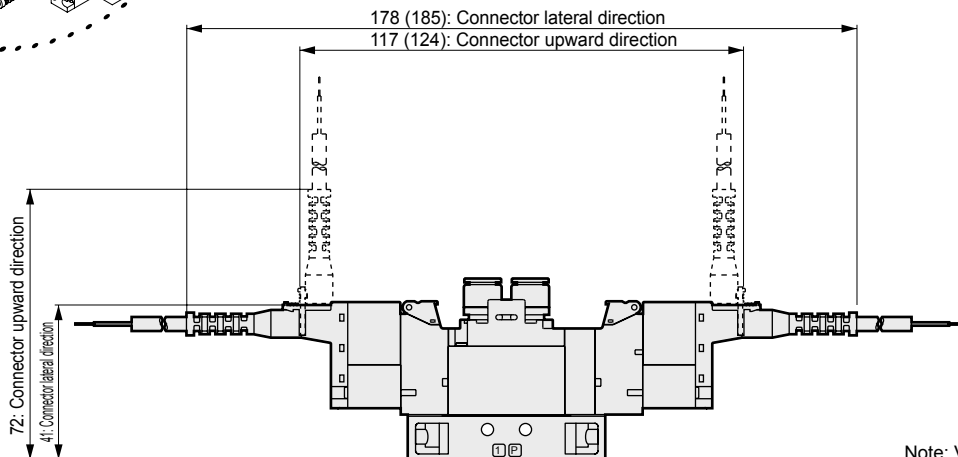
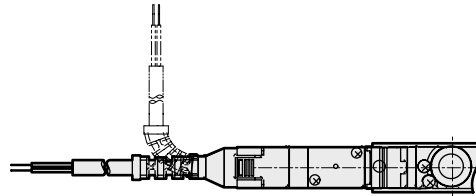
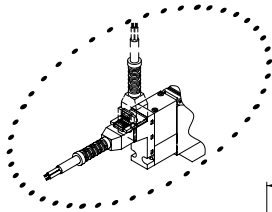
Dimensions

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/ B0
4KA/ B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S- 0
3QR 3QB
3MA/ B0
3PA/ B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA2 Series

Discrete valve; body piping

Dimensions



4GA/B

M4GA/B

4GA4/B4

MN4GA/B

4GA/B (Master)

MN3E
MN4E

W4GA/B2

W4GB4

4TB

4L2-4/
LMF0

MN3S0
MN4S0

4SA/
B0

4KA/
B

4KA/B (Master)

4F

4F (Master)

PV5G
GMF

PV5
GMF

PV5S-
0

3QR
3QB

3MA/
B0

3PA/
B

P/M/B

NP/NAP
NVP

4F*0E

HMV
HSV

2QV
3QV

SKH

PCD

Silencer

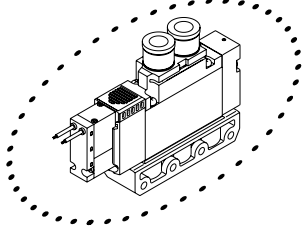
Total air
system

Total air system
(Gamma)

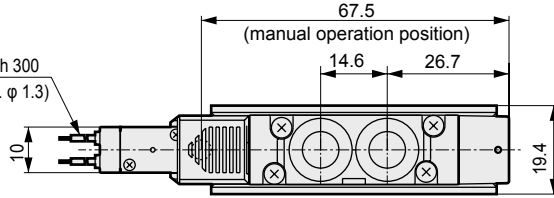
Ending

4GA210

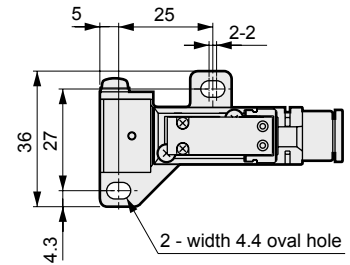
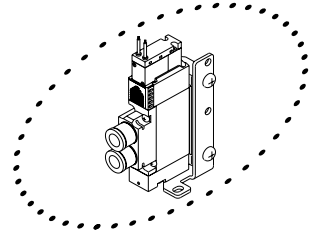
● 2-position single grommet lead wire (blank)



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

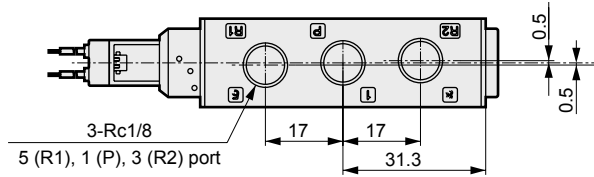
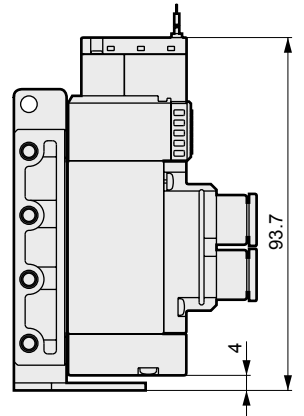
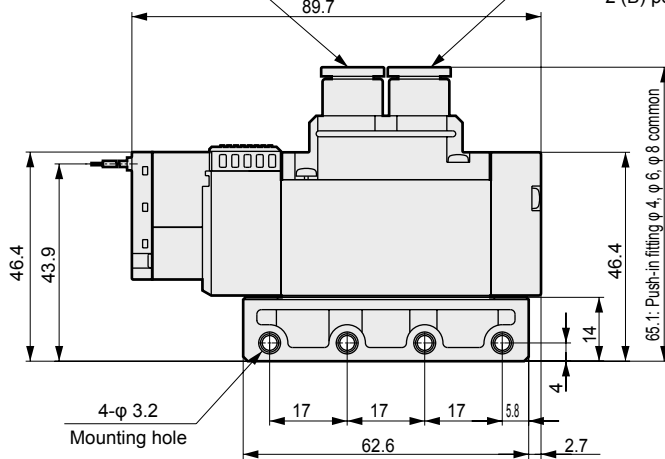
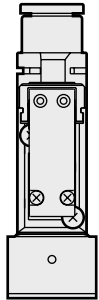


● Mounting plate type (P)



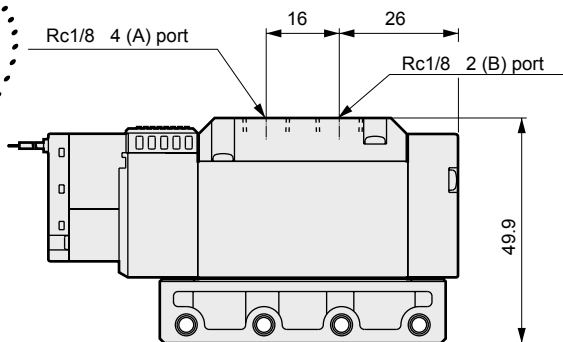
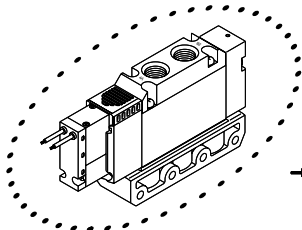
Push-in fitting ϕ 4, ϕ 6, ϕ 8 (selection)
4 (A) port

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



3-Rc1/8
5 (R1), 1 (P), 3 (R2) port

● Rc1/8 female thread type (06)

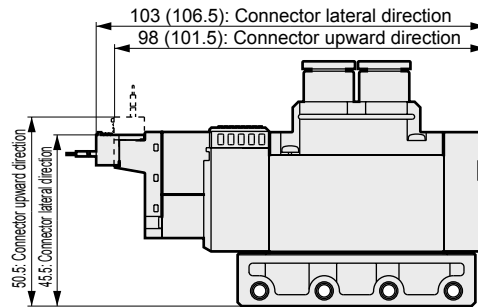
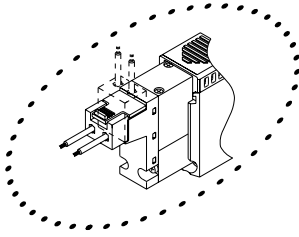


Rc1/8 4 (A) port

Rc1/8 2 (B) port

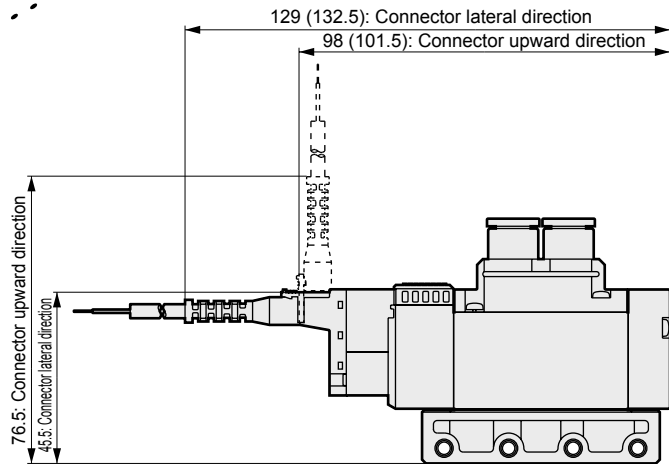
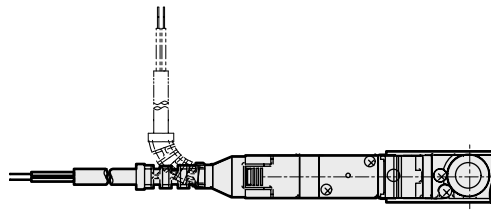
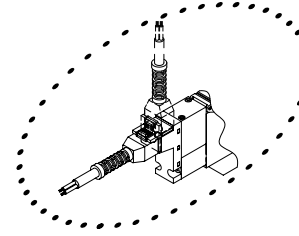
Dimensions

● E type connector type (E)



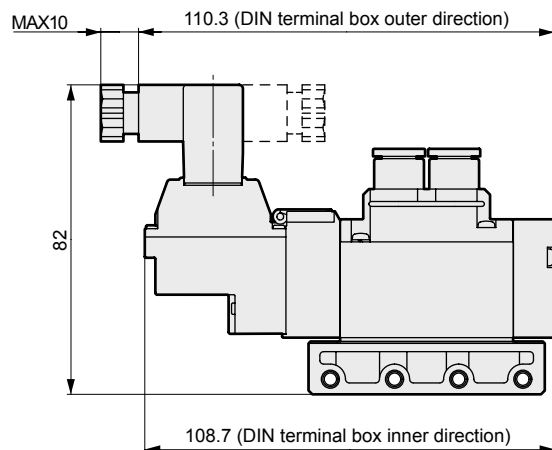
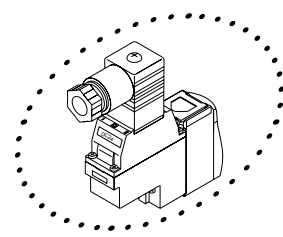
Note: Values in () apply for 100 VAC

● 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.

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

4GA2 Series

Discrete valve; body piping

Dimensions



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

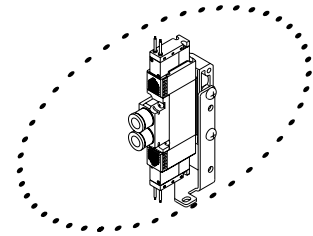
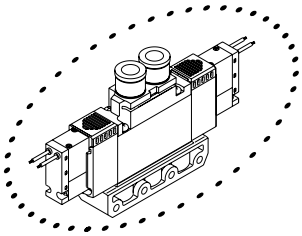
4GA220

- 2-position double grommet lead wire (blank)

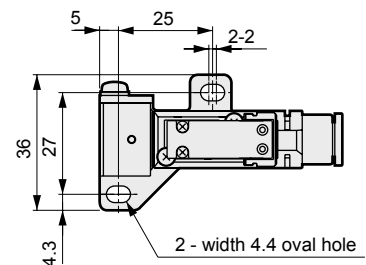
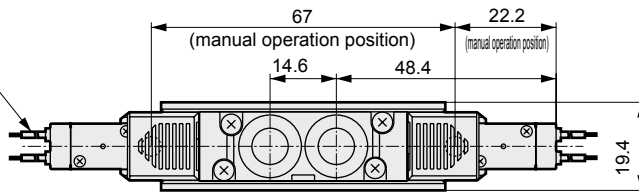
- Mounting plate type (P)

3GA2660, 3GA2670, 3GA2760, 3GA2770

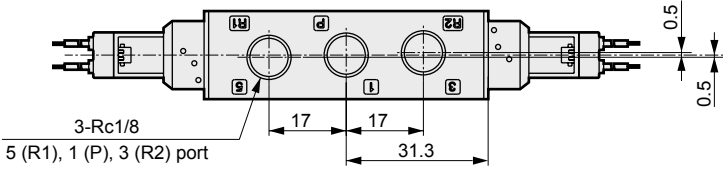
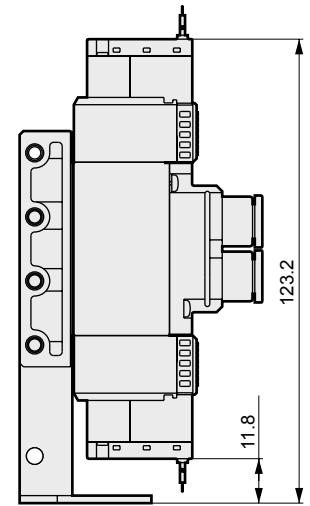
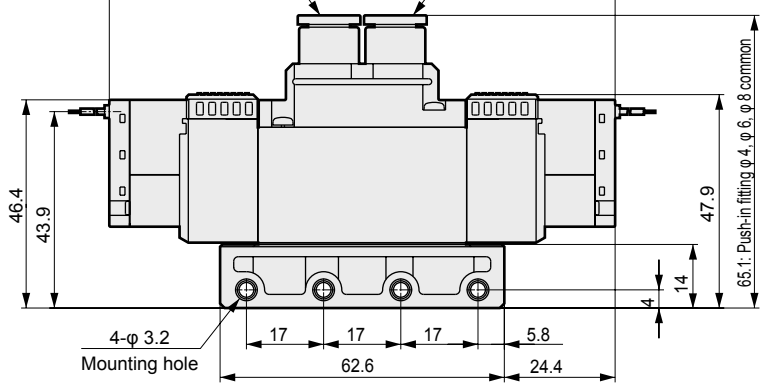
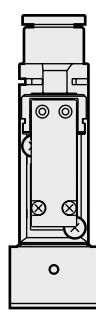
- Dual 3 port valve integrated type grommet lead wire (blank)



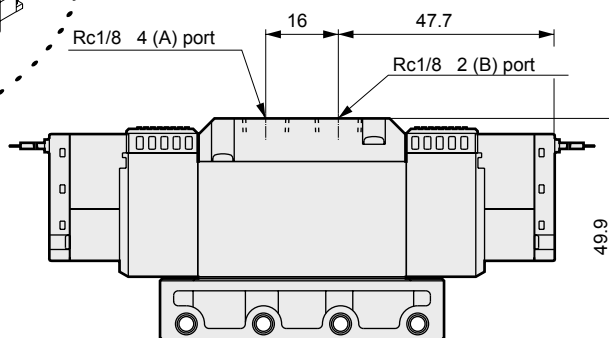
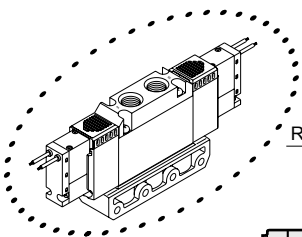
Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



Push-in fitting ϕ 4, ϕ 6, ϕ 8 (selection)
 4 (A) port 111.4 Push-in fitting ϕ 4, ϕ 6, ϕ 8 (selection)
 2 (B) port

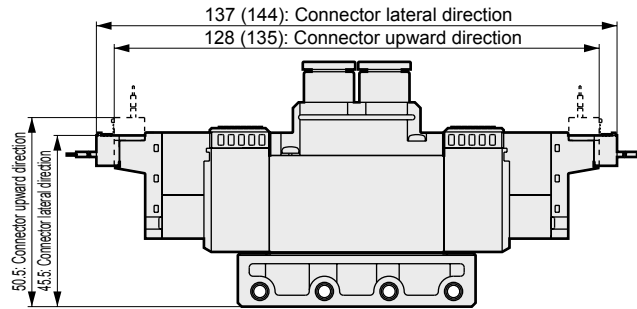
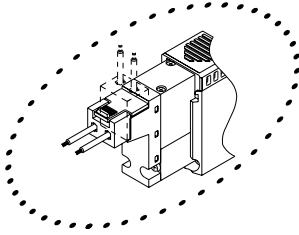


- Rc1/8 female thread type (06)



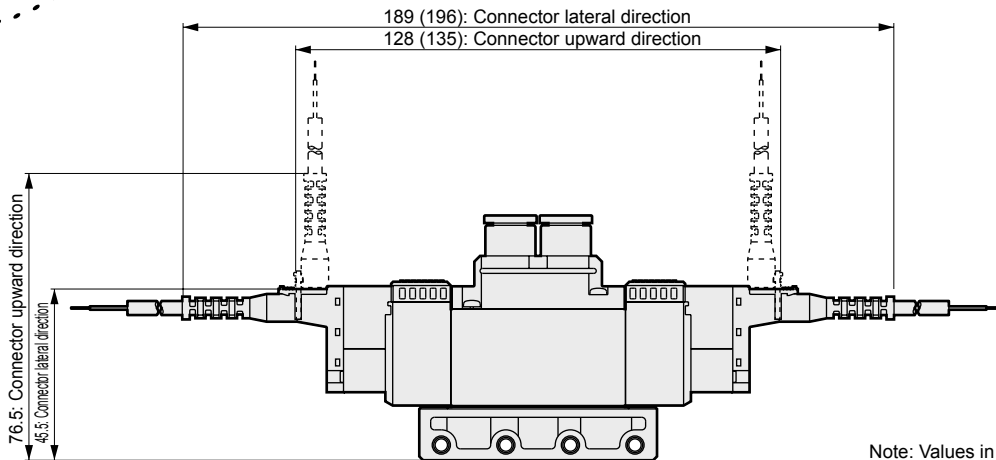
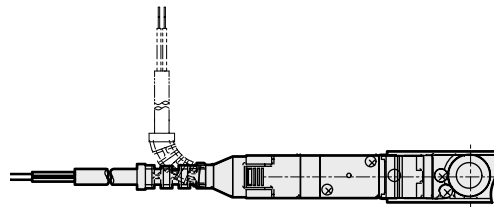
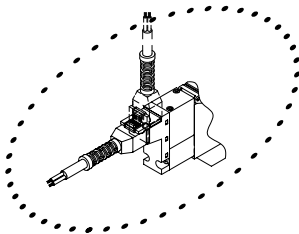
Dimensions

● E type connector type (E)



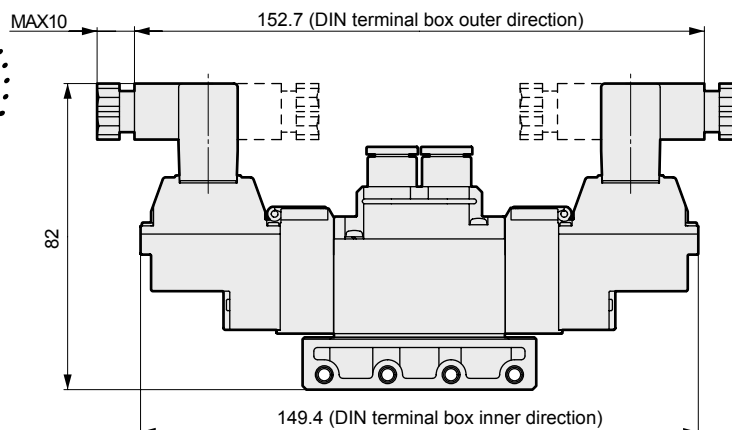
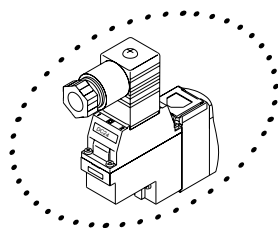
Note: Values in () apply for 100 VAC

● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC

● DIN terminal box type (B)



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

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

4GA2 Series

Discrete valve; body piping

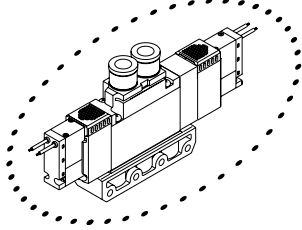
Dimensions



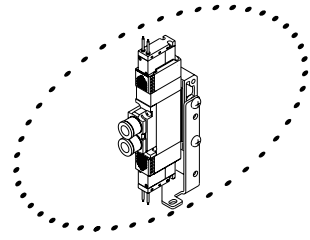
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA2³/₀

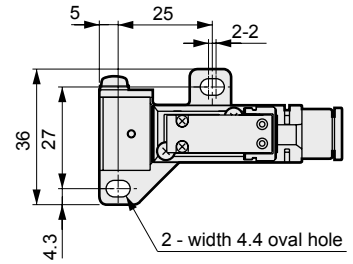
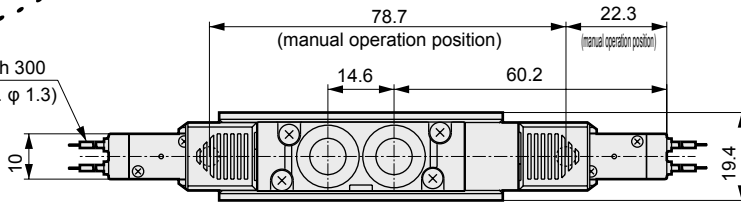
● 3 position grommet lead wire (blank)



● Mounting plate type (P)

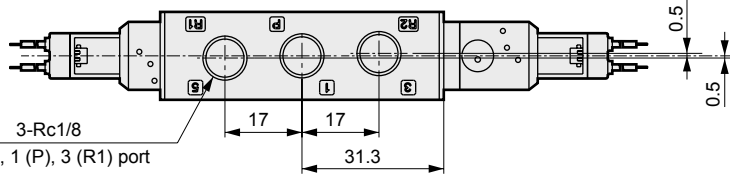
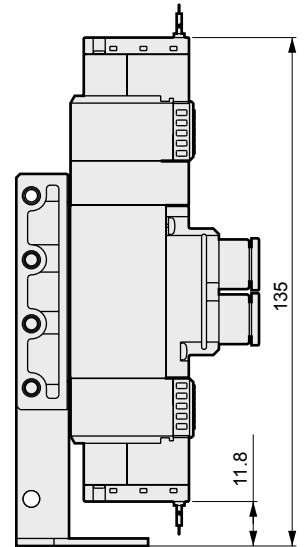
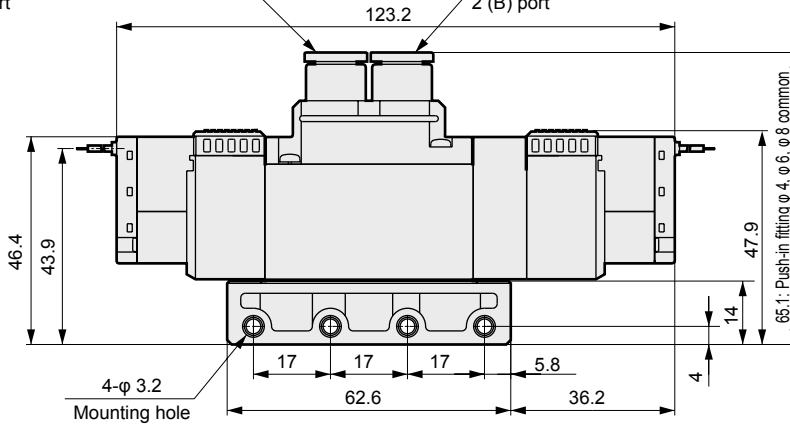
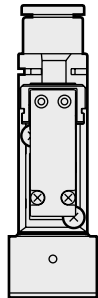


Lead wire length 300
(AWG#26, O.D. φ 1.3)



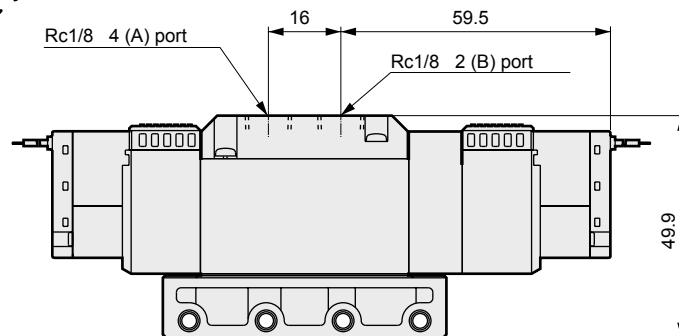
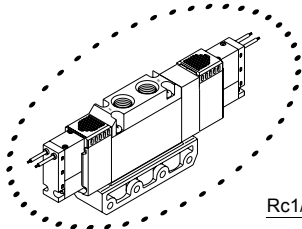
Push-in fitting φ 4, φ 6, φ 8 (selection)
4 (A) port

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



3-Rc1/8
5 (R2), 1 (P), 3 (R1) port

● Rc1/8 female thread type (06)

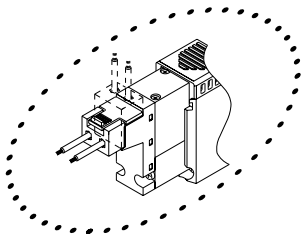


Rc1/8 4 (A) port

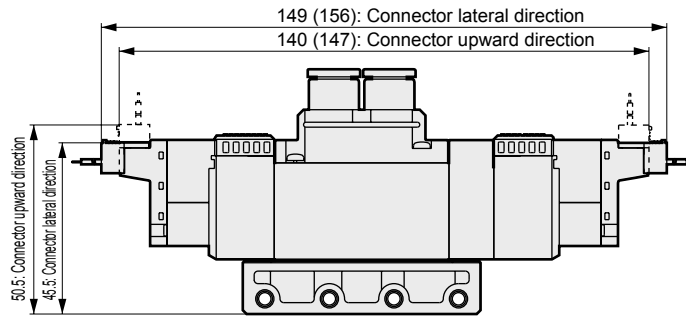
Rc1/8 2 (B) port

Dimensions

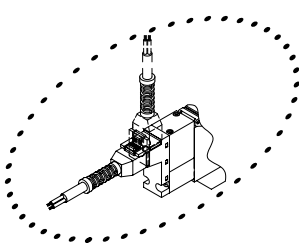
● E type connector type (E)



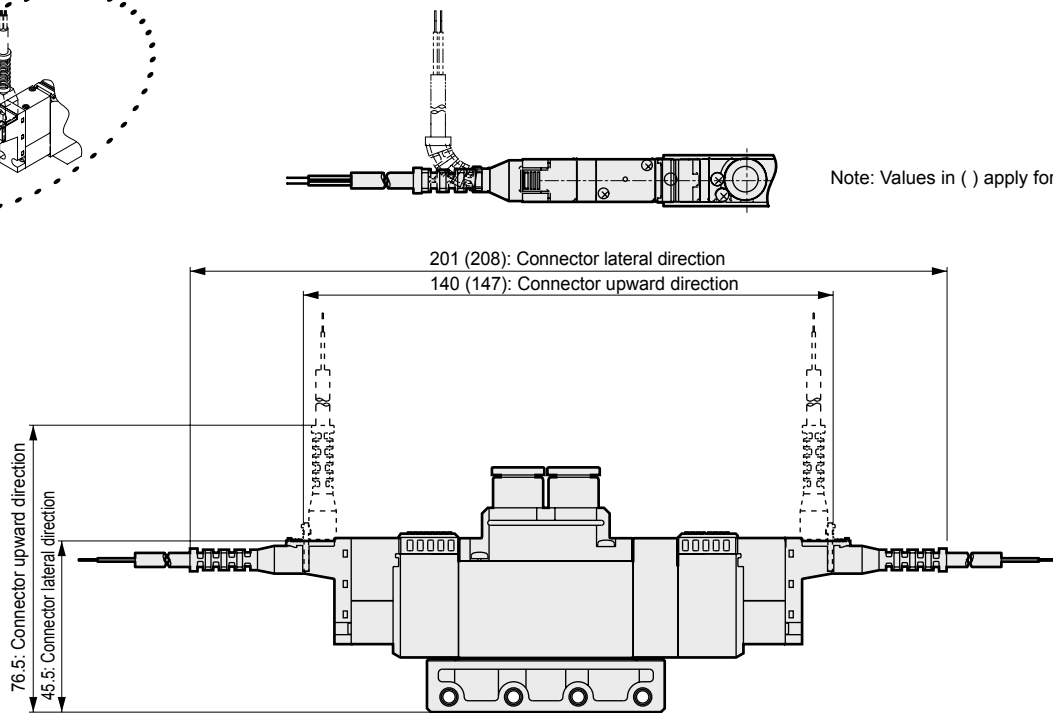
Note: Values in () apply for 100 VAC.



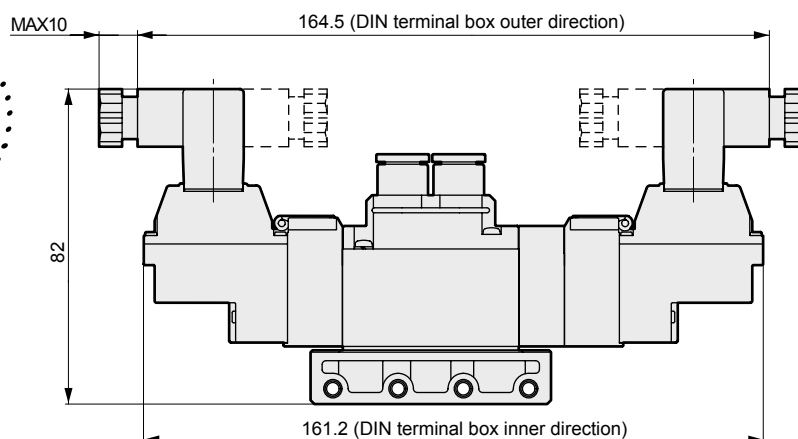
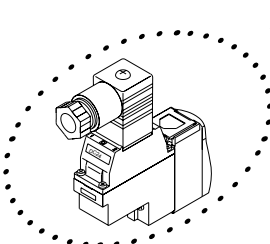
● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC.



● DIN terminal box type (B)



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

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

4GA3 Series

Discrete valve; body piping

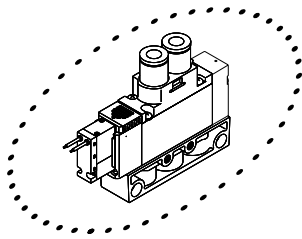
Dimensions



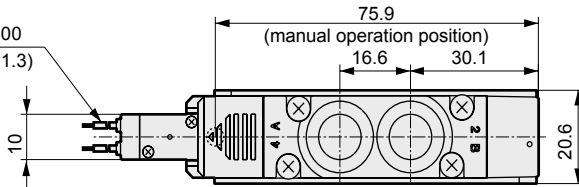
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA310

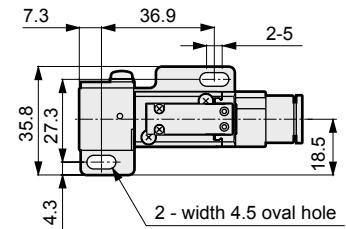
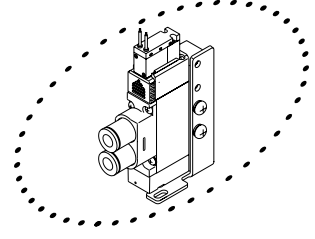
● 2-position single grommet lead wire (blank)



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

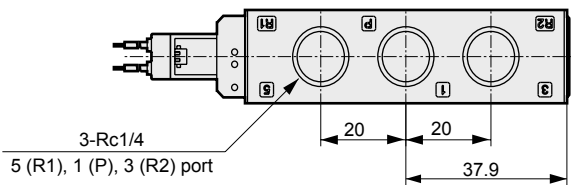
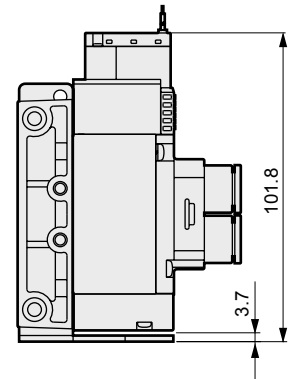
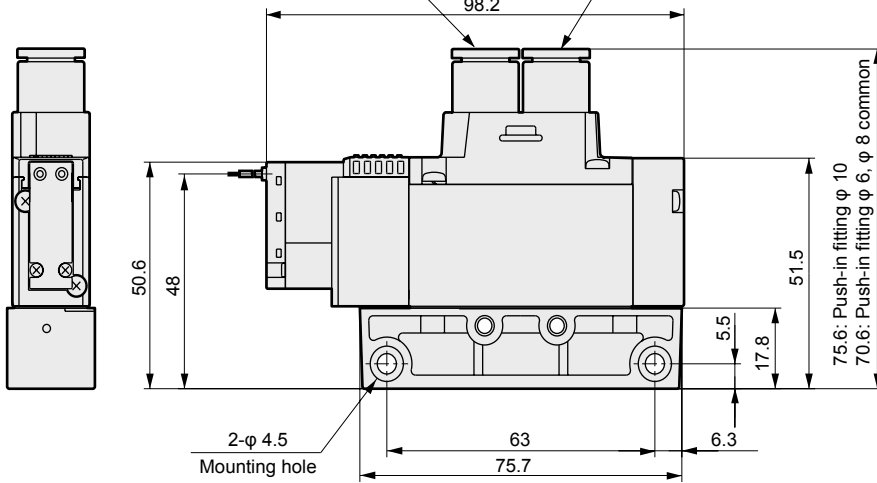


● Mounting plate type (P)

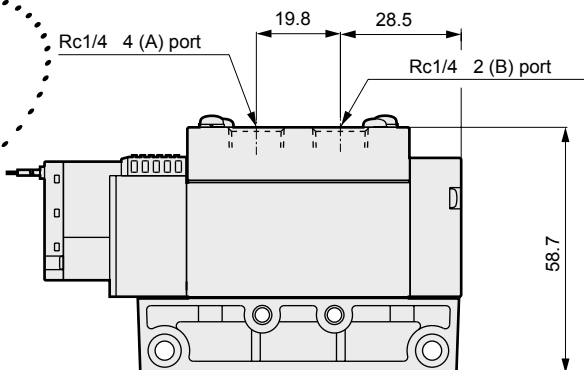
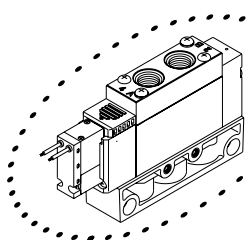


Push-in fitting φ 6, φ 8, φ 10 (selection)
4 (A) port

Push-in fitting φ 6, φ 8, φ 10 (selection)
2 (B) port

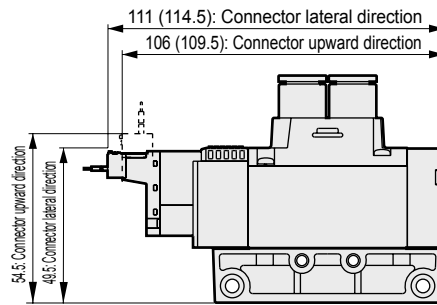
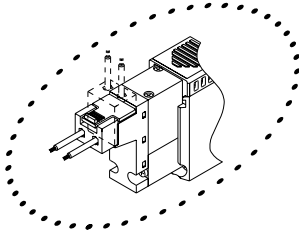


● Rc1/4 female thread type (08)



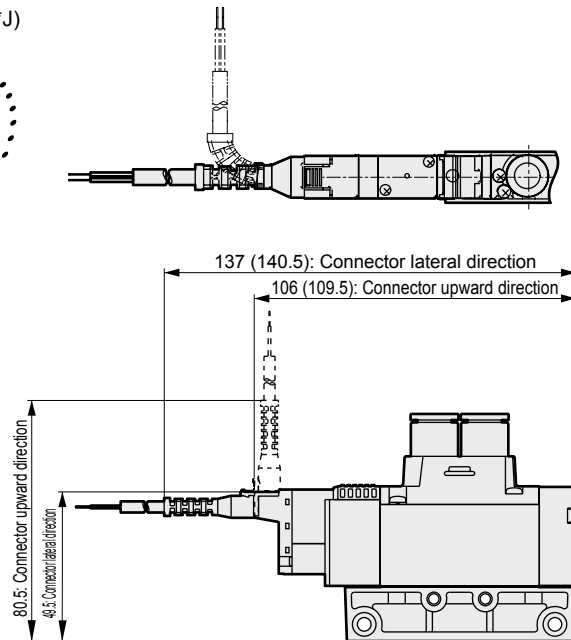
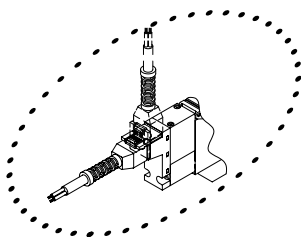
Dimensions

● E type connector type (E)



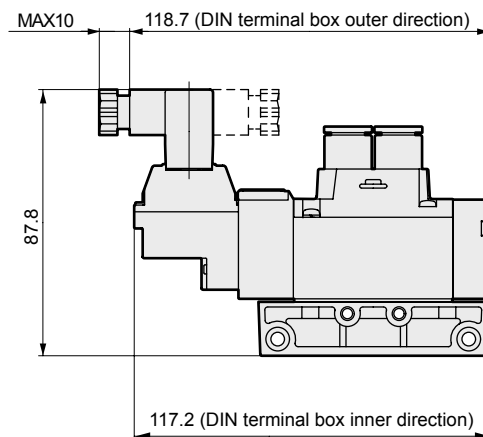
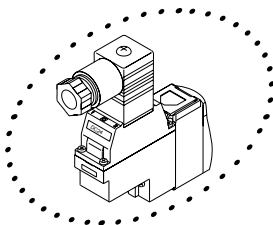
Note: Values in () apply for 100 VAC.

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA3 Series

Discrete valve; body piping

Dimensions

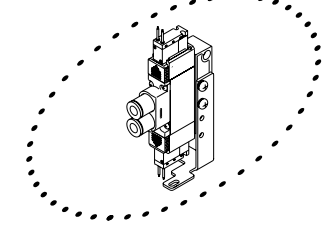
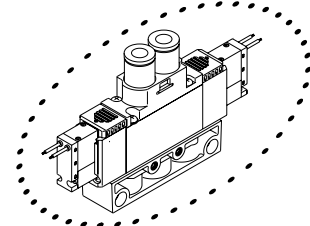


4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

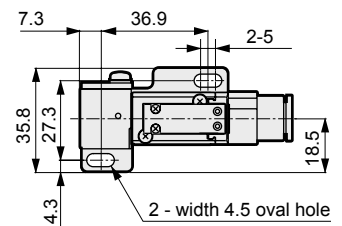
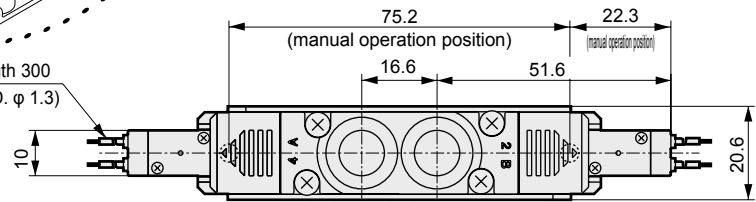
4GA320

● 2-position double grommet lead wire (blank)

● Mounting plate type (P)

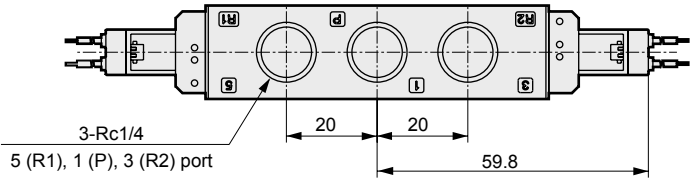
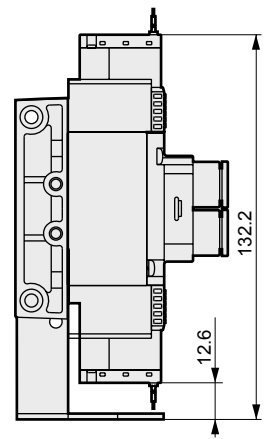
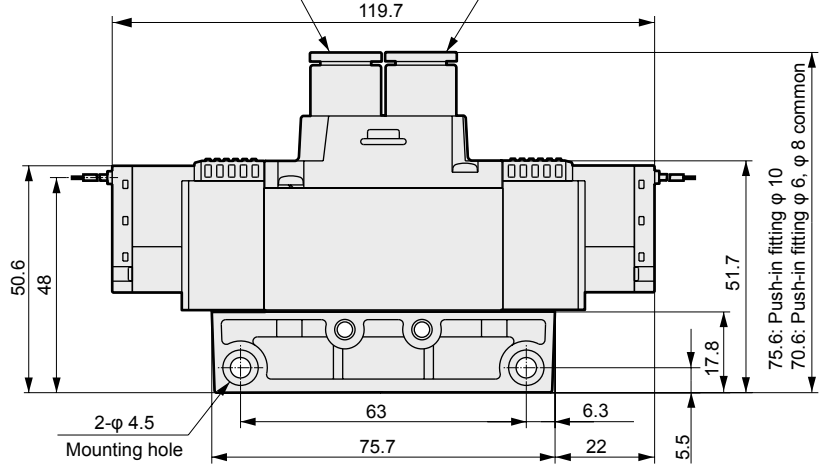
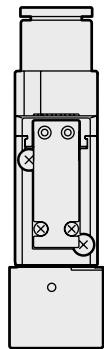


Lead wire length 300
(AWG#26, O.D. φ 1.3)

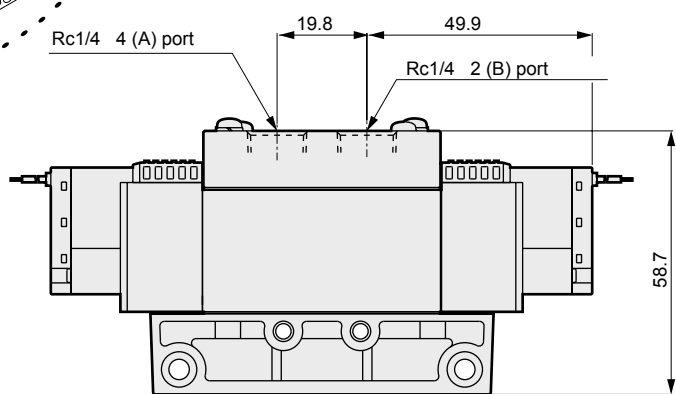
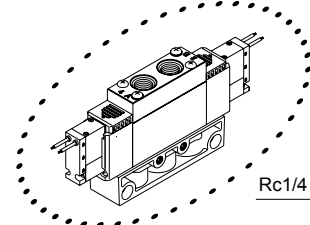


Push-in fitting φ 6, φ 8, φ 10 (selection)
4 (A) port

Push-in fitting φ 6, φ 8, φ 10 (selection)
2 (B) port

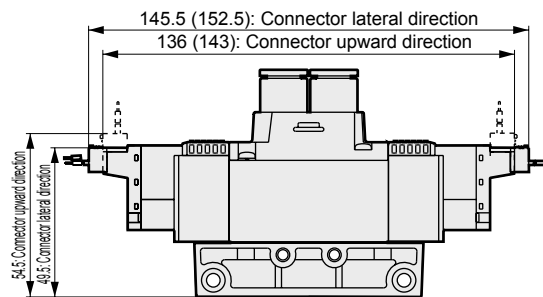
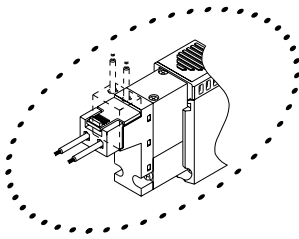


● Rc1/4 female thread type (08)



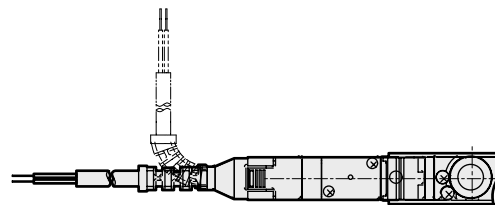
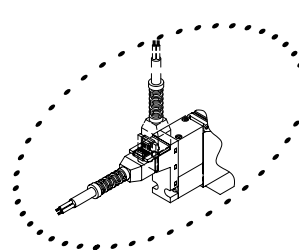
Dimensions

● E type connector type (E)



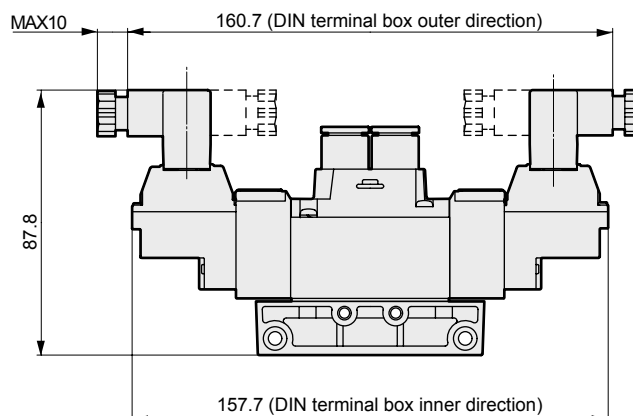
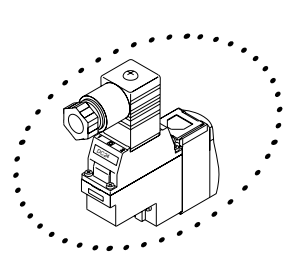
Note: Values in () apply for 100 VAC.

● 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
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GA3 Series

Discrete valve; body piping

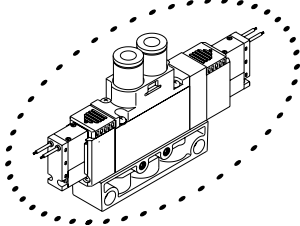
Dimensions



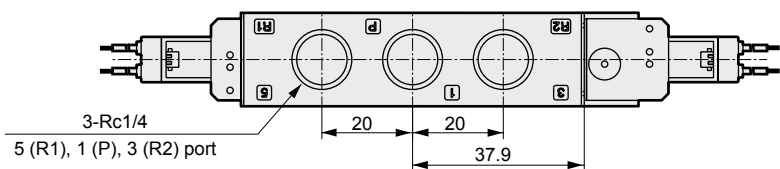
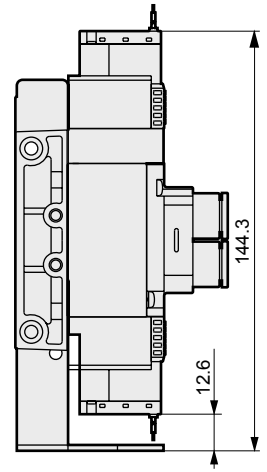
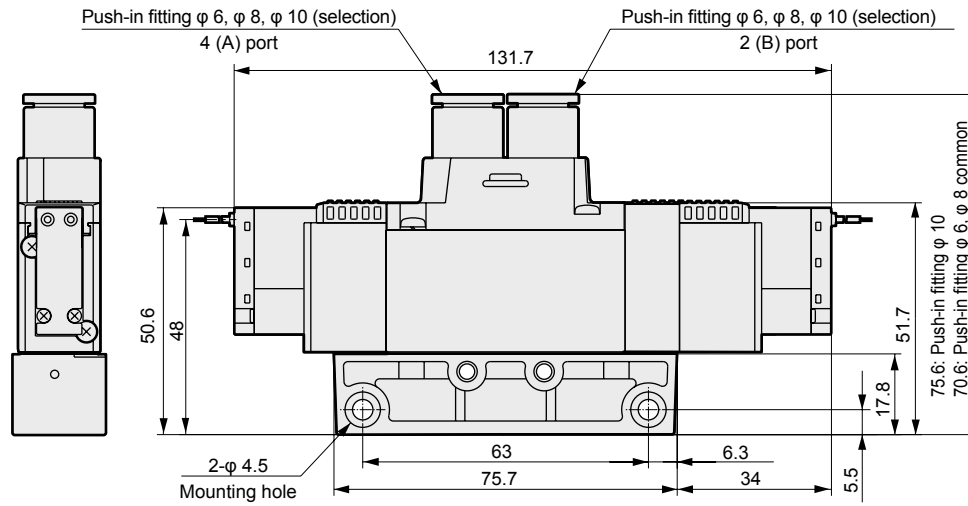
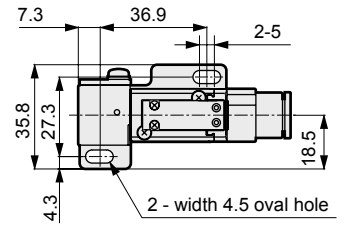
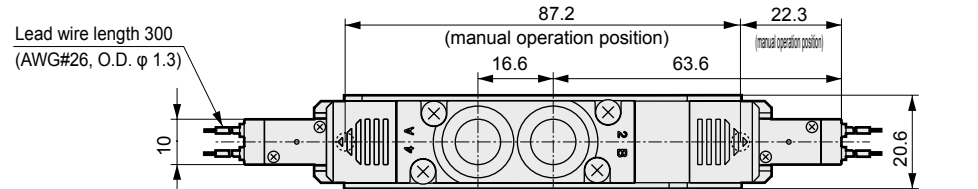
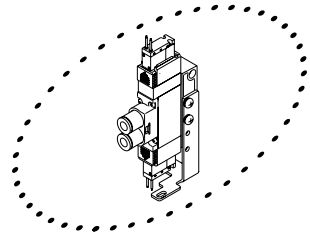
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
-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

4GA3³0

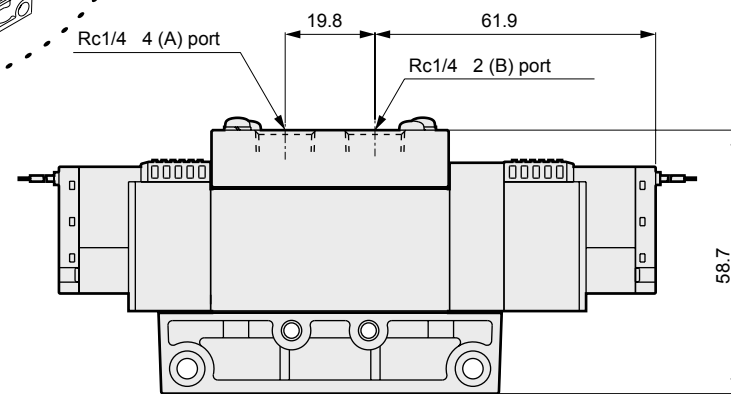
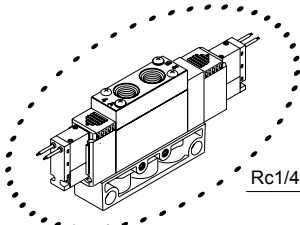
● 3 position grommet lead wire (blank)



● Mounting plate type (P)

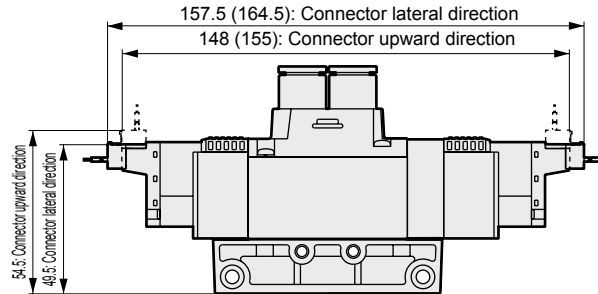
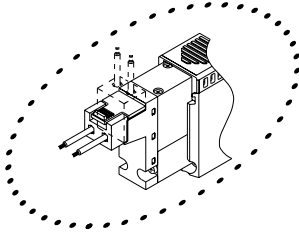


● Rc1/4 female thread type (08)



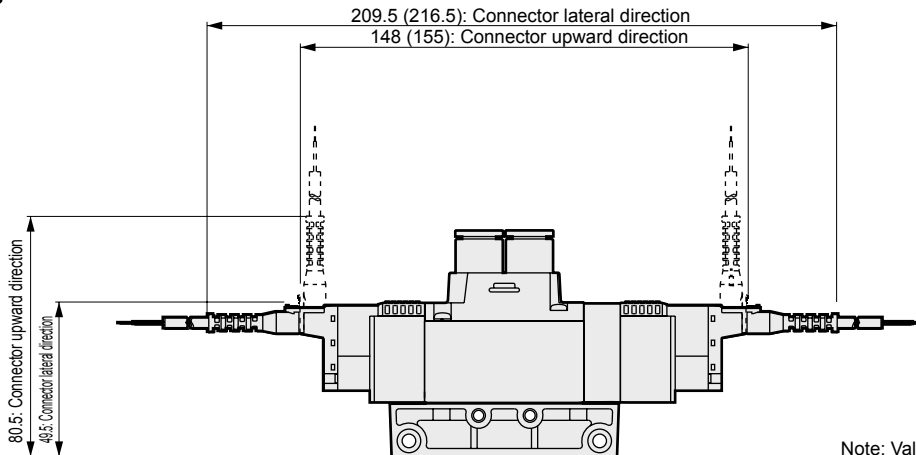
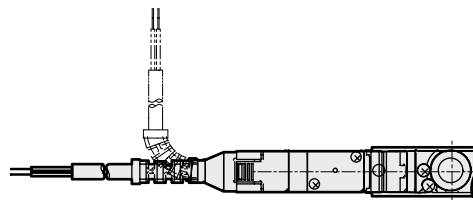
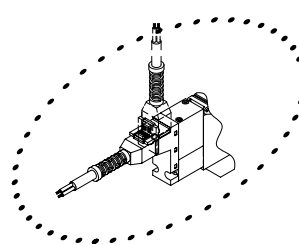
Dimensions

● E type connector type (E)



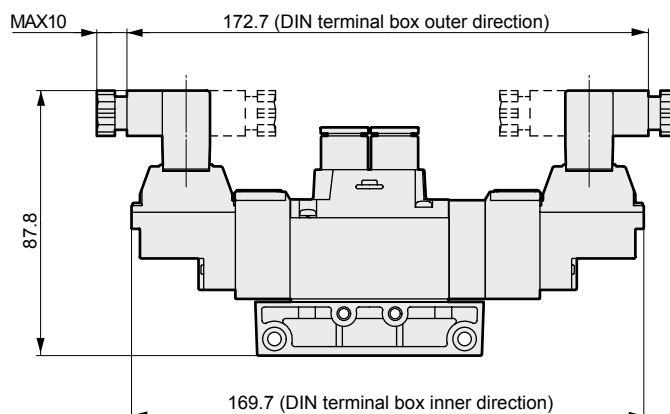
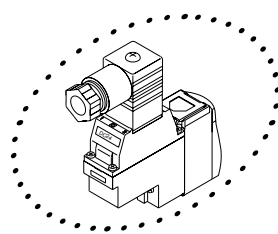
Note: Values in () apply for 100 VAC

● 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.

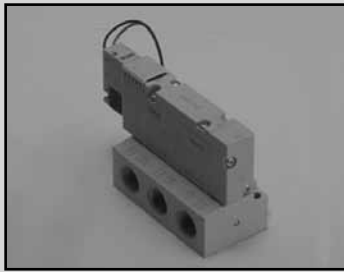
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

Discontinue

Discrete valve
Base piping

3GB1, 2/4GB1, 2, 3 Series

● Applicable cylinder bore size: ϕ 20 to ϕ 100



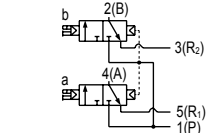
Refer to Ending for details.



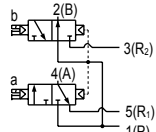
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
-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

JIS symbol

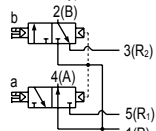
- Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



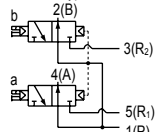
(A side valve: N.C. type, B side valve: N.O. type)



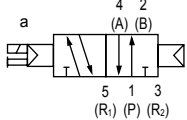
(A side valve: N.O. type, B side valve: N.C. type)



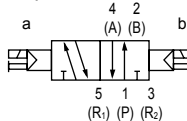
(A side valve: N.O. type, B side valve: N.O. type)



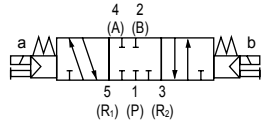
- 5 port valve
2-position single



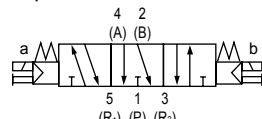
2-position double



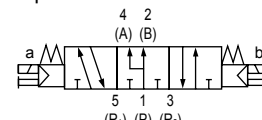
3-position all ports closed



3-position A/B/R connection



3-position P/A/B connection



Common specifications

Descriptions		
Valve type and operation	Pilot operated 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)	
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 to 0.7 MPa.

Electrical specification

Descriptions			
Rated voltage	DC	12,24	
	V AC	100	
Voltage fluctuation range		±10%	
Holding current	24 VDC	0.023 (0.025)	
	A 12 VDC	0.046 (0.050)	
Note 4	100 VAC	0.010 (0.012)	
Power consumption W	24 VDC	0.55 (0.6)	
	Note 4 12 VDC	0.55 (0.6)	
Apparent power VA	100 VAC	1.0 (1.2)	
Thermal class		B	
Temperature rise °C		50	
Surge suppressor		Option	
Indicator		Light (option)	

Note 4 Values in () apply when a light is attached.

Individual specifications

Descriptions		3GB1/4GB1	3GB2/4GB2	4GB3
Port size	A/B port	Rc1/8	Rc1/4	Rc1/4, Rc3/8
	P/R1/R 2 port	Rc1/8	Rc1/4	Rc1/4, Rc3/8

G and NPT threads are available for piping port. Contact CKD for details.

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	79 (37)	154 (72)	214 (95)
			E type connector	81 (39)	156 (74)	216 (97)
			DIN terminal box	-	176 (94)	236 (117)
		Double	Grommet lead wire	94 (52)	169 (87)	230 (111)
			E type connector	98 (56)	173 (91)	234 (115)
			DIN terminal box	-	213 (131)	274 (155)
	3-position closed	All ports closed	Grommet lead wire	95 (53)	180 (98)	239 (120)
			E type connector	99 (57)	184 (102)	243 (124)
			DIN terminal box	-	224 (141)	283 (164)

• 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.	Solenoid position	P→A/B		A/B→R1/R2		
		C[dm ³ / (s·bar)]	b	C[dm ³ / (s·bar)]	b	
3GB1	Dual 3 port valve integrated type	0.92	0.08	1.0	0.11	
3GB2	Dual 3 port valve integrated type	1.7	0.42	2.1	0.32	
4GB1	2-position	1.3	0.27	1.2	0.15	
	3-position	All ports closed	1.1	0.31	1.1	0.29
		ABR connection	1.1	0.31	1.3	0.29
		PAB connection	1.4	0.30	1.1	0.26
4GB2	2-position	2.6	0.20	2.5	0.15	
	3-position	All ports closed	2.3	0.32	2.2	0.19
		ABR connection	2.2	0.23	2.4	0.14
		PAB connection	2.4	0.10	2.3	0.24
4GB3	2-position	4.3	0.24	4.2	0.18	
	3-position	All ports closed	3.3	0.40	3.2	0.35
		ABR connection	3.3	0.36	4.2	0.28
		PAB connection	4.5	0.28	3.4	0.40

Note 1: Effective cross-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 52.

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

- 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**

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

3GB1, 2/4GB1, 2, 3 Series

Discrete valve; base piping

How to order

4GB1 **1** **0** - **06** - **E2** **○** - **3**

3GB1 **66** **0** - **06** - **E2** **○** - **3**

Discrete valve for mounting base

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

3 port discrete valve for mounting base

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

A Model no. **B** Solenoid position

C Port size

D Electrical connections
Refer to page 9 for the circuit diagram with surge suppressor/light.

E Option

F Voltage

⚠ 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 Grommet lead wire specifications are available only for 24 and 12 VDC.
- Note 3 3-position all ports closed and PAB connection are not provided with check valve. Refer to page 439 for details on check valve.

A Model no.

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

Symbol Descriptions

B Solenoid position		3GB1	3GB2	4GB1	4GB2	4GB3
1	2-position single			●	●	●
2	2-position double			●	●	●
3	3-position all ports closed			●	●	●
4	3-position ABR connection			●	●	●
5	3-position P/A/B 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 open	●	●			
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	A/B port	P/R1/R 2 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)

D Electrical connections

Blank	Grommet lead wire (300 mm) Note 2	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/light		●		●	●

E type connector (upward/lateral direction common)

E0	Lead wire (300 mm)	●	●	●	●	●
E00	Lead wire (500 mm)	●	●	●	●	●
E01	Lead wire (1000 mm)	●	●	●	●	●
E02	Lead wire (2000 mm)	●	●	●	●	●
E03	Lead wire (3000 mm)	●	●	●	●	●
E2	Lead wire (300 mm) with surge suppressor/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	●	●	●	●	●
E0N	Without lead wire (without socket)	●	●	●	●	●
E2N	Without lead wire (without socket) with surge suppressor/light	●	●	●	●	●
E3	Without lead wire (with socket/terminal) with surge suppressor/light	●	●	●	●	●
E1	Without lead wire (with socket/terminal)	●	●	●	●	●

EJ type connector (socket with cover, upward/lateral direction common)

E01J	Lead wire (1000 mm)	●	●	●	●	●
E02J	Lead wire (2000 mm)	●	●	●	●	●
E03J	Lead wire (3000 mm)	●	●	●	●	●
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	●	●	●	●	●

E Option

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	●	●	●	●	●
F	P/A/B port filter integrated	●	●	●	●	●

F Voltage

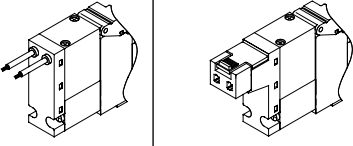
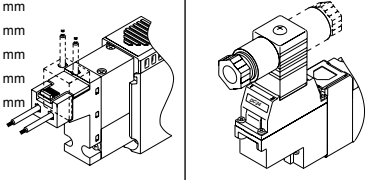
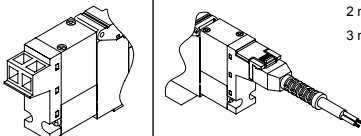
1	100 VAC (rectifier integrated)	●	●	●	●	●
3	24 VDC	●	●	●	●	●
4	12 VDC	●	●	●	●	●

is not available.

Discontinue

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 300 mm</p> 	
E0 E2 E type connector	B DIN terminal box
<p>● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm</p> 	
E0N E2N E type connector without socket	E0*J E2*J EJ type connector
<p>● Lead wire length 1 m 2 m 3 m</p> 	

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

3GB1/4GB1 Series

Discrete valve; base piping

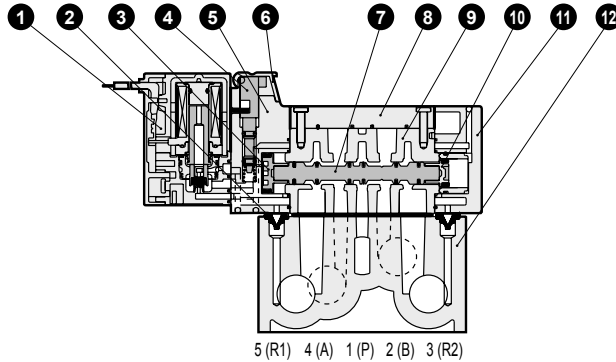
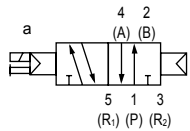
4GA/B Internal structure and parts list

M4GA/B 3GB1660, 1670, 1760, 1770

● Dual 3 port valve piping type grommet lead wire (blank) Refer to page 56.

4GA4/B4 MN4GA/B 4GB110

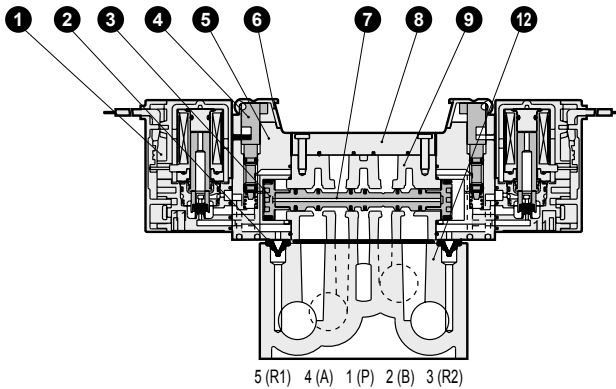
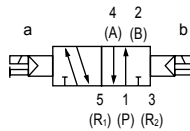
● 2-position single grommet lead wire (blank)



4TB

4L2-4/LMF0 4GB120

● 2-position double grommet lead wire (blank)

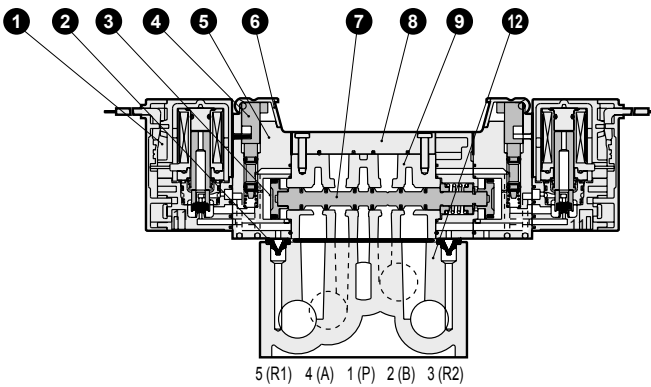
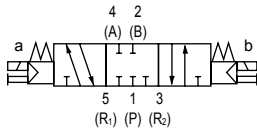


4F

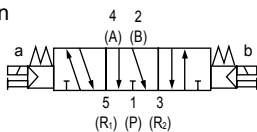
4F (Master) 4GB1 3/4 0

● 3 position grommet lead wire (blank)

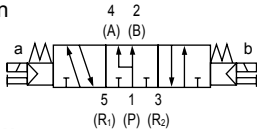
All ports closed



A/B/R connection



P/A/B connection



Main parts list

Parts list

No.	Parts name	Material	No.	Parts name	Model no.
1	Coil assembly	-	1	Coil assembly	4G - [Electrical connections] - * - COIL - [Voltage] Blank: Standard A: Ozone specifications Blank: Grommet lead wire
2	Pilot exhaust check valve	Hydrogenated nitrile rubber			
3	Piston D assembly	-			
4	Manual operating device	Resin			
5	Piston room	Resin			
6	Manual protection cover	Resin			
7	Spool assembly	-			
8	Plate	Resin			
9	Body	Aluminum alloy die-casting			
10	Piston S assembly	-			
11	Cap	Resin			
12	Discrete sub-plate	Aluminum alloy die-casting			

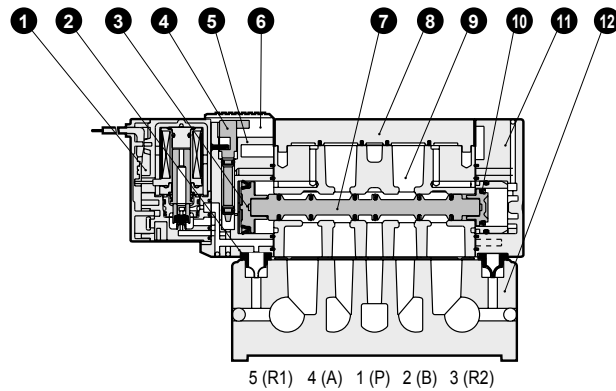
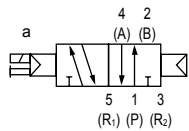
Internal structure and parts list

3GB2660, 2670, 2760, 2770

● Dual 3 port valve integrated type grommet lead wire (blank) Refer to page 56.

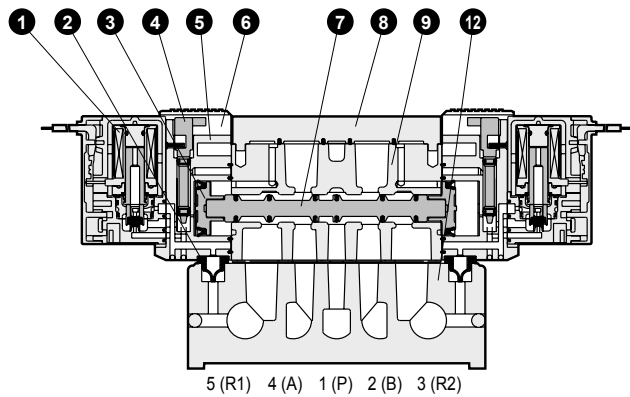
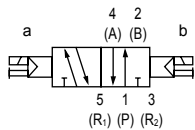
4GB210/4GB310

● 2-position single grommet lead wire (blank)



4GB220/4GB320

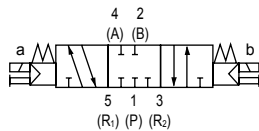
● 2-position double grommet lead wire (blank)



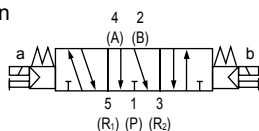
4GB2³/₄ 0/4GB3³/₅ 0

● 3 position grommet lead wire (blank)

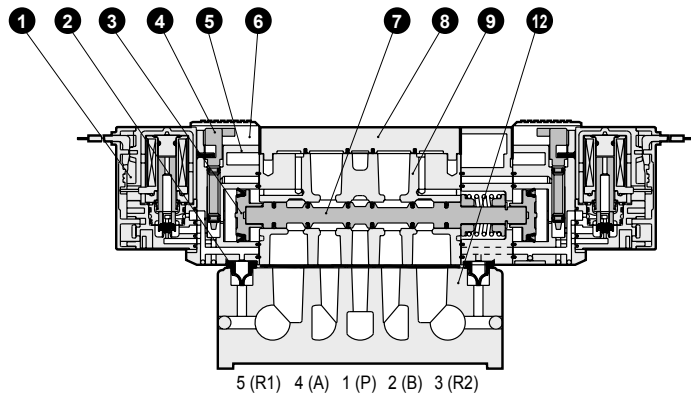
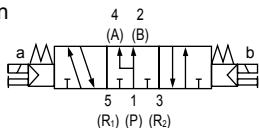
All ports closed



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	Resin
5	Piston room	Resin
6	Manual protection cover	Resin
7	Spool assembly	-
8	Plate	Resin
9	Body	Aluminum alloy die-casting
10	Piston S assembly	-
11	Cap	Resin
12	Discrete sub-plate	Aluminum alloy die-casting

Parts list

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

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

3GB1/2 Series

Discrete valve; base piping

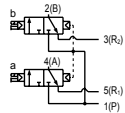
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

Internal structure and parts list

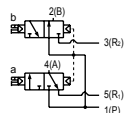
3GB1 ⁶⁶/₆₇ ⁷⁶/₇₇ 0

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

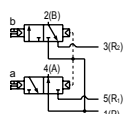
A side valve: Normally closed,
B side valve: Normally closed
NC/NC type



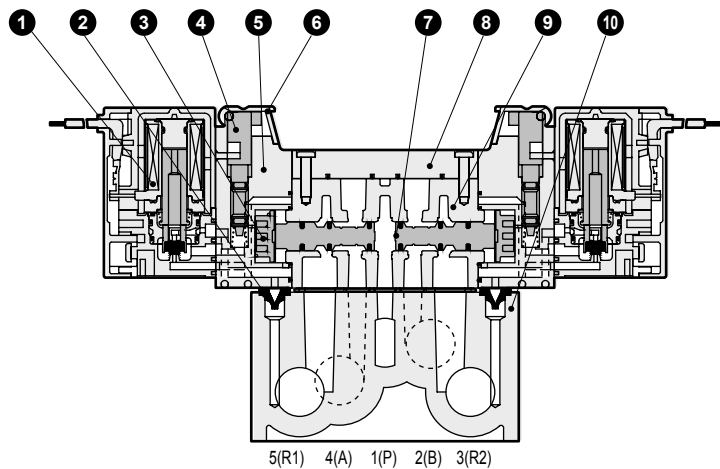
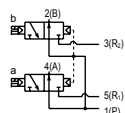
A side valve: Normally closed,
B side valve: Normally open
NC/NO type



A side valve: Normally open,
B side valve: Normally closed
NO/NC type



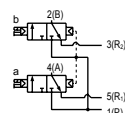
A side valve: Normally open,
B side valve: Normally open
NO/NO type



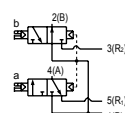
3GB2 ⁶⁶/₆₇ ⁷⁶/₇₇ 0

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

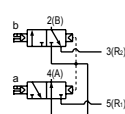
A side valve: Normally closed,
B side valve: Normally closed
NC/NC type



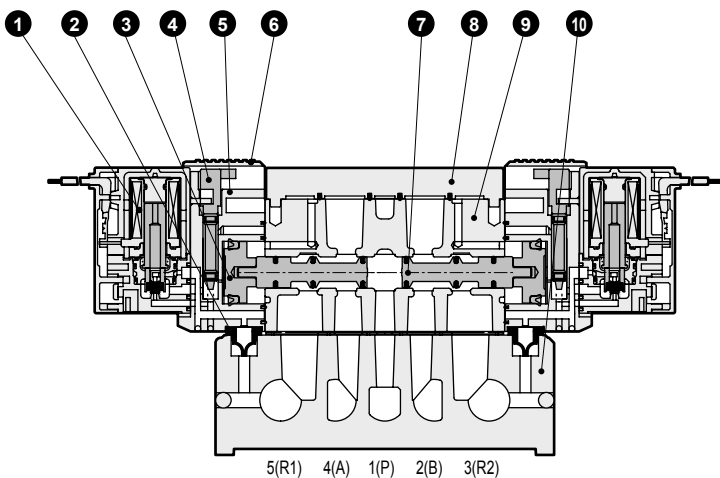
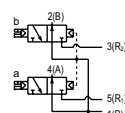
A side valve: Normally closed,
B side valve: Normally open
NC/NO type



A side valve: Normally open,
B side valve: Normally closed
NO/NC type



A side valve: Normally open,
B side valve: Normally open
NO/NO type



Main parts list

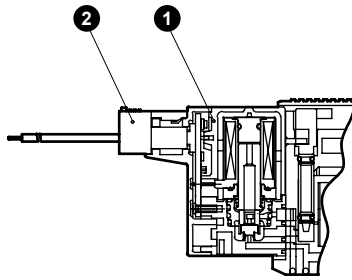
No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston assembly	-
4	Manual operating device	Resin
5	Piston room	Resin
6	Manual protection cover	Resin
7	Spool assembly	-
8	Plate	Resin
9	Body	Aluminum alloy die-casting
10	Discrete sub-plate	Aluminum alloy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

Parts list

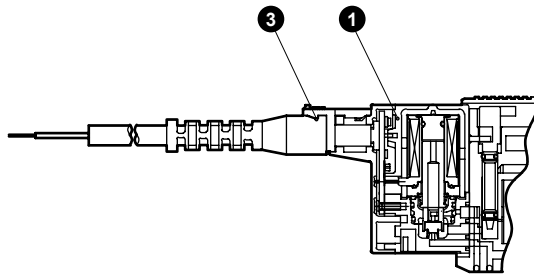
No.	Parts name	Model no.
1	Coil assembly	4G - [Electrical connections] - * - COIL - [Voltage]
		Blank: Standard
		A: Ozone specifications
		Blank: Grommet lead wire

Electrical connections internal structure and parts list

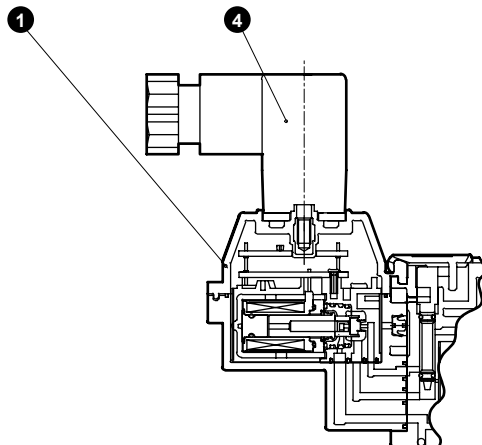
- E type connector type (E**)



- 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	4G - [Electrical connections] - * - COIL - [Voltage] <small>Blank: Standard A: Ozone specifications</small> <small>E*: E type connector type E*J: Socket with cover type B: DIN terminal box type B includes the DIN terminal box</small>
2	E type connector socket assembly	4G - SOCKET - ASSY - E** - [Voltage]
3	Socket assembly with cover	4G - SOCKET - ASSY - E**J
4	DIN terminal box assembly	4G - TERMINAL - BOX - [Voltage]

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

4GB1 Series

Discrete valve; base piping

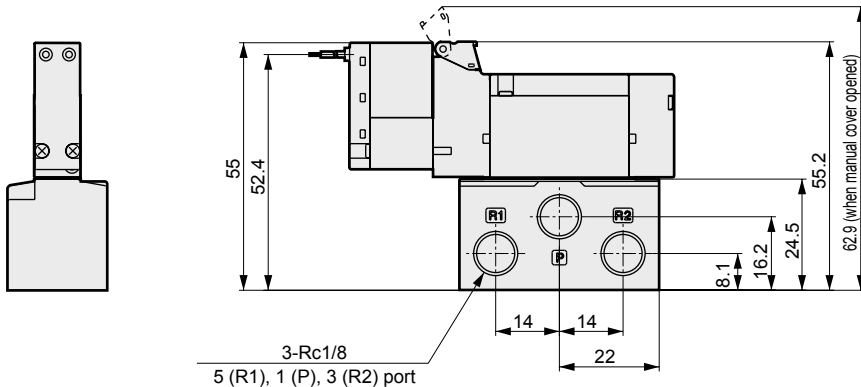
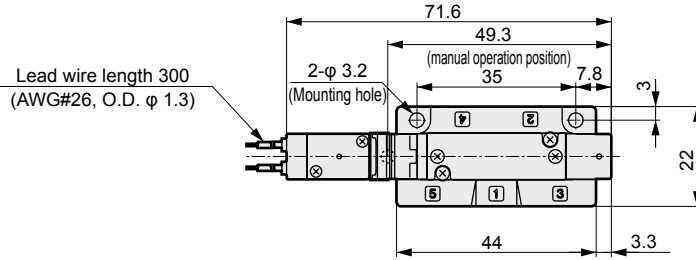
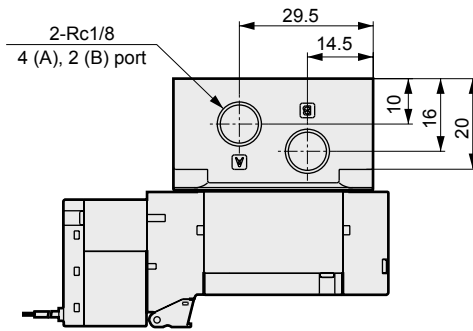
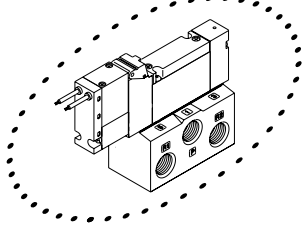
Dimensions



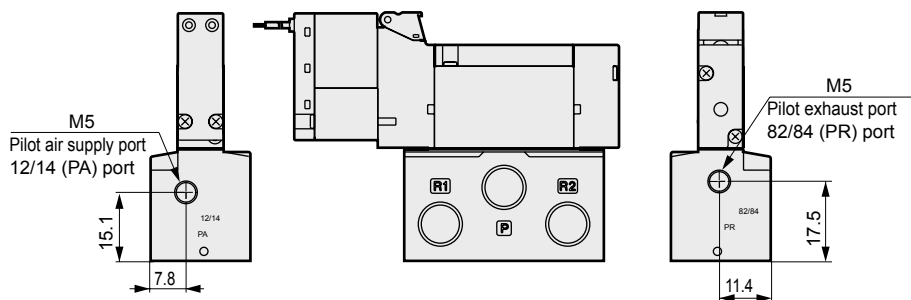
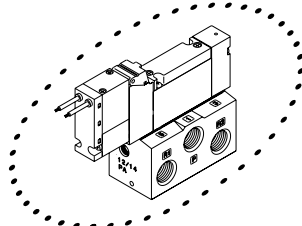
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GB110

● 2-position single Grommet lead wire (blank)

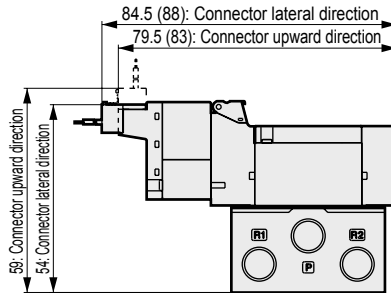
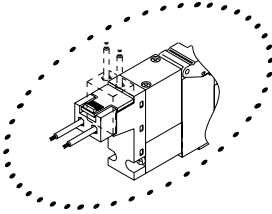


● External pilot type (K)



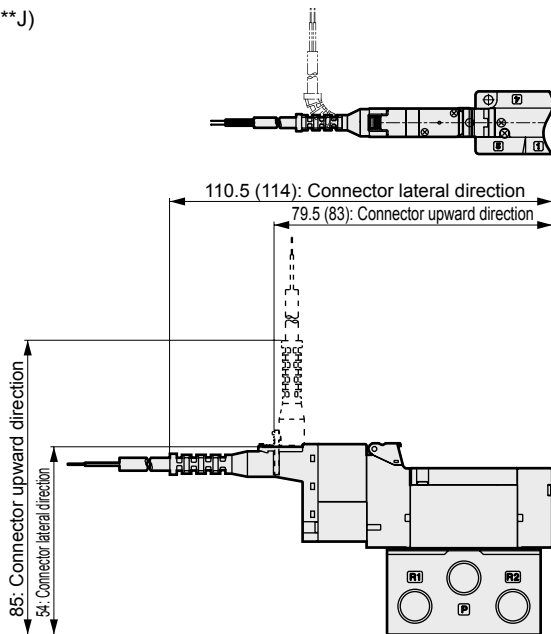
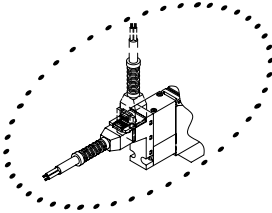
Dimensions

● 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

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

4GB1 Series

Discrete valve; base piping

Dimensions



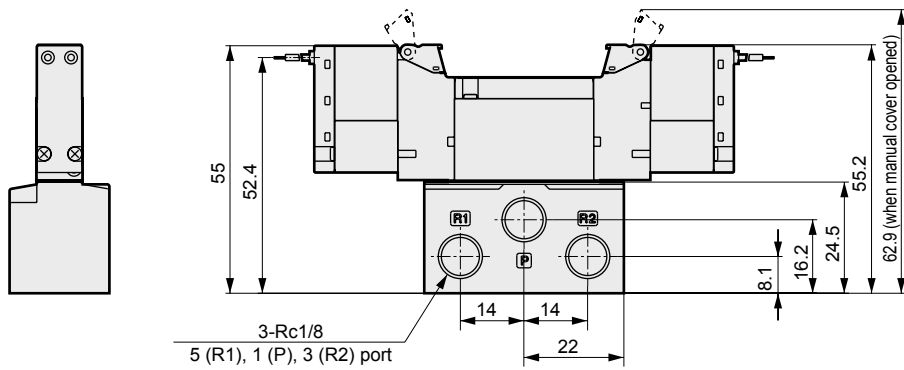
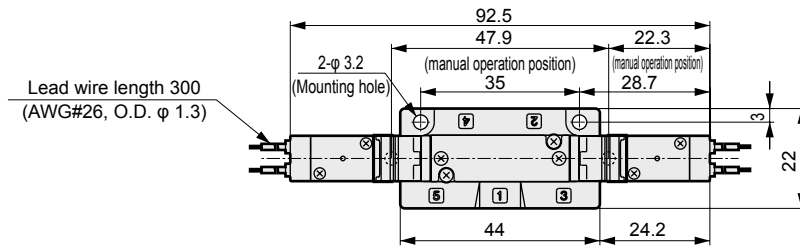
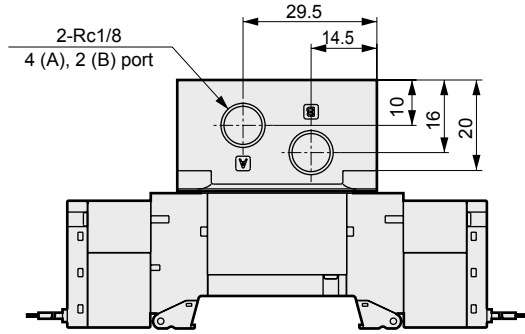
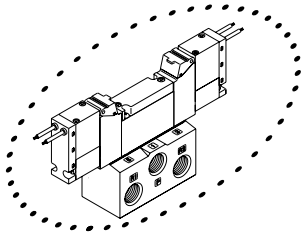
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GB120

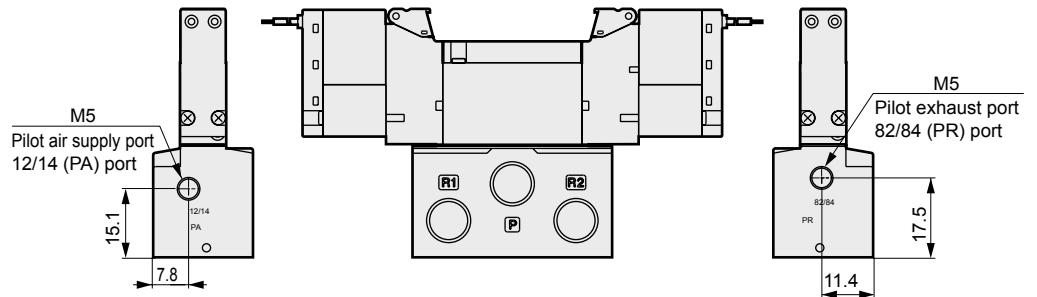
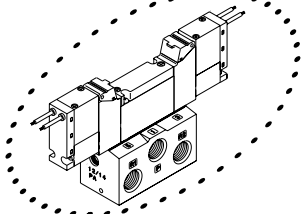
● 2-position double grommet lead wire (blank)

3GB1660/3GB1670/3GB1760/3GB1770

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



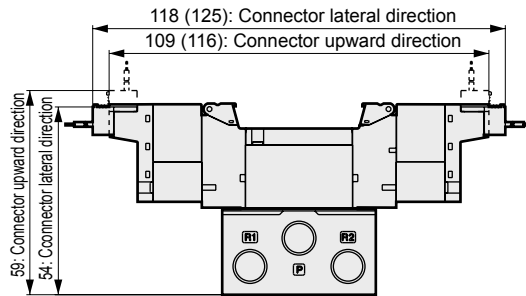
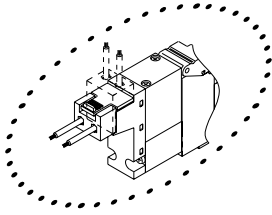
● External pilot type (K)



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

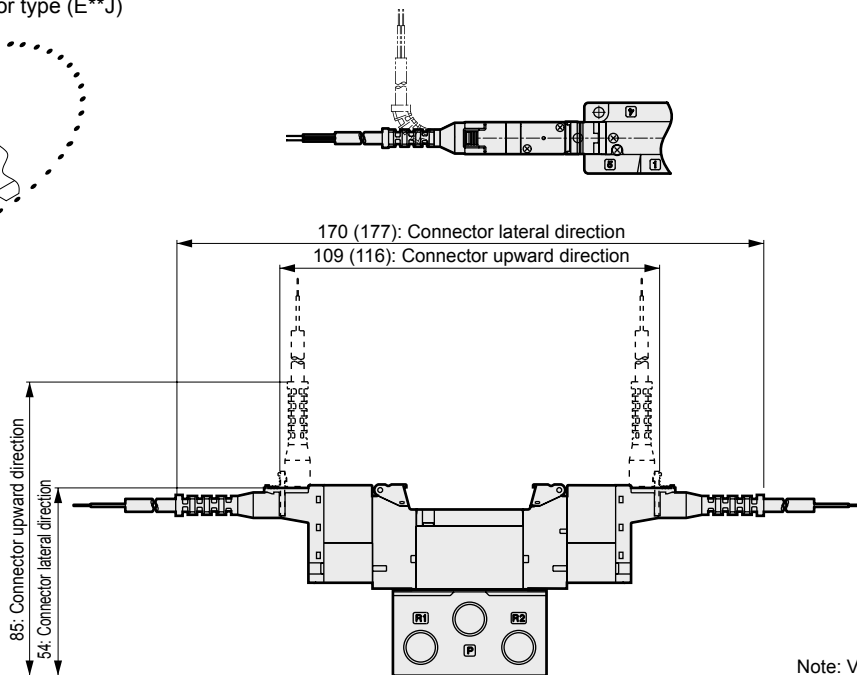
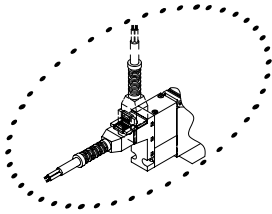
Dimensions

● 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

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

4GB1 Series

Discrete valve; base piping

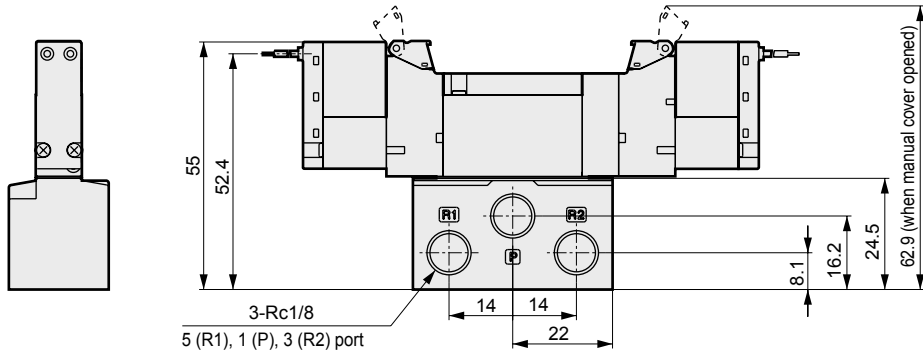
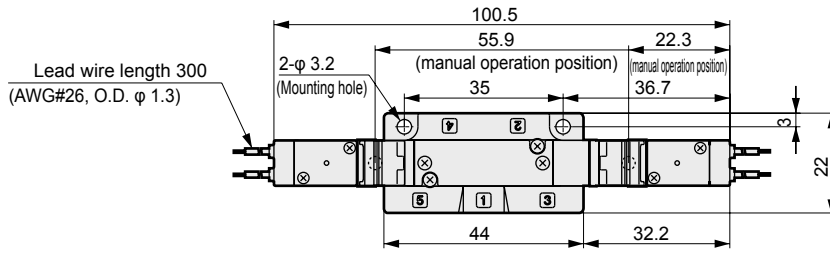
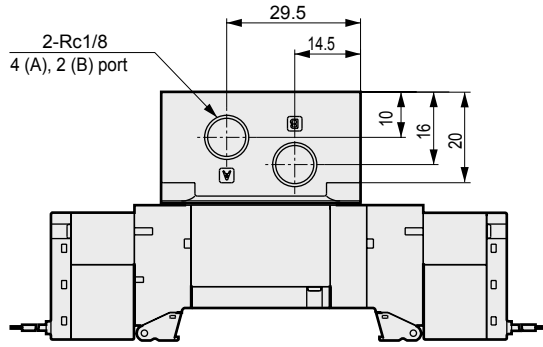
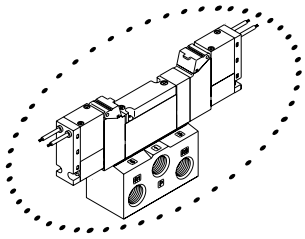
Dimensions



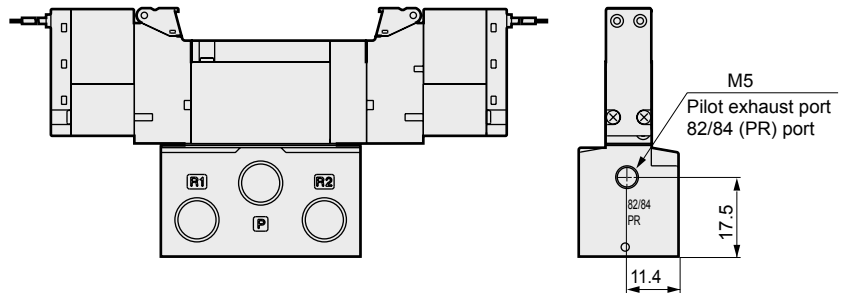
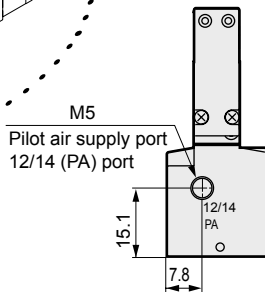
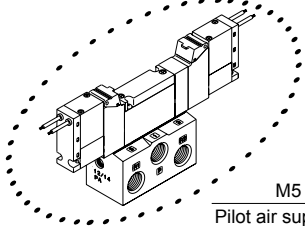
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GB1³₀₄0

● 3 position grommet lead wire (blank)

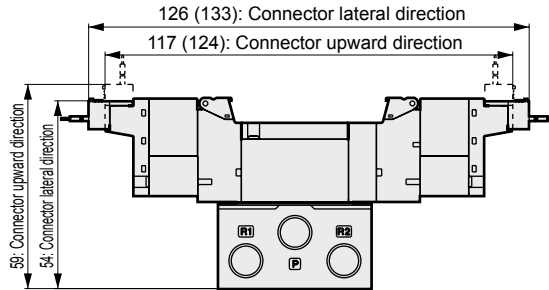
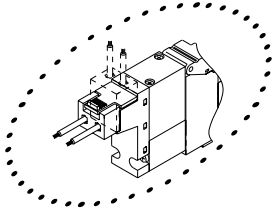


● External pilot type (K)



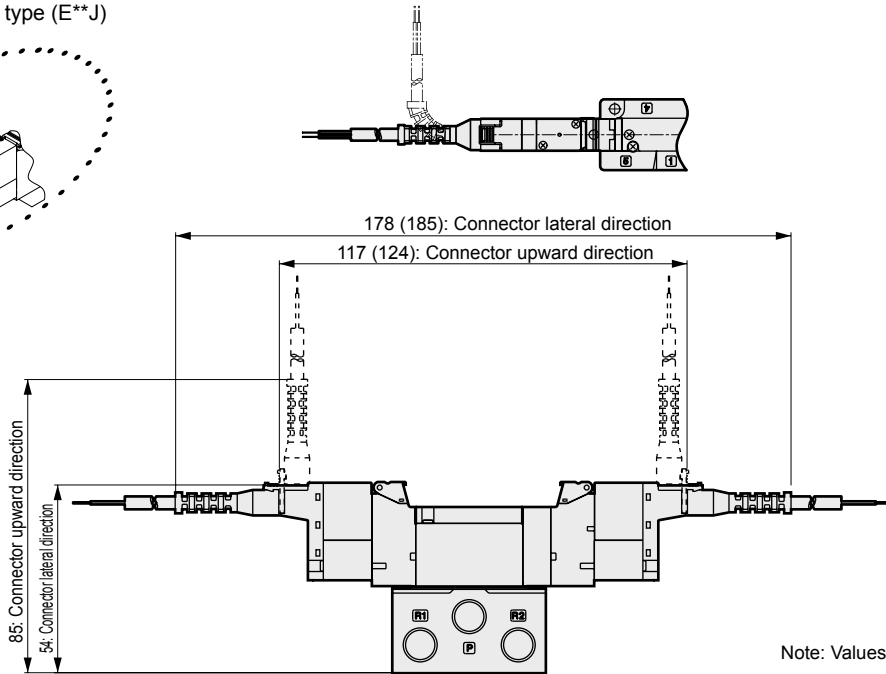
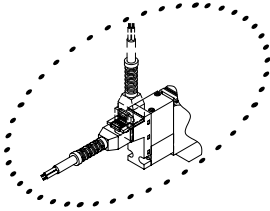
Dimensions

● 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

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

4GB2 Series

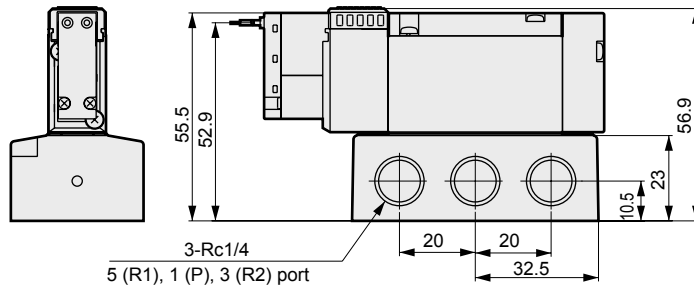
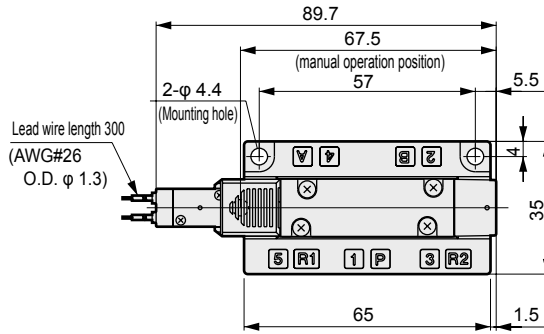
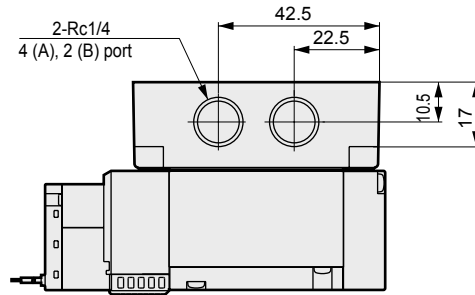
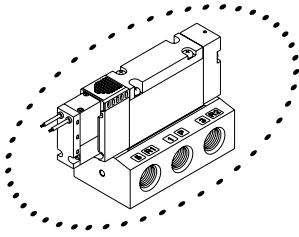
Discrete valve; base piping

Dimensions

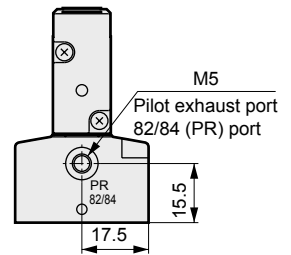
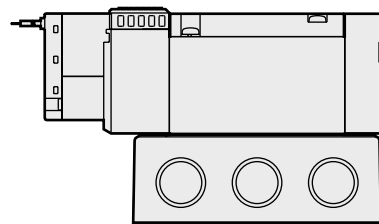
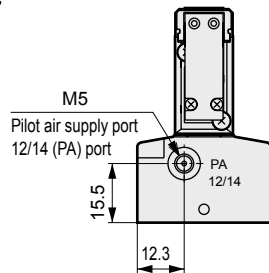
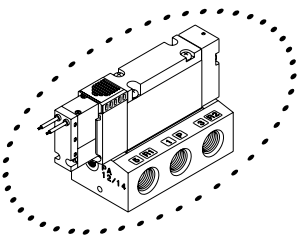


4GB210

- 2-position single grommet lead wire (blank)

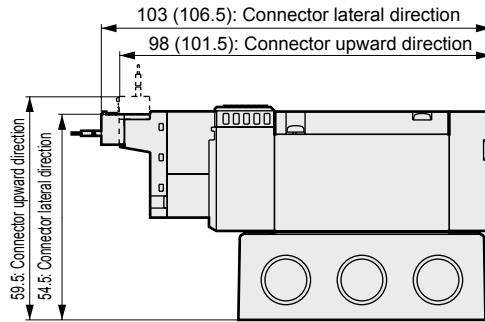
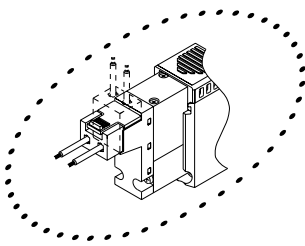


- External pilot type (K)



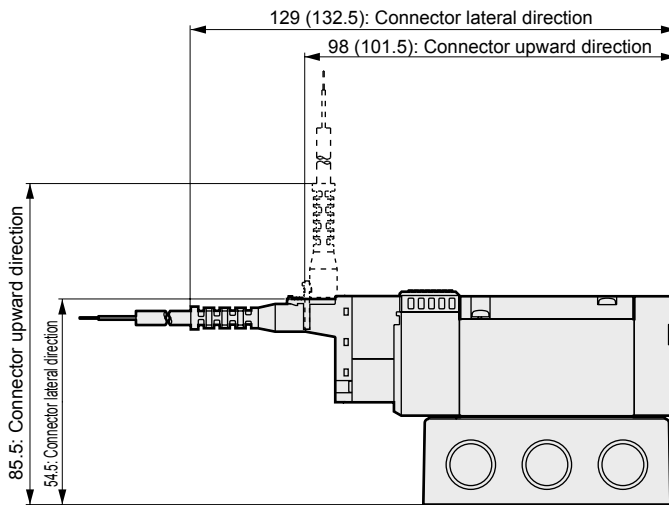
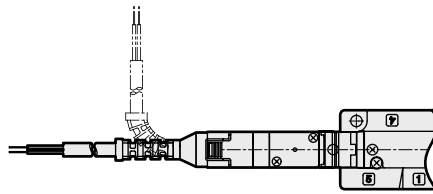
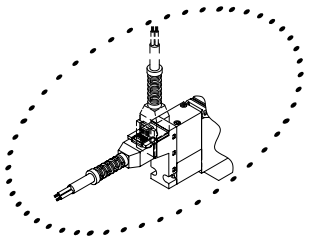
Dimensions

● E type connector type (E)



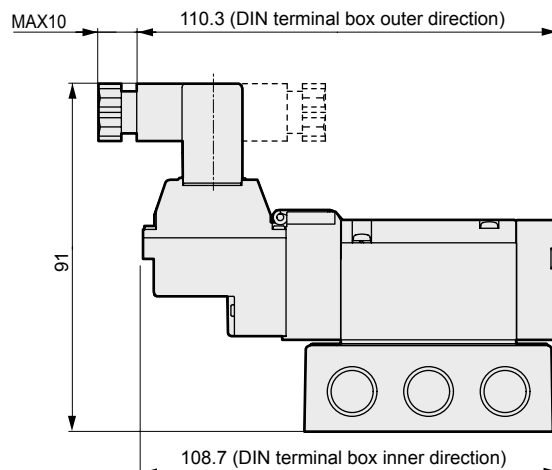
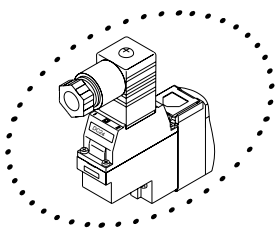
Note: Values in () apply for 100 VAC

● 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.

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

4GB2 Series

Discrete valve; base piping

Dimensions



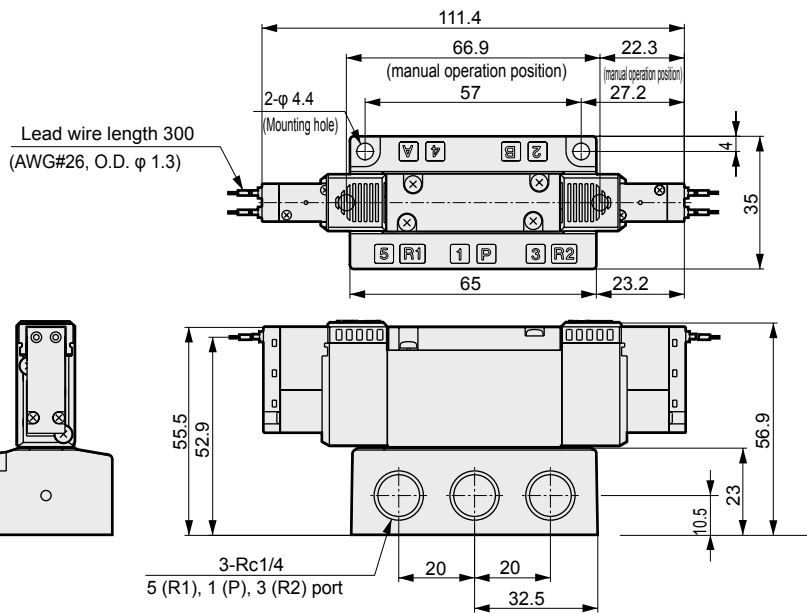
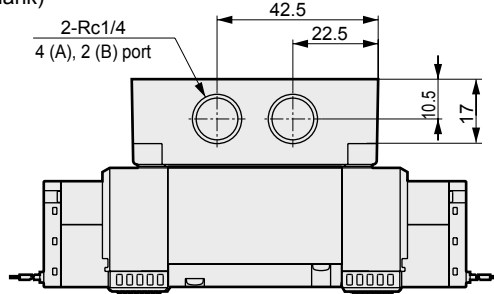
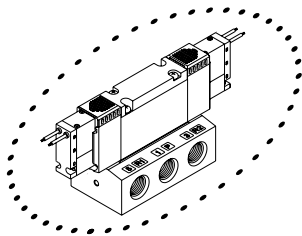
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GB220

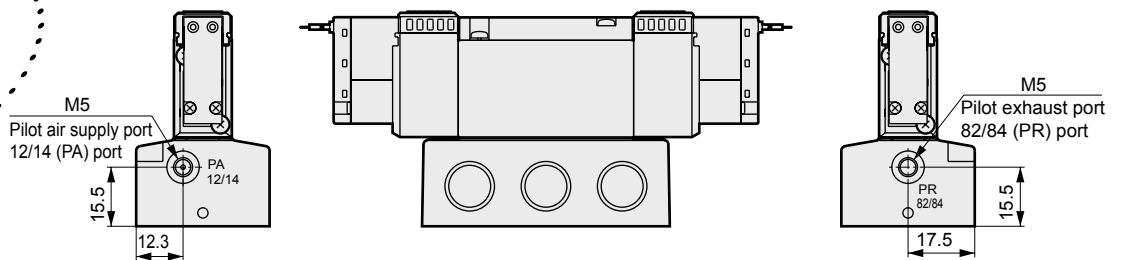
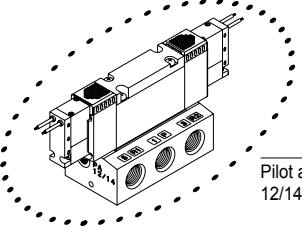
- 2-position double grommet lead wire (blank)

3GB2660/3GB2670/3GB2760/3GB2770

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



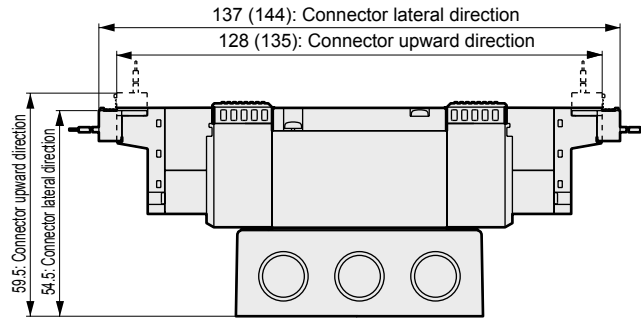
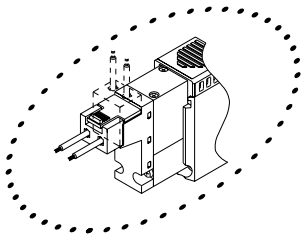
- External pilot type (K)



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

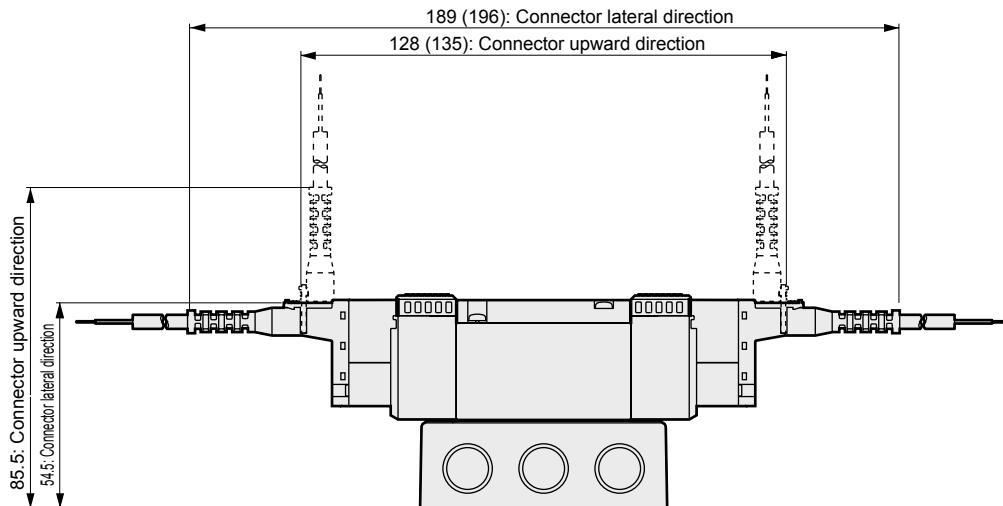
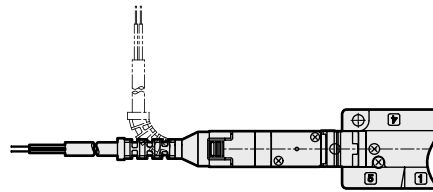
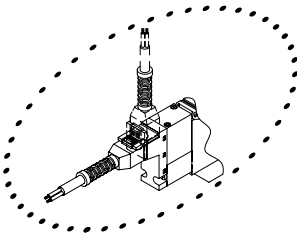
Dimensions

● E type connector type (E)



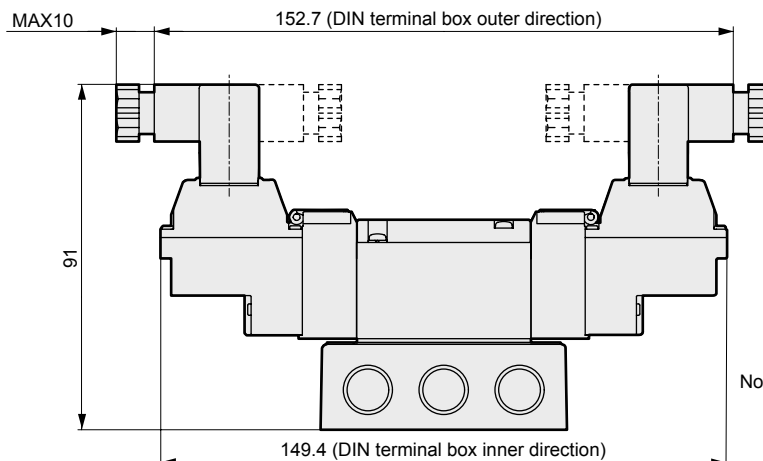
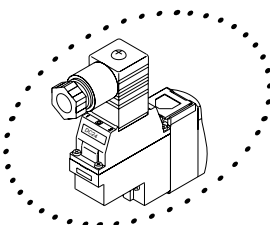
Note: Values in () apply for 100 VAC

● 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.

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

4GB2 Series

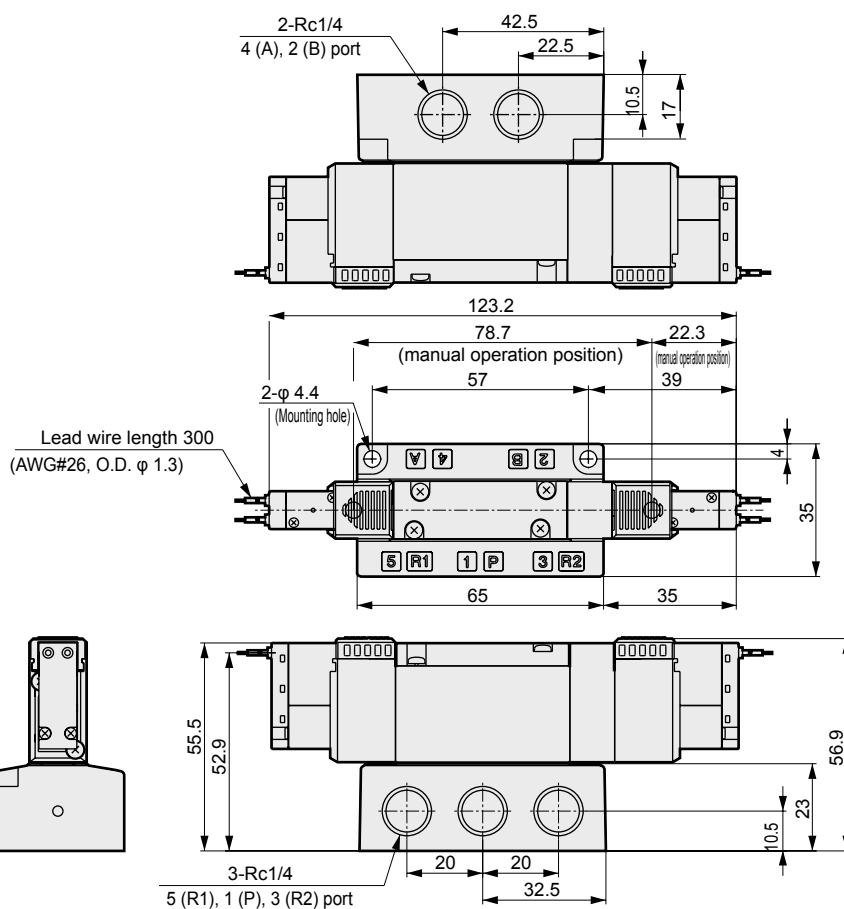
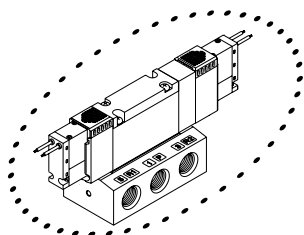
Discrete valve; base piping

Dimensions

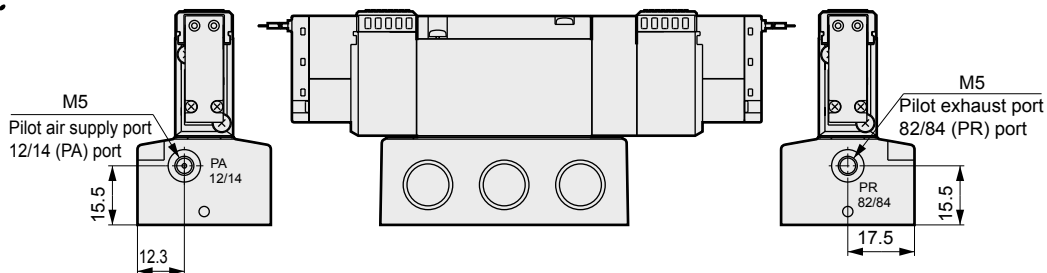
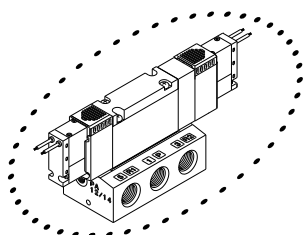


4GB2³₀

● 3 position grommet lead wire (blank)

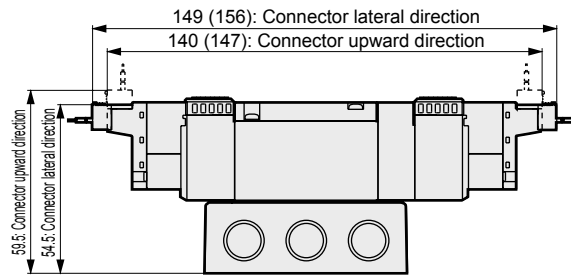
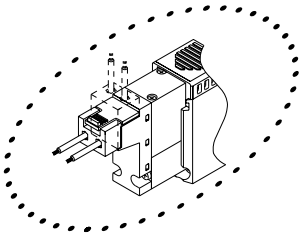


● External pilot type (K)



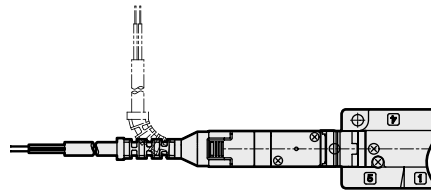
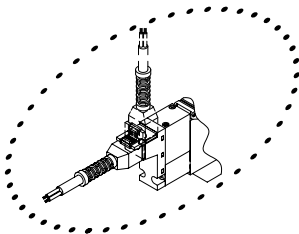
Dimensions

● E type connector type (E)

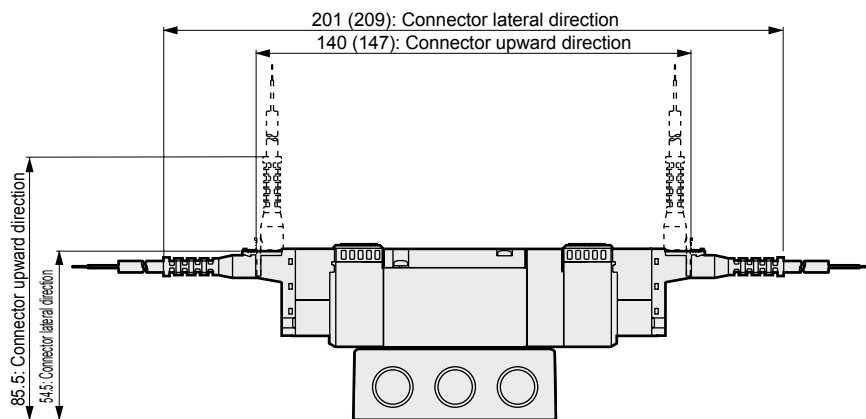


Note: Values in () apply for 100 VAC

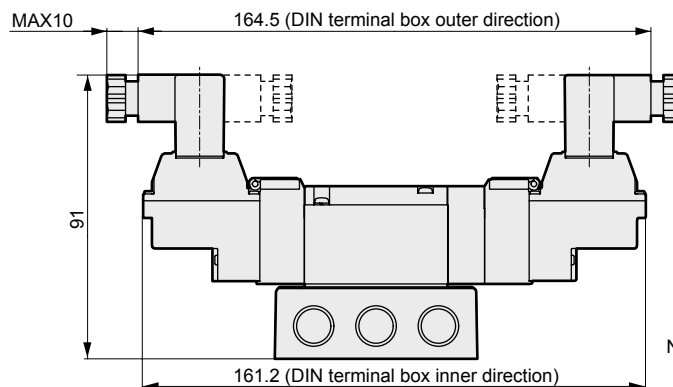
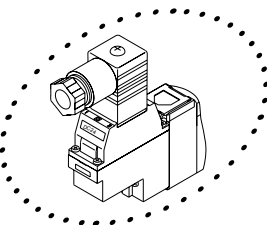
● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC



● DIN terminal box type (B)



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

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

4GB3 Series

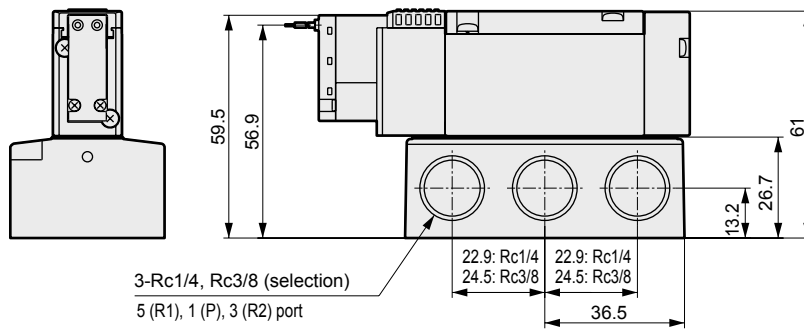
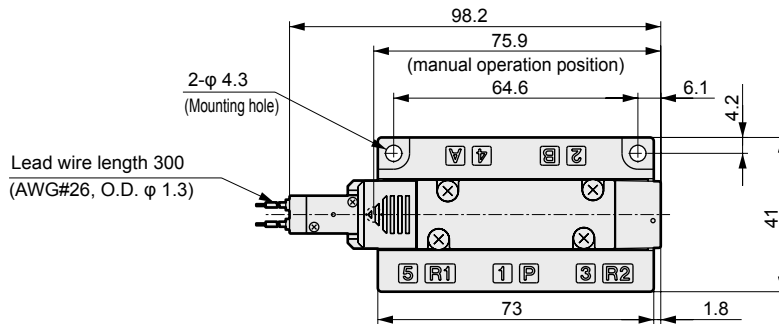
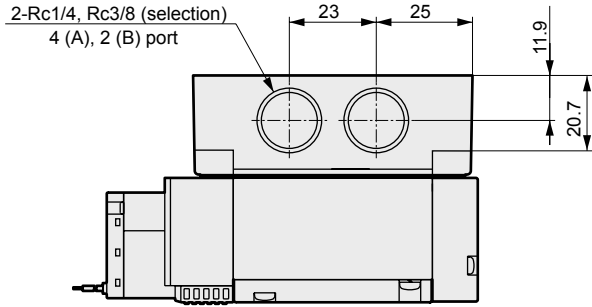
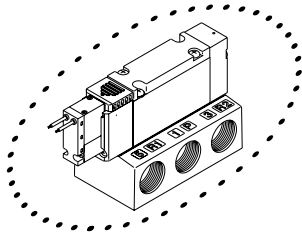
Discrete valve; base piping

Dimensions

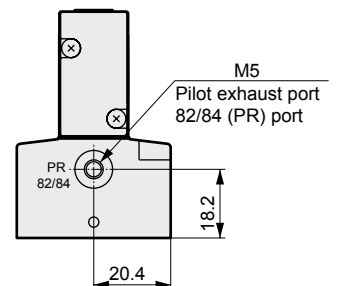
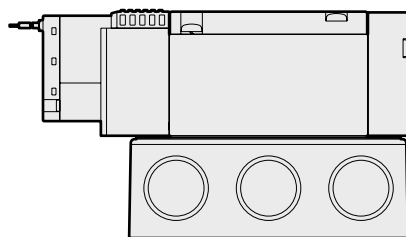
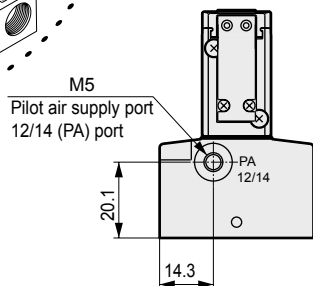
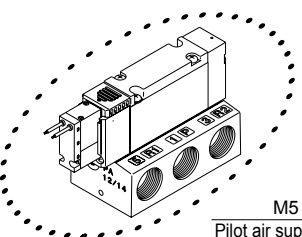


4GB310

- 2-position single grommet lead wire (blank)



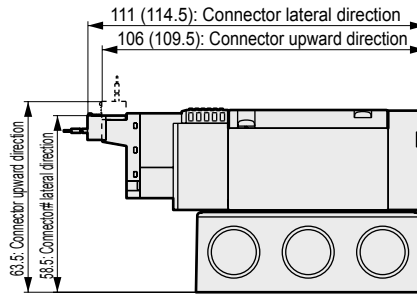
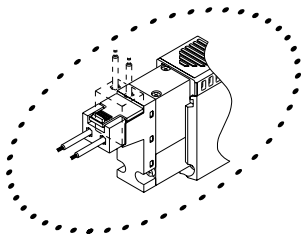
- External pilot type (K)



4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

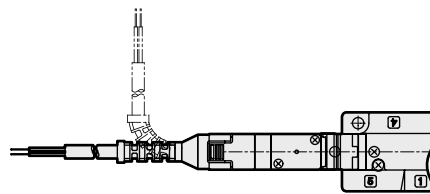
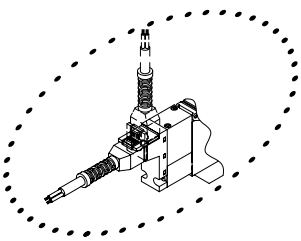
Dimensions

● E type connector type (E)

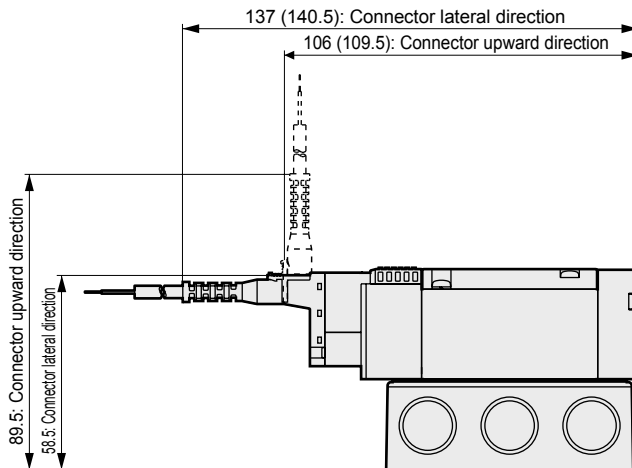


Note: Values in () apply for 100 VAC

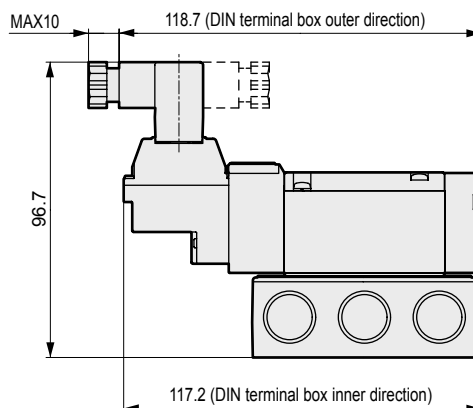
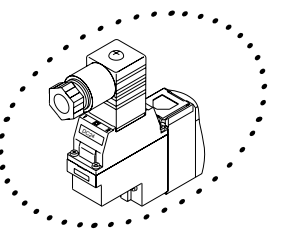
● EJ type connector type (E**J)



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

4GB3 Series

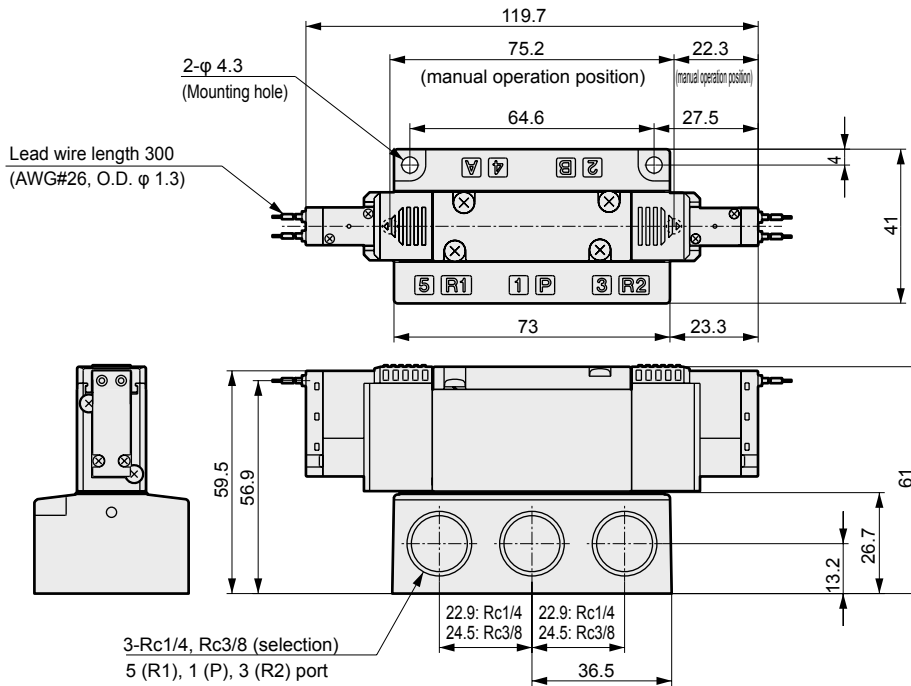
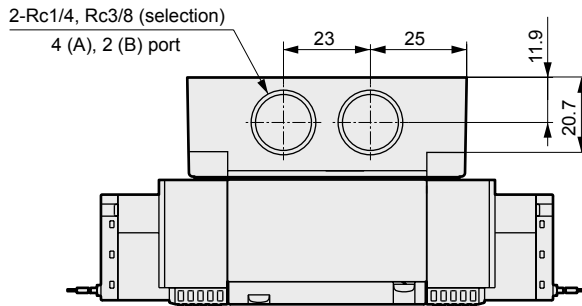
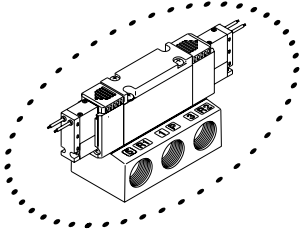
Discrete valve; base piping

Dimensions

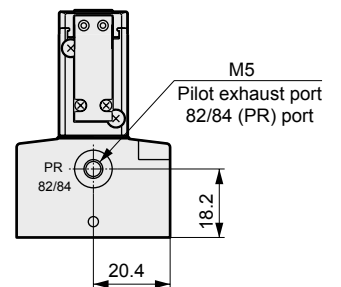
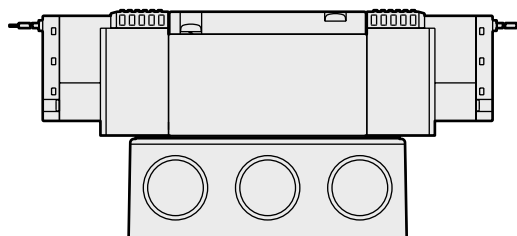
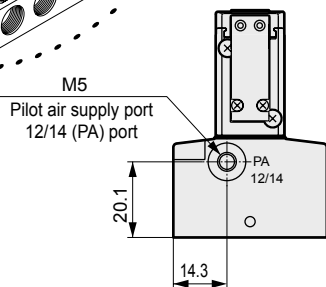
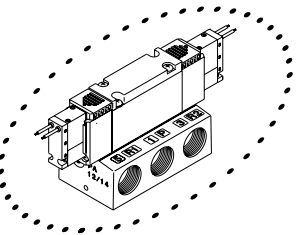


4GB320

● 2-position double grommet lead wire (blank)

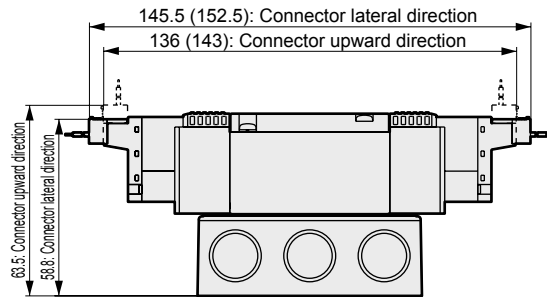
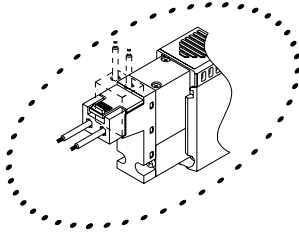


● External pilot type (K)



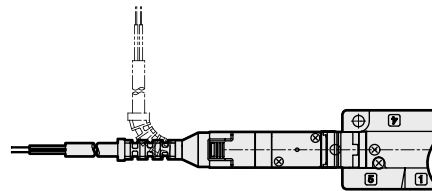
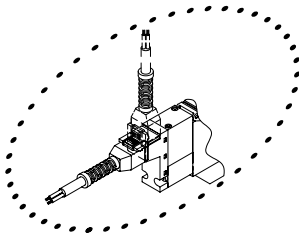
Dimensions

● E type connector type (E)

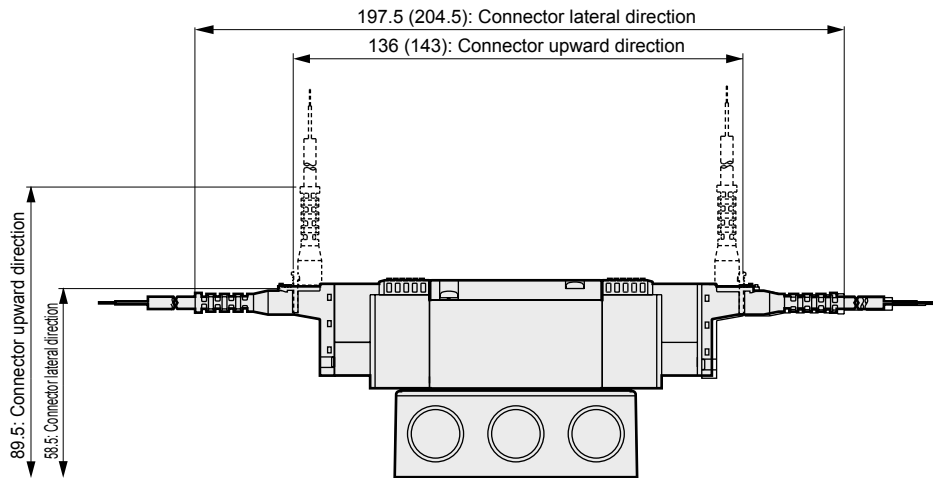


Note: Values in () apply for 100 VAC

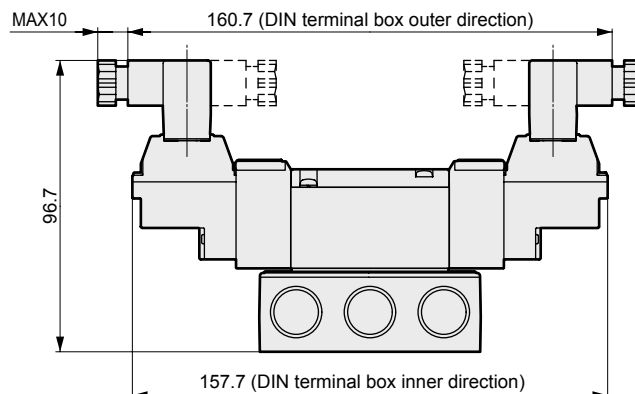
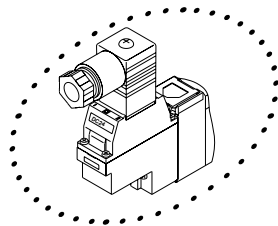
● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC



● DIN terminal box type (B)



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

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

4GB3 Series

Discrete valve; base piping

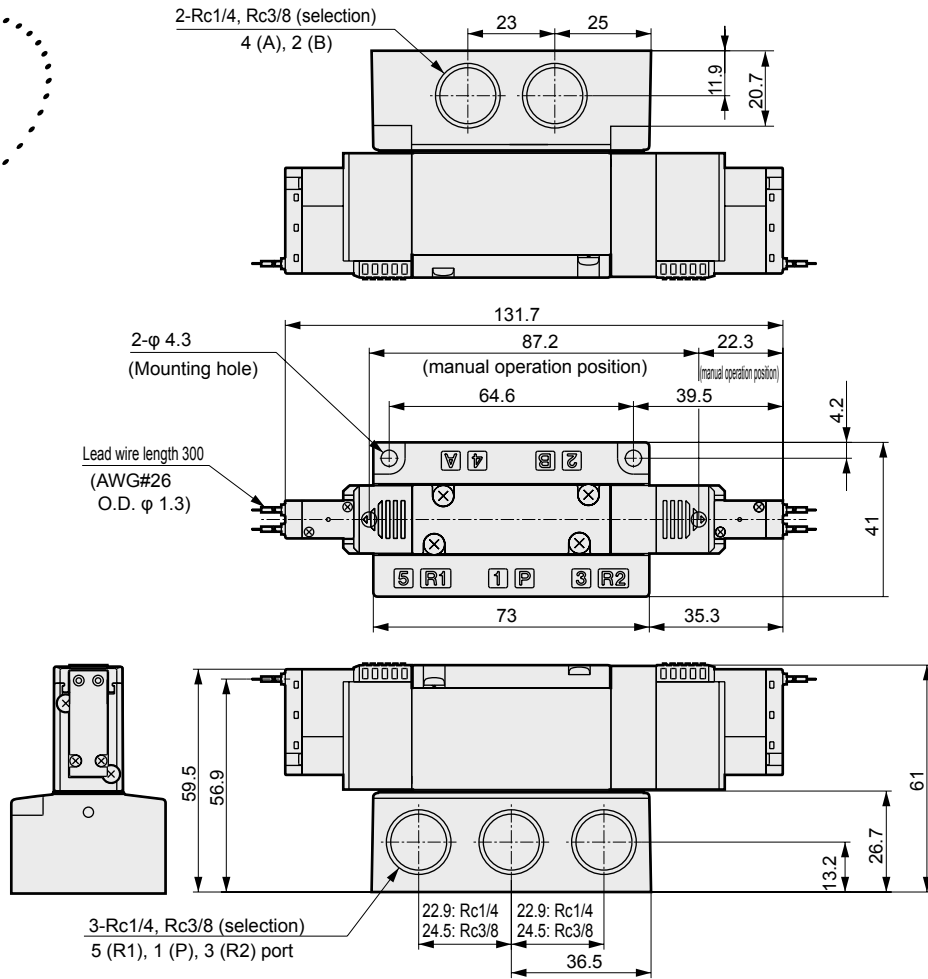
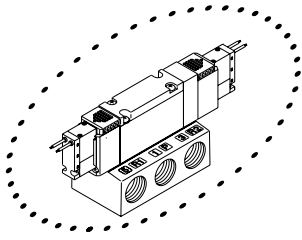
Dimensions



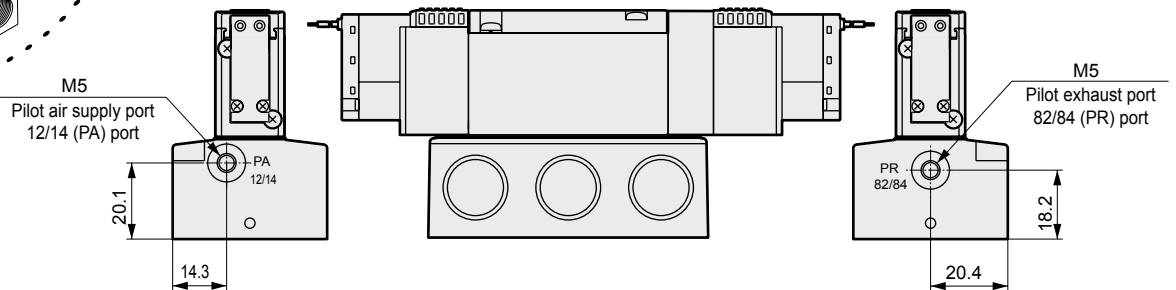
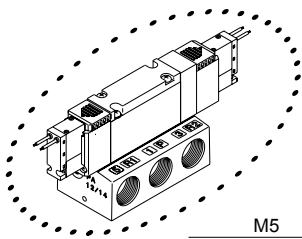
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

4GB3_{0.4.3} 0

● 3 position grommet lead wire (blank)

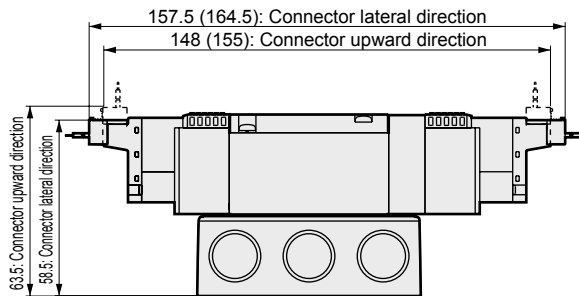
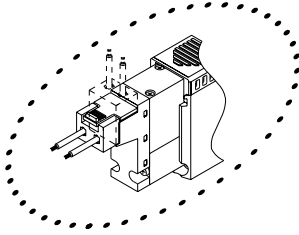


● External pilot type (K)



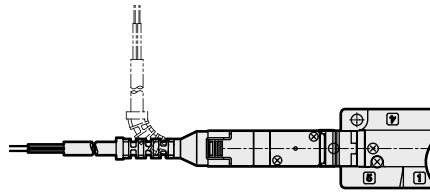
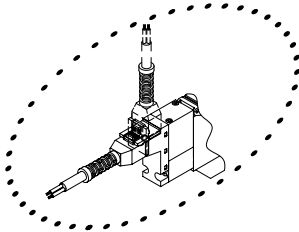
Dimensions

● E type connector type (E)

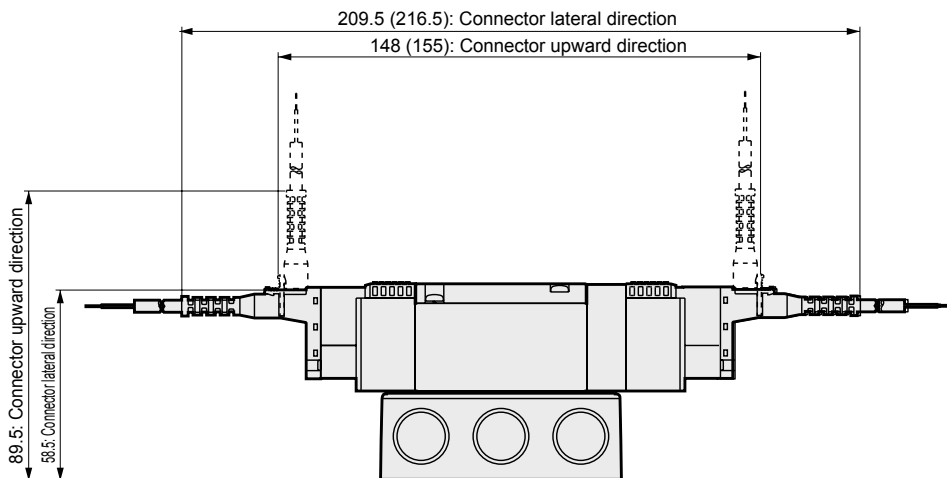


Note: Values in () apply for 100 VAC

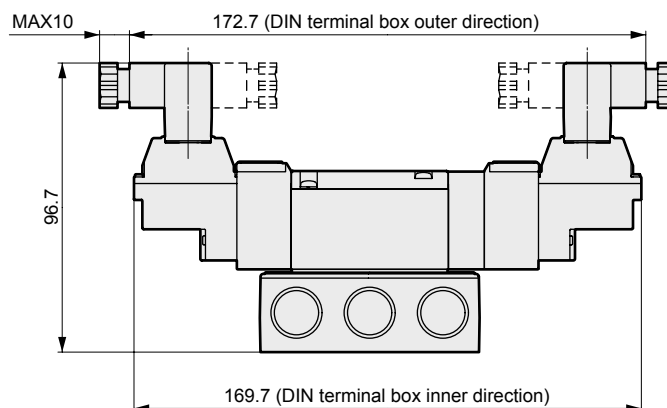
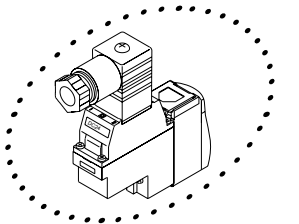
● EJ type connector type (E**J)



Note: Values in () apply for 100 VAC



● DIN terminal box type (B)



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

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

Discontinue

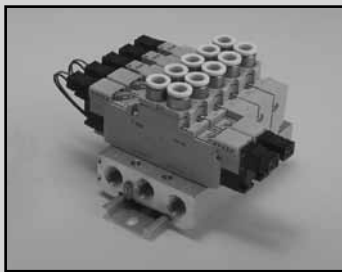
Individual wiring manifold Body piping Direct mount type/DIN rail mount type

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

● Applicable cylinder bore size: φ 20 to φ 100

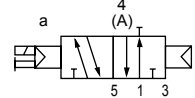


Refer to Ending for details.

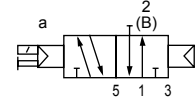


JIS symbol

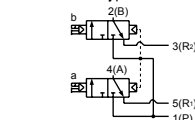
● 3 port valve 2-position single N.C. type



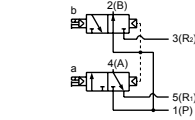
2-position single N.O. type



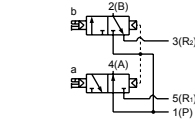
● Dual 3 port valve integrated type (A side valve: N.C. type, B side valve: N.C. type)



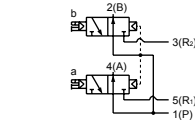
(A side valve: N.C. type, B side valve: N.O. type)



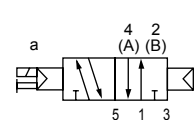
(A side valve: N.O. type, B side valve: N.C. type)



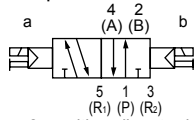
(A side valve: N.O. type, B side valve: N.O. type)



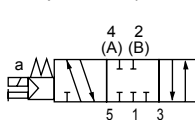
● 5 port valve 2-position single



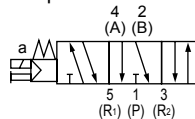
2-position double



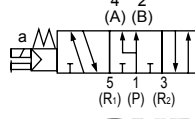
3-position all ports closed



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	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	

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 air pressure between 0.2 and 0.7 MPa.

Electrical specification

Descriptions	Integrated base	
Rated voltage	DC	12, 24
	AC	100
Voltage fluctuation range	±10%	
Holding current	DC24	0.023 (0.025)
	DC12	0.046 (0.050)
	Note 4 A AC100	0.010 (0.012)
Power consumption	DC24	0.55 (0.6)
	Note 4 W DC12	0.55 (0.6)
Apparent power VA	AC100	1.0 (1.2)
Thermal class	B	
Temperature rise °C	50	
Surge suppressor	Option	
Indicator	Light (option)	

Note 4 Values in () apply when a light is attached.

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	16	20	16
	External pilot	12 stations	12 stations	stations	stations	stations	stations
Port size	A/B port	Barbed fitting φ 1.8 Push-in fitting φ 1.8, φ 4, φ 6 M5		Push-in fitting φ 4, φ 6, φ 8 Rc1/8		Push-in fitting φ 6, φ 8, φ 10 Rc1/4	
	P/R1/R 2 port	Rc1/8		Rc1/4		Rc3/8	
Manifold base weight calculation formula (n: station no.)	Standard	23n+52	25n+60	47n+64	49n+92	74n+88	76n+117
	g External pilot	36n+105	38n+113	88n+135	90n+163	136n+194	138n+223

Refer to "Cautions for Mounting the DIN Rail" (page 441), 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.

Discontinue

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

Individual wiring manifold; body piping

Flow characteristics

Model no.	Solenoid 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	0.66	0.22	
	2-position	0.99	0.20	0.70	0.12	
	3-position	All ports closed	0.94	0.23	0.99	0.09
		ABR connection	0.93	0.18	0.70	0.02
	PAB connection	1.1	0.28	1.0	0.12	
M3GA2 M4GA2	Dual 3 port valve integrated type	1.7	0.40	1.7	0.32	
	2-position	2.3	0.36	1.7	0.33	
	3-position	All ports closed	2.1	0.35	2.4	0.37
		ABR connection	2.2	0.37	1.8	0.29
	PAB connection	2.4	0.34	2.5	0.33	
M3GA3 M4GA3	2-position	3.2	0.37	2.5	0.28	
	3-position	All ports closed	2.9	0.35	3.2	0.35
		ABR connection	3.0	0.34	2.6	0.27
		PAB connection	3.3	0.30	3.3	0.32

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

Note 2: Values for 2-position, dual 3 port valve integrated type, and ABR connection are the values when check valve is integrated.

Ozone proof specifications / Cutting oil proof type specifications

Select the option "A" of (E) in how to order on page 78.

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

- 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**

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA1/2/3 Series

Individual wiring manifold; body piping

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/
LMFO
- MN3S0
MN4S0
- 4SA/
B0
- 4KA/
B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-
0
- 3QR
3QB
- 3MA/
B0
- 3PA/
B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air
system
- Total air system
(Gamma)
- Ending

How to order

Manifold model no.

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

3 port manifold model no.

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

Discrete valve for mounting base

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

Discrete 3 port valve for mounting base

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

B Solenoid position

A Model no.

C Port size

D Electrical connections

E Option

F Mount type

G Station no.

H Voltage

Note on model no. selection

Note 1: Select M4GA*80 when mixing with 3, 5 port valves.

Select M3GA*80 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: 3-position all ports closed and PAB connection are not provided with check valve (H). Refer to page 439 for details on check valve.

Note 5: Contact CKD when using a vacuum with the external pilot (K).

Note 6: 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 154 to 156 for details.

* Always indicate "Manifold specifications" (page 168 to 179).

A Model no.

3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
------	------	------	------	------	------

Symbol Descriptions

B Solenoid position		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
1	2-position single				●	●	●
2	2-position double				●	●	●
3	3-position all ports closed				●	●	●
4	3-position ABR connection				●	●	●
5	3-position P/A/B connection				●	●	●
1	2-position single normally closed	●	●	●			
11	2-position single normally open	●	●	●			
66	Dual 3 port valve integrated type Note 1, 2	●	●				
67	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally closed					
		B side valve: Normally open					
76	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally open					
		B side valve: Normally closed					
77	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally open		●	●		
		B side valve: Normally open					
8	Mix manifold (In case of multiple solenoid positions)	●	●	●	●	●	●

C Port size

Port	A/B port	P/R1/R 2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8			
C18	φ 1.8 push-in fitting for fiber tube (applicable tube UP-9402-**)	(2)		(2)	
C4	φ 4 push-in fitting	(2)	(3)	(2)	(3)
C6	φ 6 push-in fitting	(2)	(3)	(4)	(2) (3) (4)
C8	φ 8 push-in fitting		(3)	(4)	(3) (4)
C10	φ 10 push-in fitting			(4)	(4)
CF	φ 1.8 barbed fitting for fiber tube (applicable tube UP-9102-**)	(2)		(2)	
CX	Push-in fitting mix	Note 3	(2)	(3)	(4) (2) (3) (4)
M5	M5	(2)		(2)	
06	Rc1/8		(3)		(3)
08	Rc1/4			(4)	(4)

D Electrical connections

Refer to the next page for electrical connections.

E Option

Blank	Non-locking/locking common manual override	●	●	●	●	●	●
M	Non-locking manual override	●	●		●	●	
H	With check valve	Note 4	●	●	●	●	●
K	External pilot	Note 5	●	●	●	●	●
A	Ozone/cutting oil proof		●	●	●	●	●
F	A/B port filter integrated (P port: Standard)		●	●	●	●	●
Z1	Air supply spacer	Note 6	●	●	●	●	●
Z2	In stop valve spacer	Note 6	●	●		●	●

F Mount type

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

G Station no.

2	2 stations						
to	to	●	●	●	●	●	●
20	Refer to page 76 for the max. station no. for each model.						

H Voltage

1	100 VAC (rectifier integrated)	●	●	●	●	●	●
3	24 VDC	●	●	●	●	●	●
4	12 VDC	●	●	●	●	●	●

is not available.

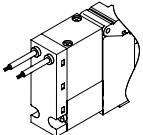
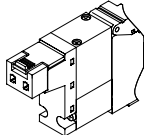
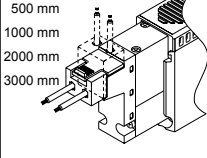
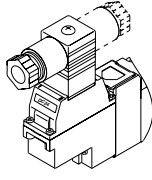
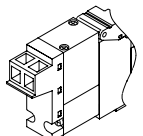
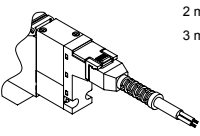
M4GA1/2/3 Series

Individual wiring manifold; body piping

(Electrical connection list)

		A Model no.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
D Electrical connections							
Blank	Grommet lead wire (300 mm) Note 7	●	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/light		●	●		●	●
E type connector (upward/lateral direction common)							
E0	Lead wire (300 mm)	●	●	●	●	●	●
E00	Lead wire (500 mm)	●	●	●	●	●	●
E01	Lead wire (1000 mm)	●	●	●	●	●	●
E02	Lead wire (2000 mm)	●	●	●	●	●	●
E03	Lead wire (3000 mm)	●	●	●	●	●	●
E2	Lead wire (300 mm) with surge suppressor/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	●	●	●	●	●	●
E0N	Without lead wire (without socket)	●	●	●	●	●	●
E2N	Without lead wire (without socket) with surge suppressor/light	●	●	●	●	●	●
E3	Without lead wire (with socket/terminal) with surge suppressor/light	●	●	●	●	●	●
E1	Without lead wire (with socket/terminal)	●	●	●	●	●	●
EJ type connector (socket with cover, upward/lateral direction common)							
E01J	Lead wire (1000 mm)	●	●	●	●	●	●
E02J	Lead wire (2000 mm)	●	●	●	●	●	●
E03J	Lead wire (3000 mm)	●	●	●	●	●	●
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 7: Grommet lead wire specifications are available only for 24 and 12 VDC.

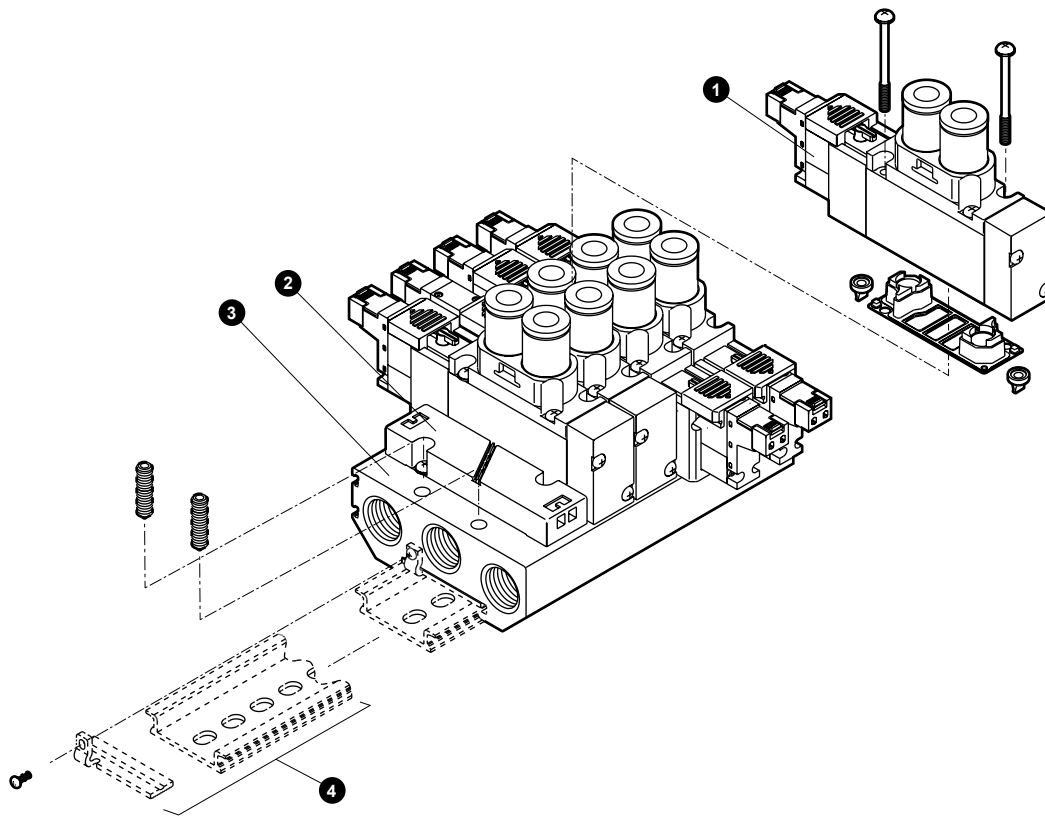
Electrical connections	
Discrete valve/individual wiring manifold	
Blank	Grommet lead wire E1 E type connector with socket/terminal E3
● Lead wire length 300 mm 	
E0 E2	E type connector B DIN terminal box
● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm 	
E0N E2N	E type connector without socket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

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

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**9 - <input type="text" value="Port size"/> <input type="text" value="Electrical connections"/> <input type="text" value="Option"/> - <input type="text" value="Voltage"/> <input type="text" value="Solenoid position"/> <input type="text" value="Series flow rate size"/>	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 78
2	Masking plate	3G1/4G1 4G1-MP 3G2/4G2 4G2-MP 3G3/4G3 4G3-MP	Masking plate Gasket Set screw 2	* 3G2/4G2 and 3G3/4G3 have two PR check valves.
3	Manifold base assembly	M4GA* - 00 - <input type="text" value="Option"/> - <input type="text" value="Station no."/> <input type="text" value="Series flow rate size"/>	Manifold base	
4	DIN rail kit			Details on page 161

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.
-	Coil assembly	4G - <input type="text" value="Electrical connections"/> - * - COIL - <input type="text" value="Voltage"/> Blank: standard A: Ozone/cutting oil proof Select from <input type="text" value="Electrical connections"/> on page 79	-	Cartridge type push-in fitting and related parts	<input type="text" value="φ 1.8 straight type"/> 4G1-JOINT-C18
-	E type connector Socket assembly	4G - SOCKET - ASSY - <input type="text" value="Electrical connections"/> - <input type="text" value="Voltage"/>	-		<input type="text" value="φ 4 straight type"/> 4G1-JOINT-C4
-					<input type="text" value="φ 6 straight type"/> 4G1-JOINT-C6
-	EJ type connector Socket assembly	4G - SOCKET - ASSY - <input type="text" value="Electrical connections"/>			<input type="text" value="φ 1.8 barbed type"/> 4G1-JOINT-CF
-					<input type="text" value="Plug cartridge"/> 4G1-JOINT-CPG
-	E type connector Socket assembly	4G - SOCKET - ASSY - <input type="text" value="Electrical connections"/>			<input type="text" value="φ 4 straight type"/> 4G2-JOINT-C4
-					<input type="text" value="φ 6 straight type"/> 4G2-JOINT-C6
-					<input type="text" value="φ 8 straight type"/> 4G2-JOINT-C8
-	E type connector Socket assembly	4G - SOCKET - ASSY - <input type="text" value="Electrical connections"/>			<input type="text" value="Plug cartridge"/> 4G2-JOINT-CPG
-					<input type="text" value="φ 6 straight type"/> 4G3-JOINT-C6
-					<input type="text" value="φ 8 straight type"/> 4G3-JOINT-C8
-	E type connector Socket assembly	4G - SOCKET - ASSY - <input type="text" value="Electrical connections"/>			<input type="text" value="φ 10 straight type"/> 4G3-JOINT-C10
-				<input type="text" value="Plug cartridge"/> 4G3-JOINT-CPG	

MEMO

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

M4GA1 Series

Individual wiring manifold; body piping

Dimensions

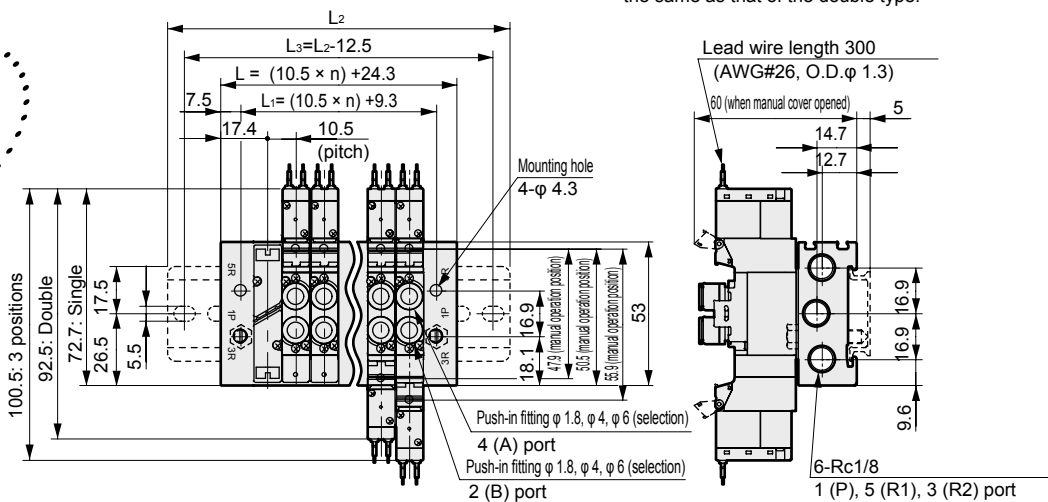
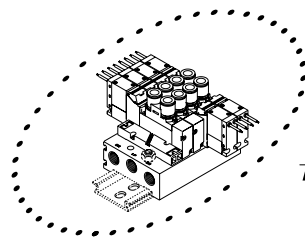


M4GA1

- 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.



Lead wire length 300

(AWG#26, O.D. φ 1.3)

60 (when manual cover opened)

5

14.7

12.7

16.9

16.9

9.6

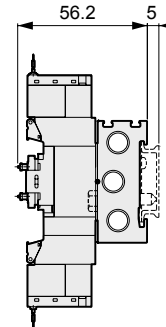
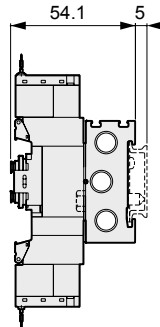
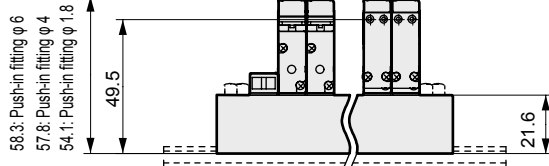
6-Rc1/8

1 (P), 5 (R1), 3 (R2) port

(1st station) ... (n-th station)

- Push-in fitting φ 1.8 type (C 18)

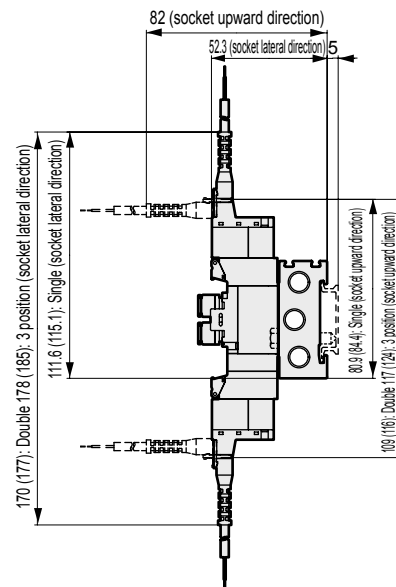
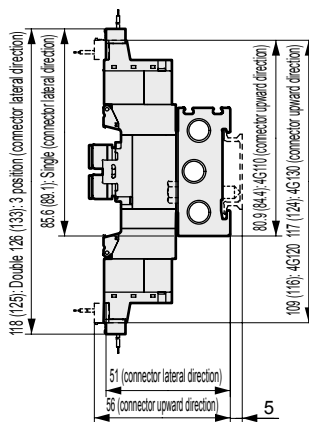
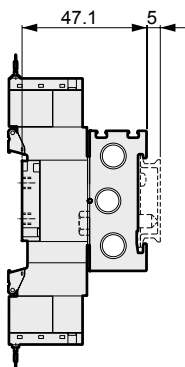
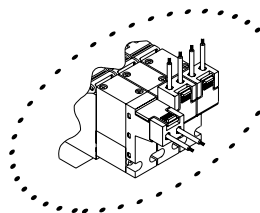
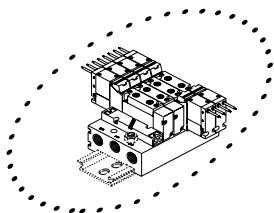
- φ 1.8 barbed fitting type (CF)



- M5 female thread type (M5)

- E type connector type (E)

- EJ type connector type (E ** J)



Note: Values in () apply for 100 VAC.

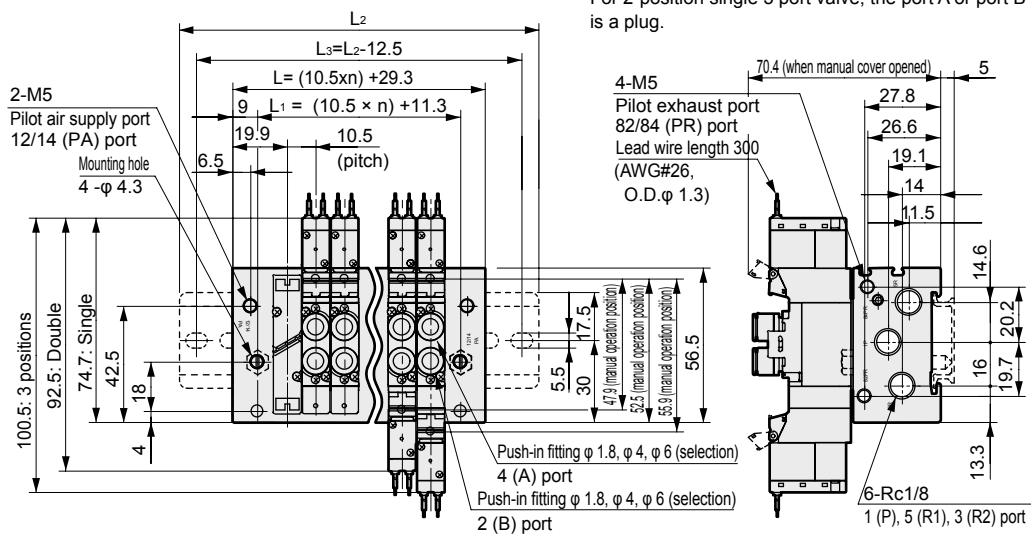
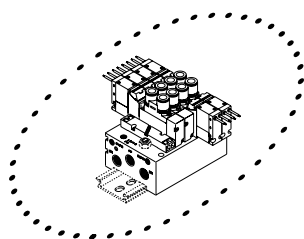
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	45.3	55.8	66.3	76.8	87.3	97.8	108.3	118.8	129.3	139.8	150.3	160.8	171.3	181.8	192.3	202.8	213.3	223.8	234.3
L ₁	30.3	40.8	51.3	61.8	72.3	82.8	93.3	103.8	114.3	124.8	135.3	145.8	156.3	166.8	177.3	187.8	198.3	208.8	219.3
L ₂	87.5	100.0	112.5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



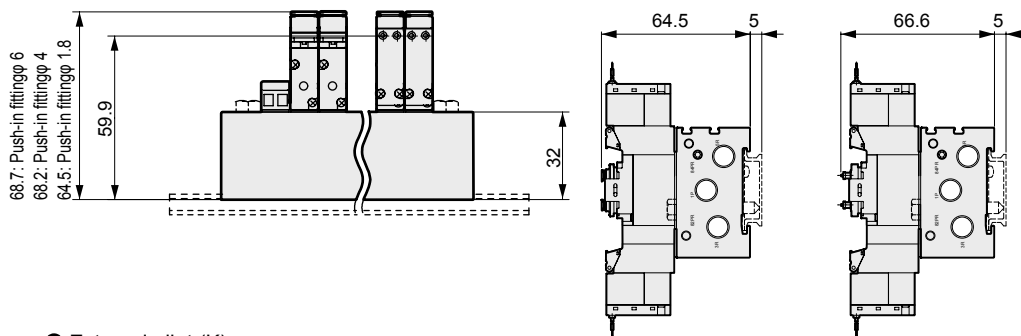
M4GA1

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

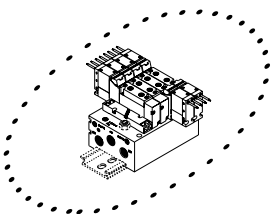


(1st station) ... (n-th station)

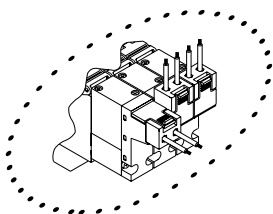
- Push-in fitting $\phi 1.8$ type (C 18)
- $\phi 1.8$ barbed fitting type (CF)



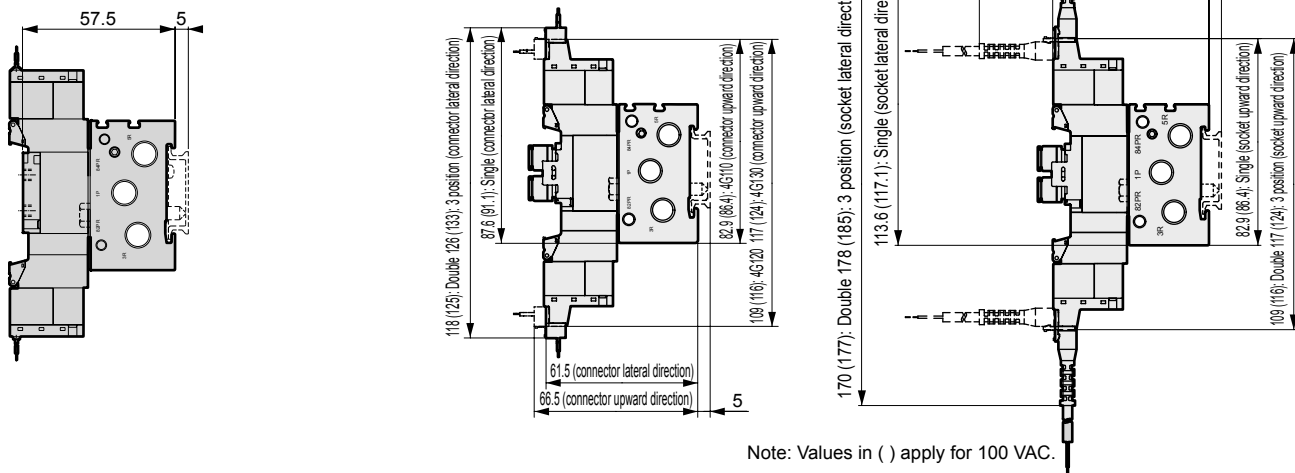
- External pilot (K)
M5 female thread type (M5)



- 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

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
PMB
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA2 Series

Individual wiring manifold; body piping

Dimensions

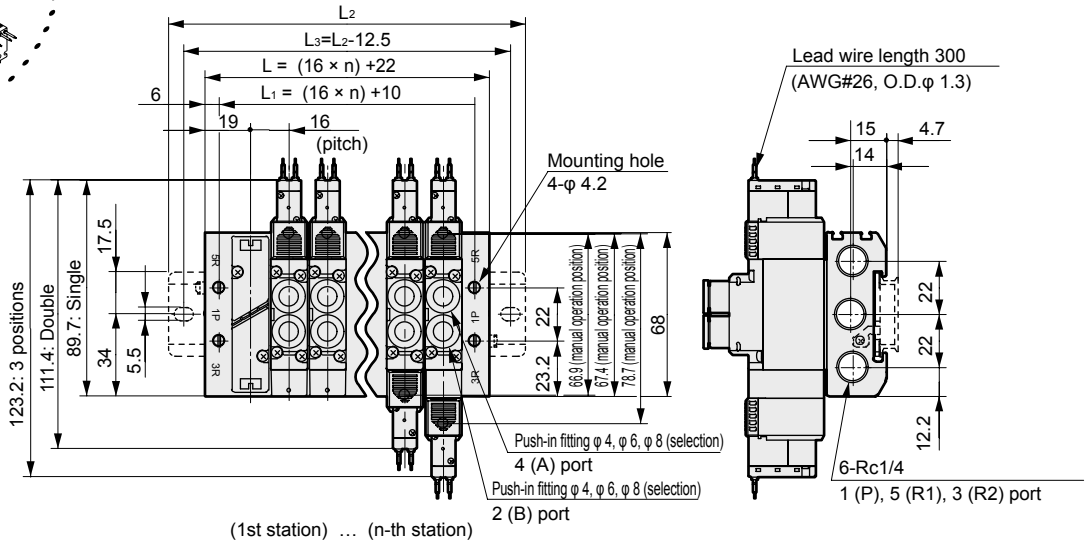
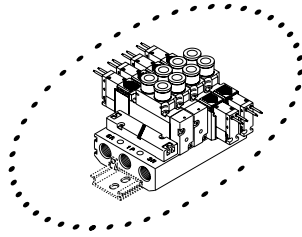


M4GA2

- Grommet lead wire (blank)

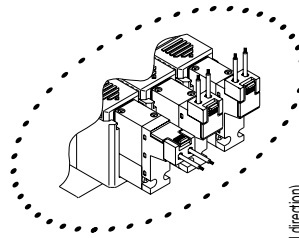
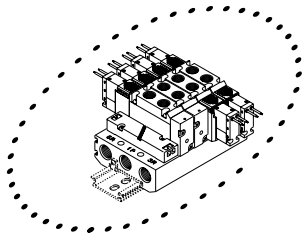
* For 2-position single 3 port valve, the port A or port B is a plug.

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

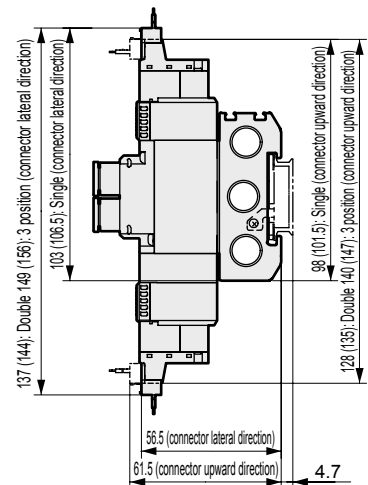
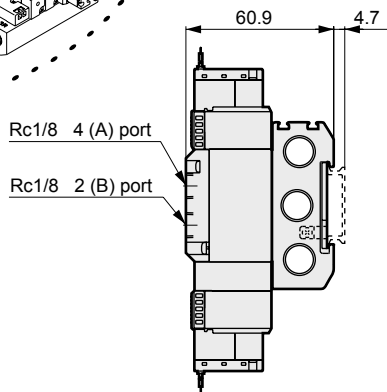


- Rc1/8 female thread type (06)

- E type connector type (E)



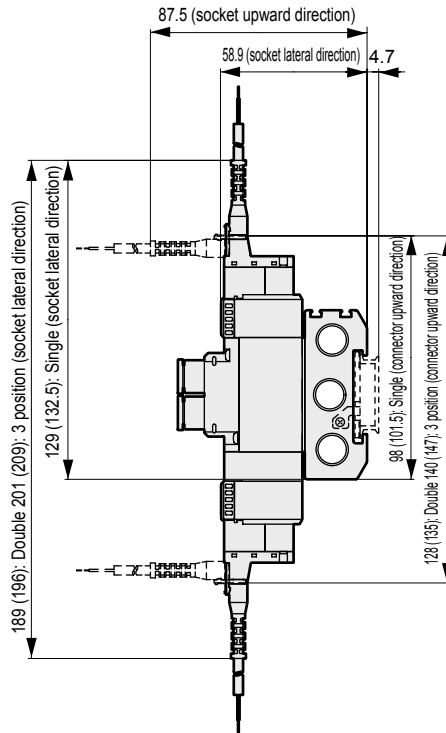
Note: Values in () apply for 100 VAC.



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	54	70	86	102	118	134	150	166	182	198	214	230	246	262	278	294	310	326	342
L ₁	42	58	74	90	106	122	138	154	170	186	202	218	234	250	266	282	298	314	330
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				

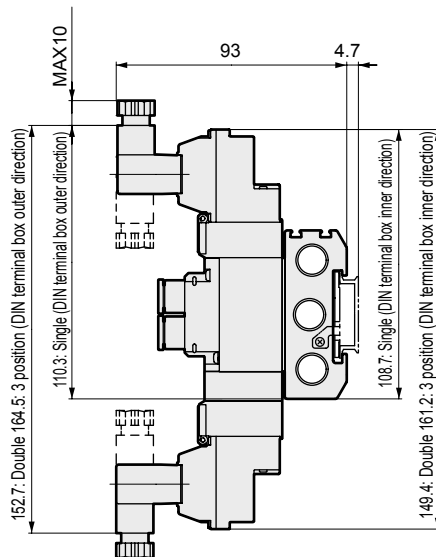
Dimensions

- 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.

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA2 Series

Individual wiring manifold; body piping

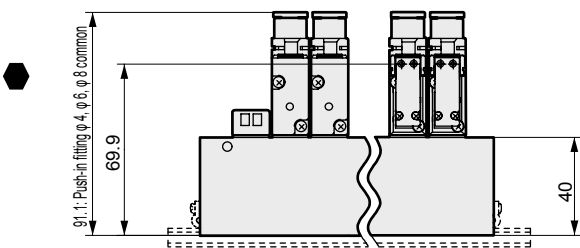
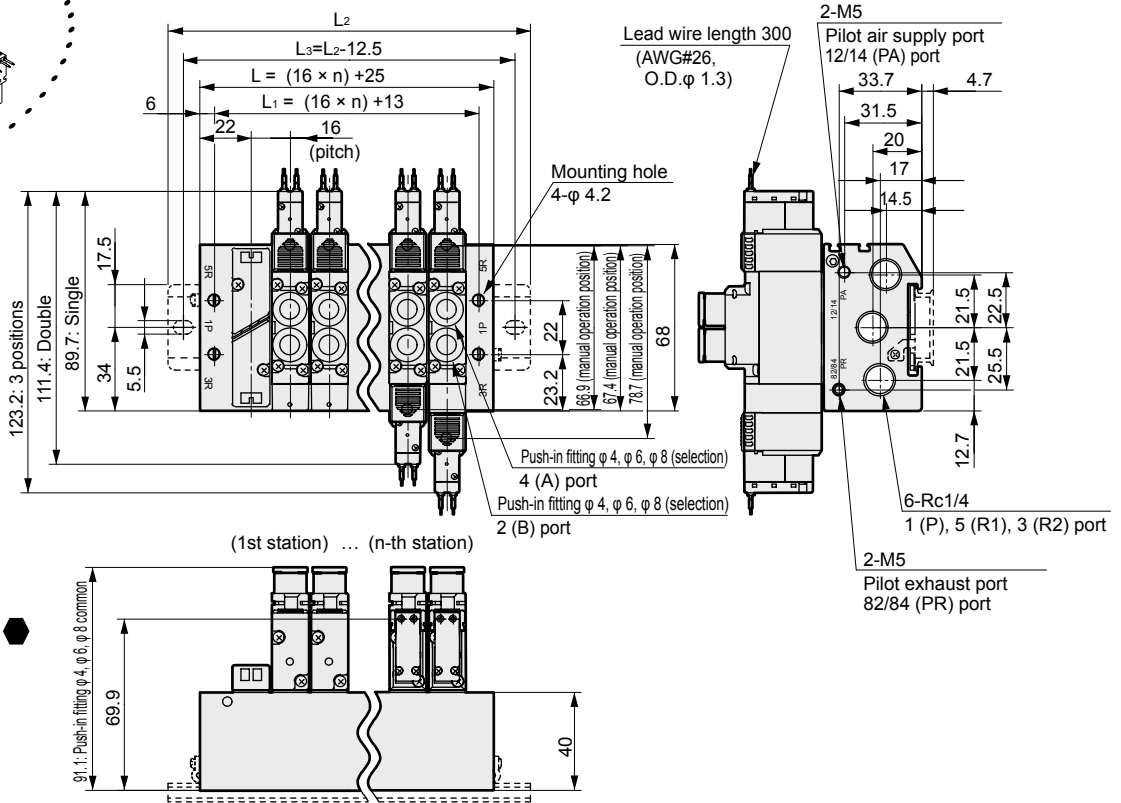
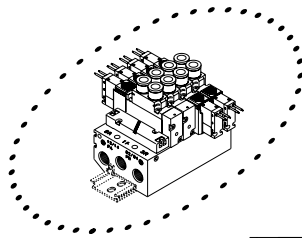
Dimensions



M4GA2

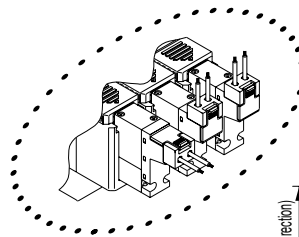
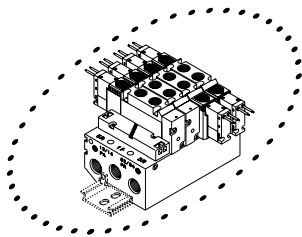
- External pilot (K)
Grommet lead wire (blank)

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

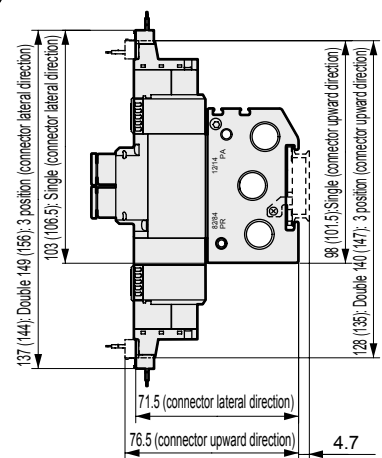
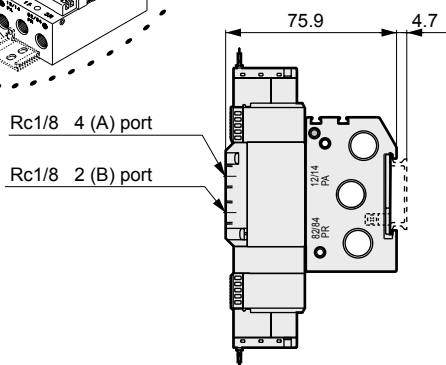


- External pilot (K)
Rc1/8 female thread type (06)

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



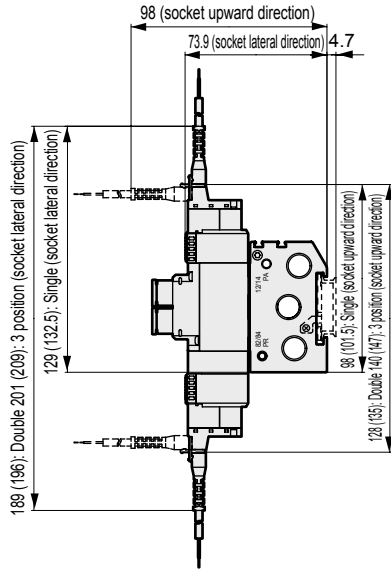
Note: Values in () apply for 100 VAC.



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	57	73	89	105	121	137	153	169	185	201	217	233	249	265	281	297	313	329	345
L ₁	45	61	77	93	109	125	141	157	173	189	205	221	237	253	269	285	301	317	333
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				

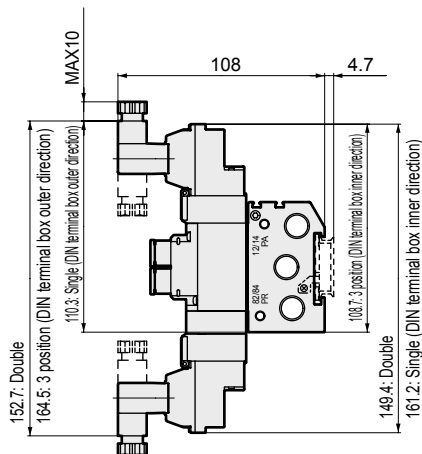
Dimensions

- 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.

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA3 Series

Individual wiring manifold; body piping

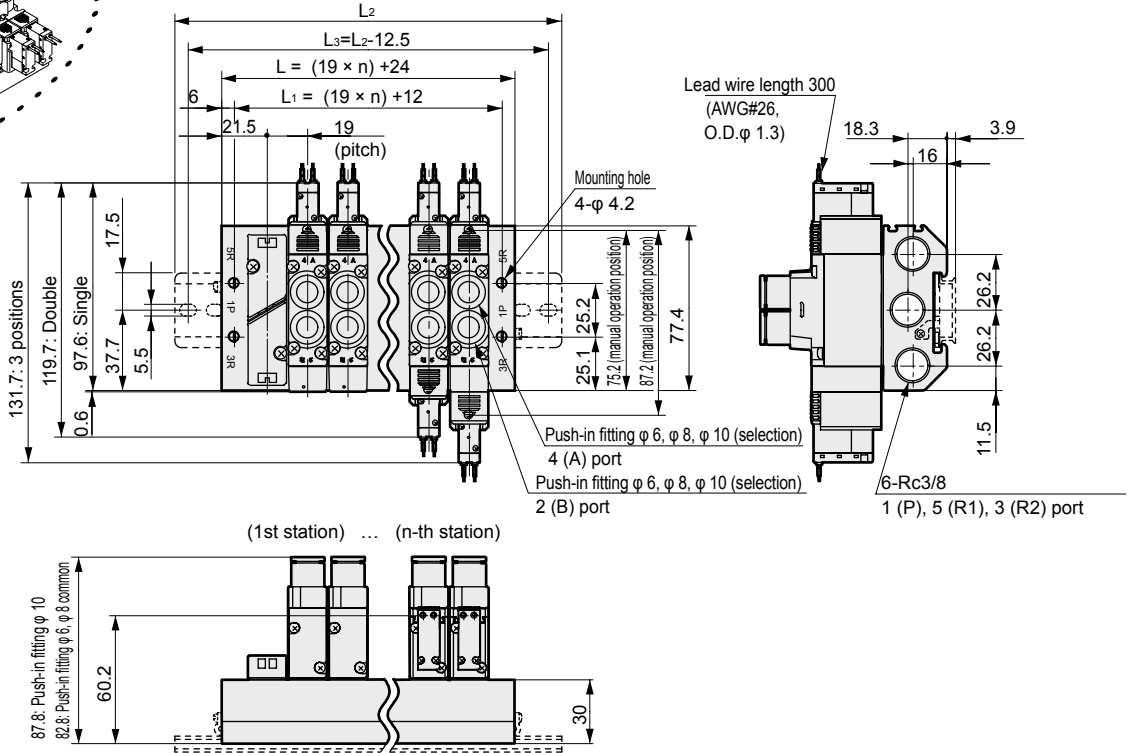
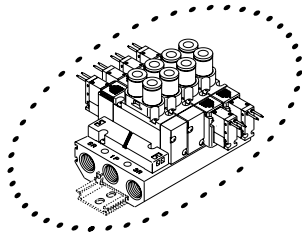
Dimensions



M4GA3

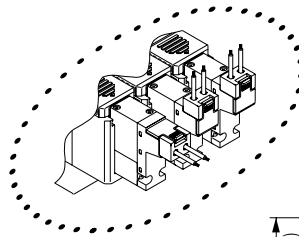
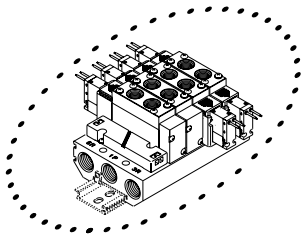
- Grommet lead wire (blank)

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

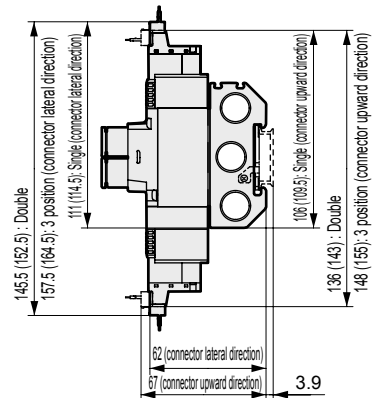
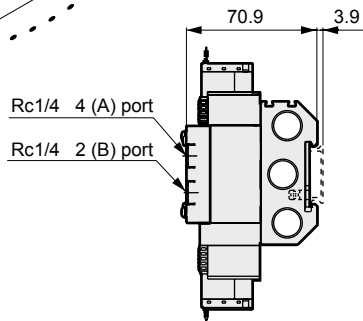


- Rc1/4 female thread type (08)

- E type connector type (E)



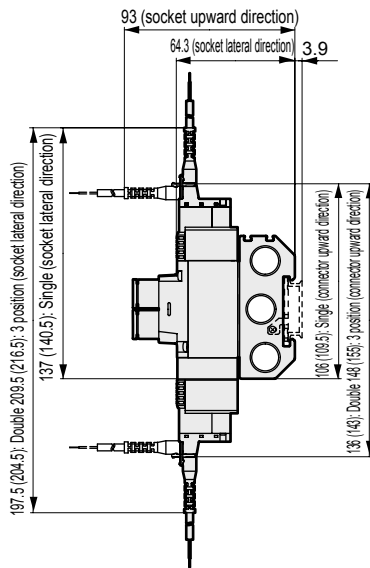
Note: Values in () apply for 100 VAC.



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	62	81	100	119	138	157	176	195	214	233	252	271	290	309	328	347	366	385	404
L ₁	50	69	88	107	126	145	164	183	202	221	240	259	278	297	316	335	354	373	392
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				

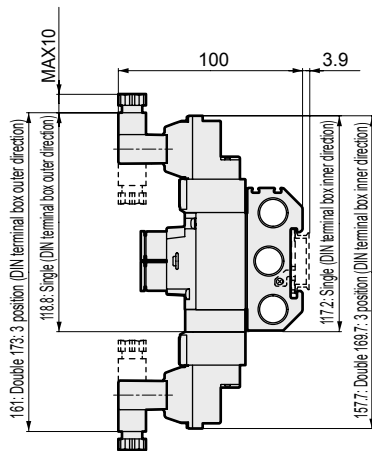
Dimensions

- 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.

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA3 Series

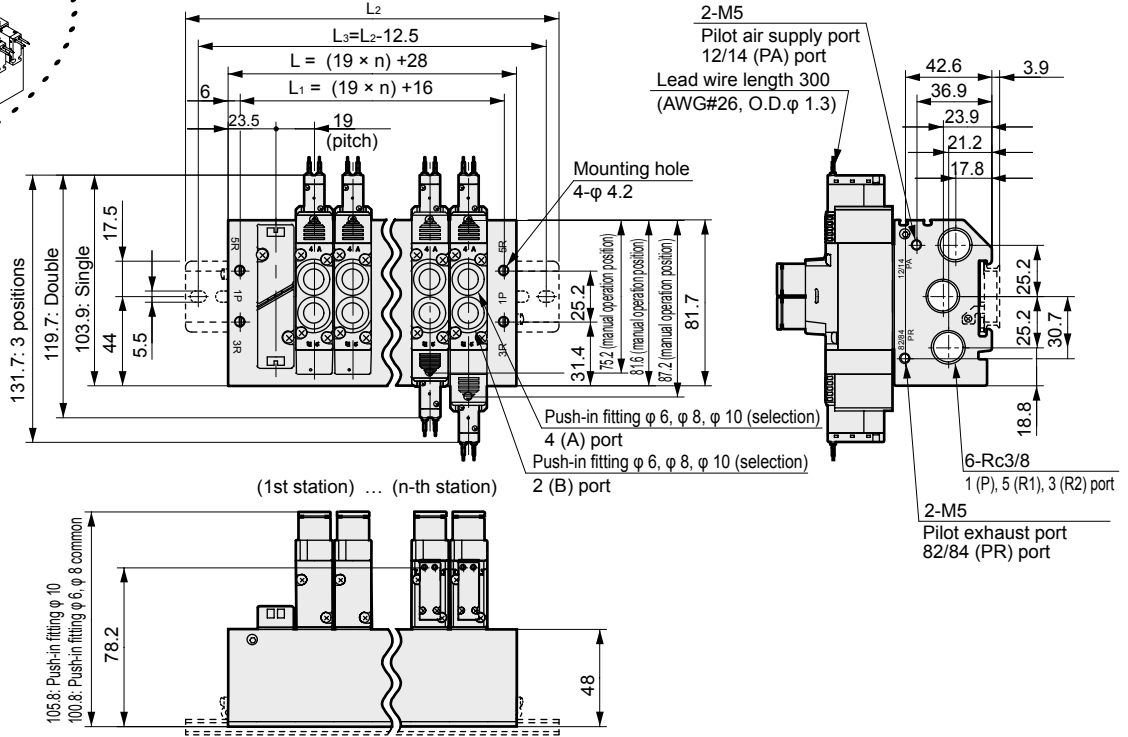
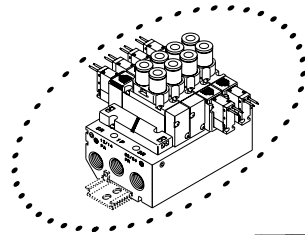
Individual wiring manifold; body piping

Dimensions

M4GA3

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

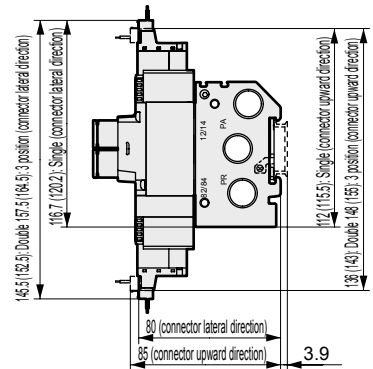
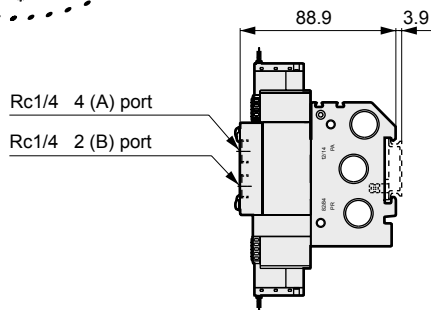
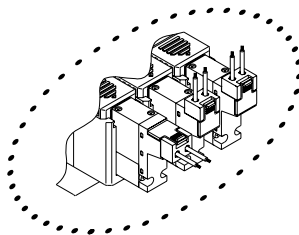
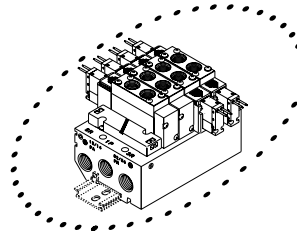
* For 2-position single 3 port valve, the port A or port B is a plug.



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

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

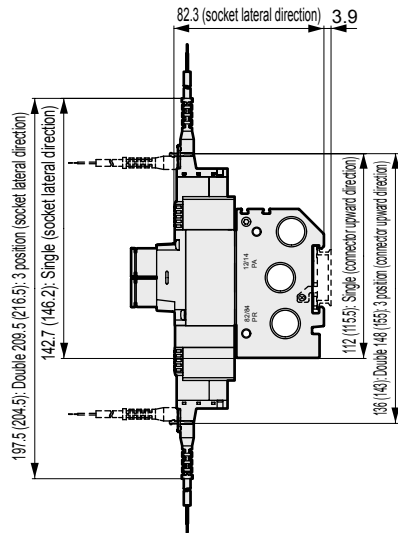
Note: Values in () apply for 100 VAC.



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Total air system L	66	85	104	123	142	161	180	199	218	237	256	275	294	313	332	351	370	389	408
Total air system (Gamma) L ₁	54	73	92	111	130	149	168	187	206	225	244	263	282	301	320	339	358	377	396
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				
Ending 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				

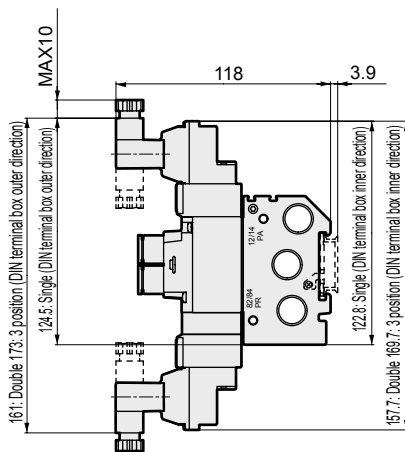
Dimensions

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



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.

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

Discontinue

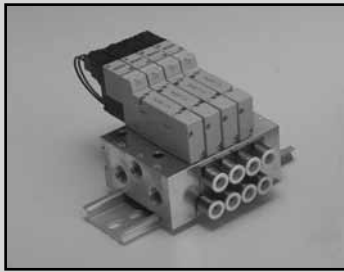
Individual wiring manifold
Base piping
Direct mount type/DIN rail mount type

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

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



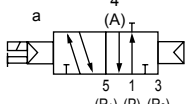
Refer to Ending for details.



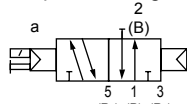
JIS symbol

● 3 port valve

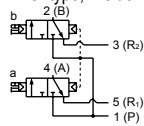
2-position single N.C. type



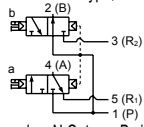
2-position single N.O. type



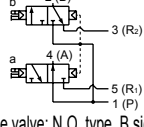
● Dual 3 port valve integrated type (A side valve: N.C. type, B side valve: N.C. type)



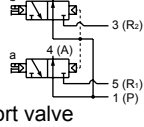
(A side valve: N.C. type, B side valve: N.O. type)



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

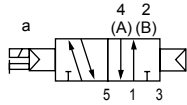


(A side valve: N.O. type, B side valve: N.O. type)

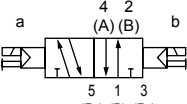


● 5 port valve

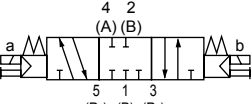
2-position single



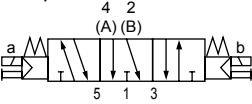
2-position double



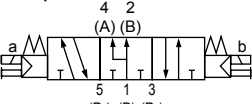
3-position all ports closed



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		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

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.

Electrical specification

Descriptions		DC	12, 24
Rated voltage	DC	12, 24	
	V AC		100
Voltage fluctuation range		±10%	
Holding current	24 VDC	0.023 (0.025)	
	12 VDC	0.046 (0.050)	
	Note 4 A 100 VAC	0.010 (0.012)	
Power consumption	24 VDC	0.55 (0.6)	
	Note 4 W 12 VDC	0.55 (0.6)	
Apparent power VA 100 VAC		1.0 (1.2)	
Thermal class		B	
Temperature rise °C		50	
Surge suppressor		Option	
Indicator		Light (option)	

Note 4 Values in () apply when a light is attached.

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	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		Rc1/8	Rc1/4		Rc3/8		
	Manifold base weight calculation formula (n: station no.)		Standard	35n + 61	36n + 115	71n + 106	73n + 134	113n + 170
		External pilot	35n + 106	36n + 114	76n + 135	78n + 166	118n + 194	120n + 223

Refer to "Cautions for Mounting the DIN Rail" (page 441), 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.

Discontinue

M3GB1, 2/M4GB1, 2, 3 Series

Individual wiring manifold; base piping

Flow characteristics

Model no.	Solenoid 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	0.67	0.23	
	2-position	1.1	0.22	0.70	0.10	
	3-position	All ports closed	0.98	0.22	1.0	0.11
		ABR connection	0.97	0.35	0.68	0.24
	PAB connection	1.1	0.38	0.99	0.22	
M3GB2 M4GB2	Dual 3 port valve integrated type	1.7	0.44	1.6	0.30	
	2-position	2.4	0.34	1.7	0.31	
	3-position	All ports closed	2.2	0.34	2.4	0.29
		ABR connection	2.2	0.34	1.8	0.27
PAB connection		2.4	0.29	2.4	0.29	
M4GB3	2-position	3.5	0.34	2.6	0.27	
	3-position	All ports closed	3.1	0.33	3.3	0.22
		ABR connection	3.0	0.30	2.7	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 $S \cong 5.0 \times C$.

Note 2: Values for 2-position, dual 3 port valve integrated type, and ABR connection are the values when check valve is integrated.

Ozone proof specifications / Cutting oil proof specifications

Select the option "A" of (E) in how to order on page 94.

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

- 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**

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GB1/2/3 Series

Individual wiring manifold; base piping

How to order

Manifold model no.

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

3 port manifold model no.

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

Discrete valve for mounting base

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

3 port discrete valve for mounting base

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

B Solenoid 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*80 when mixing with 3, 5 port valves. Select M3GB*80 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 (upward) (downward).

Note 5 3-position all ports closed and PAB connection are not provided with check valve (H). Refer to page 439 for details on check valve.

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

Note 7 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 154 to 156 for details.

Note 8 The direct mount type of M4GB1 cannot be changed to the DIN rail mount type in mid-course.

* Always indicate "Manifold specifications" (page 168 to 179).

Symbol	Descriptions	A Model no.				
		3GB1	3GB2	4GB1	4GB2	4GB3
B Solenoid 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, 2	●	●			
67	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally closed				
		B side valve: Normally closed				
76	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally closed				
		B side valve: Normally open				
77	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally open				
		B side valve: Normally closed				
8	Mix manifold (In case of multiple solenoid positions)	A side valve: Normally open				
		B side valve: Normally open				

Port	A/B port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8			
		(2)	(3)	(4)	(4)
C18	φ 1.8 push-in fitting for fiber tube (applicable tube UP-9402-**) (2)		(2)		
C4	φ 4 push-in fitting (2) (3) (2) (3) (4)				
C6	φ 6 push-in fitting (2) (3) (2) (3) (4)				
C8	φ 8 push-in fitting (3) (3) (3) (4)				
C10	φ 10 push-in fitting (4)				
CL18	L type φ 1.8 push-in fitting for fiber tube (upward) (applicable tube UP-9402-**) (2)		(2)		
CL4	L type φ 4 push-in fitting (upward) (2)				
CL6	L type φ 6 push-in fitting (upward) (2) (3)				
CL8	L type φ 8 push-in fitting (upward) (3) (4)				
CL10	L type φ 10 push-in fitting (upward) (4)				
CD18	L type φ 1.8 push-in fitting for fiber tube (downward) (applicable tube UP-9402-**) (2)		(2)		
CD4	L type φ 4 push-in fitting (downward) (2)		(2)		
CD6	L type φ 6 push-in fitting (downward) (2) (3) (2) (3)				
CD8	L type φ 8 push-in fitting (downward) (3) (3) (4)				
CD10	L type φ 10 push-in fitting (downward) (4)				
CF	φ 1.8 barbed fitting for fiber tube (applicable tube UP-9102-**) (2)		(2)		
CX	Push-in fitting mix (2) (3) (2) (3) (4)				
M5	M5 (2)		(2)		
06	Rc1/8 (3)			(3)	
08	Rc1/4 (4)				(4)

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

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	●	●	●	●	●
F	A/B port filter integrated (P port: Standard)	●	●	●	●	●
Z1	Air supply spacer Note 7	●	●	●	●	●
Z2	In stop valve spacer Note 7		●		●	●

F Mount type						
Blank	Direct mount type Note 8	●	●	●	●	●
D	DIN rail mount type	●	●	●	●	●

G Station no.						
2	2 stations					
to		●	●	●	●	●
20	Refer to page 92 for the max. station no. for each model.					

H Voltage						
1	100 VAC (rectifier integrated)	●	●	●	●	●
3	24 VDC	●	●	●	●	●
4	12 VDC	●	●	●	●	●

is not available.

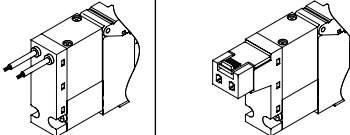
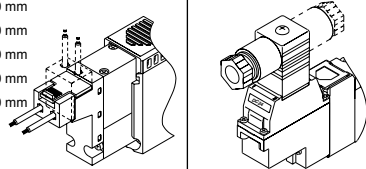
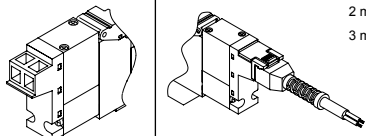
M4GB1/2/3 Series

Individual wiring manifold; base piping

(Electrical connection list)

		A Model no.				
		3GB1	3GB2	4GB1	4GB2	4GB3
D Electrical connections						
Blank	Grommet lead wire (300 mm) Note 9	●	●	●	●	●
B	DIN terminal box (Pg7) With surge suppressor/light	●	●	●	●	●
E type connector (upward/lateral direction common)						
E0	Lead wire (300 mm)	●	●	●	●	●
E00	Lead wire (500 mm)	●	●	●	●	●
E01	Lead wire (1000 mm)	●	●	●	●	●
E02	Lead wire (2000 mm)	●	●	●	●	●
E03	Lead wire (3000 mm)	●	●	●	●	●
E2	Lead wire (300 mm) With surge suppressor/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	●	●	●	●	●
E0N	Without lead wire (without socket)	●	●	●	●	●
E2N	Without lead wire (without socket) With surge suppressor/light	●	●	●	●	●
E3	Without lead wire (with socket/terminal) With surge suppressor/light	●	●	●	●	●
E1	Without lead wire (with socket/terminal)	●	●	●	●	●
EJ type connector (socket with cover, upward/lateral direction common)						
E01J	Lead wire (1000 mm)	●	●	●	●	●
E02J	Lead wire (2000 mm)	●	●	●	●	●
E03J	Lead wire (3000 mm)	●	●	●	●	●
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 available only for 24 and 12 VDC.

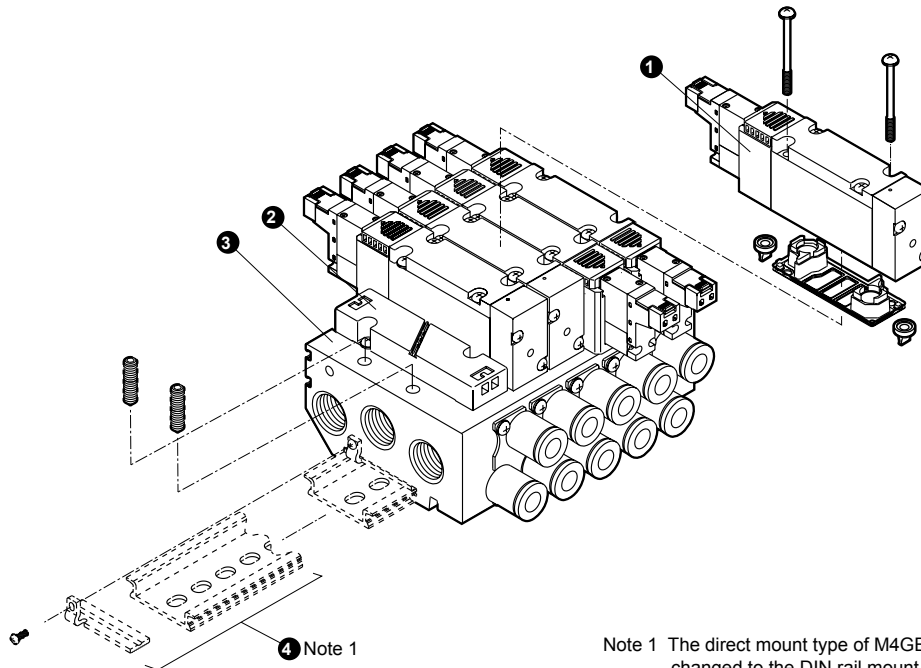
Electrical connections	
Discrete valve/individual wiring manifold	
Blank	Grommet lead wire E1 E type connector with socket/terminal E3
● Lead wire length 300 mm	
E0 E2	E type connector B DIN terminal box
● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm	
E0N E2N	E type connector without socket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

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4GB1/2/3 Series

Individual wiring manifold; base piping

Manifold components explanation and parts list



Note 1 The direct mount type of M4GB1 cannot be changed to the DIN rail mount type.

Main components list

No.	Component name	Model no.	Descriptions	Remarks
1	Discrete valve for mounting base	4GB**9-00- <div style="display: flex; justify-content: space-around; font-size: small;"> Electrical connections Option Voltage </div> <div style="display: flex; justify-content: space-around; font-size: small;"> Solenoid position </div> <div style="display: flex; justify-content: space-around; font-size: small;"> Series flow rate size </div>	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 94
2	Masking plate	3G1/4G1 4G1-MP 3G2/4G2 4G2-MP 3G3/4G3 4G3-MP	Masking plate Gasket Set screw 2	* 3G2/4G2 and 3G3/4G3 have two PR check valves.
3	Manifold base assembly	M4GB*- <div style="display: flex; justify-content: space-around; font-size: small;"> Connection Port size Option D Station no. </div> <div style="display: flex; justify-content: space-around; font-size: small;"> Series flow rate size </div> <div style="display: flex; justify-content: space-around; font-size: small;"> Mount type </div>	Manifold base	Even if the mount type "D" is selected, the DIN rail kit shall be prepared separately.
4	DIN rail kit			Details on page 161

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.
-	Coil assembly	4G- <div style="display: flex; justify-content: space-around; font-size: small;"> Electric wire Connection EJ COIL Voltage </div> <div style="display: flex; justify-content: space-around; font-size: x-small;"> Blank: standard A: Ozone/cutting oil proof </div> <div style="display: flex; justify-content: space-around; font-size: x-small;"> Select from (D) Electrical connections on page 95 </div>			
-	E type connector socket assembly	4G-SOCKET-ASSY- <div style="display: flex; justify-content: space-around; font-size: small;"> Electric wire Connection Voltage </div>			
-	EJ type connector socket assembly	4G-SOCKET-ASSY- <div style="display: flex; justify-content: space-around; font-size: small;"> Electric wire Connection </div>			
				Cartridge type push-in fitting and related parts	
			4G1	φ 1.8 straight type	4G1-JOINT-C18
			4G1	φ 1.8 elbow type	4G1-JOINT-CL18, CLL18
			4G1	φ 4 straight type	4G1-JOINT-C4
			4G1	φ 6 straight type	4G1-JOINT-C6
			4G1	φ 4 elbow type	4G1-JOINT-CL4, CLL4
			4G1	φ 6 elbow type	4G1-JOINT-CL6, CLL6
			4G1	φ 1.8 barbed type	4G1-JOINT-CF
			4G1	Plug cartridge	4G1-JOINT-CPG
			4G2	φ 4 straight type	4G2-JOINT-C4
			4G2	φ 6 straight type	4G2-JOINT-C6
			4G2	φ 8 straight type	4G2-JOINT-C8
			4G2	φ 6 elbow type	4G2-JOINT-CL6, CLL6
			4G2	φ 8 elbow type	4G2-JOINT-CL8, CLL8
			4G2	Plug cartridge	4G2-JOINT-CPG
			4G3	φ 6 straight type	4G3-JOINT-C6
			4G3	φ 8 straight type	4G3-JOINT-C8
			4G3	φ 10 straight type	4G3-JOINT-C10
			4G3	φ 8 elbow type	4G3-JOINT-CL8, CLL8
			4G3	φ 10 elbow type	4G3-JOINT-CL10, CLL10
			4G3	Plug cartridge	4G3-JOINT-CPG

MEMO

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

M4GB1 Series

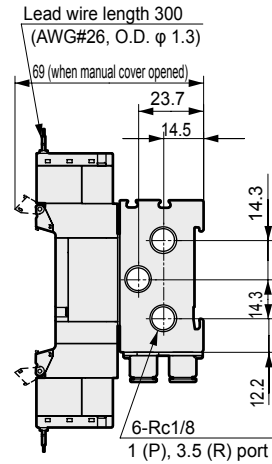
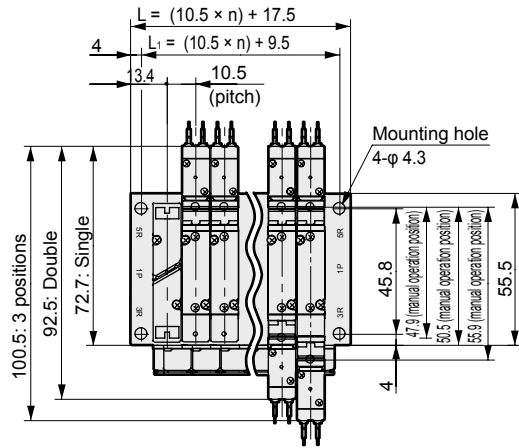
Individual wiring manifold; base piping

Dimensions

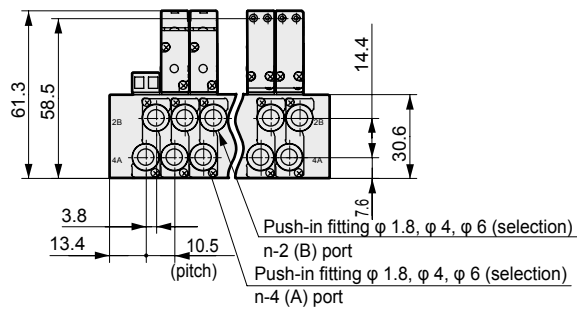
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
-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

M4GB1

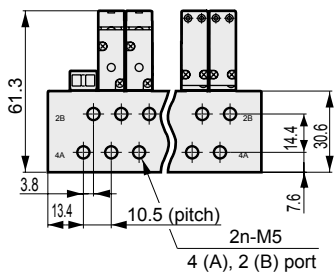
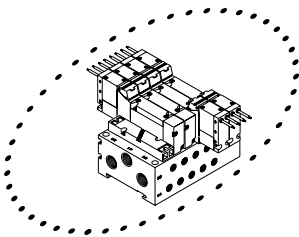
- Direct mount installation
- Grommet lead wire (blank)



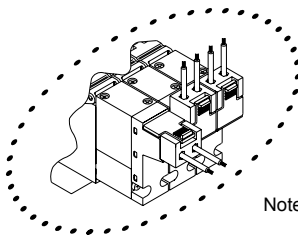
(1st station) ... (n-th station)



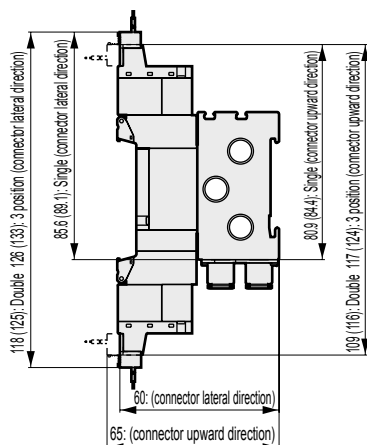
- M5 female thread type (M5)



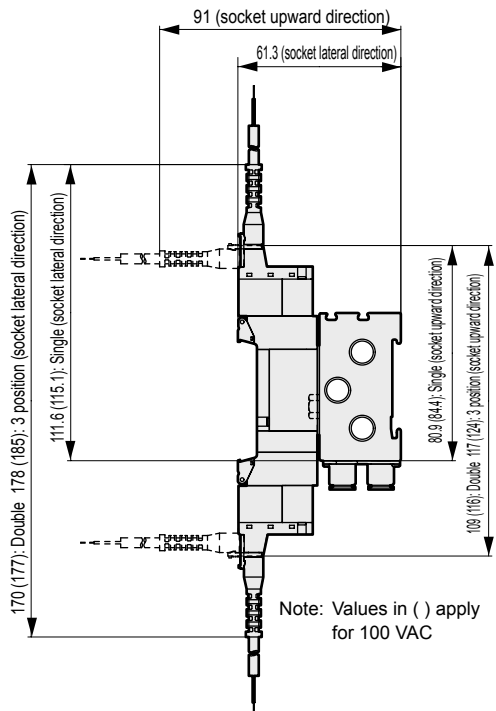
- E type connector type (E)



Note: Values in () apply for 100 VAC



- EJ type connector type (E**J)

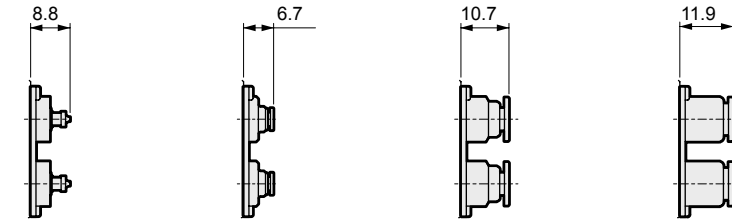


Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	38.5	49	59.5	70	80.5	91	101.5	112	122.5	133	143.5	154	164.5	175	185.5	196	206.5	217	227.5
L ₁	30.5	41	51.5	62	72.5	83	93.5	104	114.5	125	135.5	146	156.5	167	177.5	188	198.5	209	219.5

Dimensions

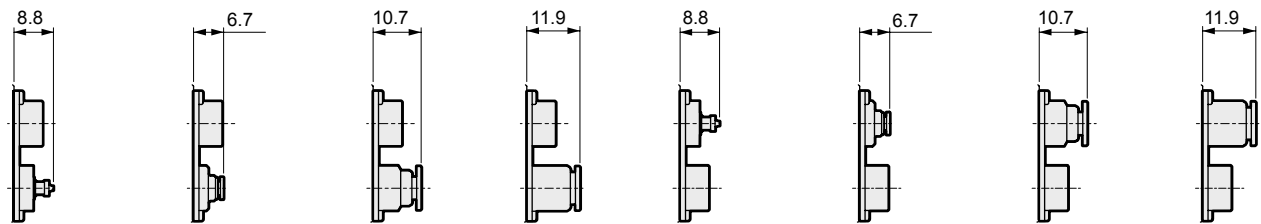
● Fitting straight

- ϕ 1.8 (CF) ● ϕ 1.8 (C18) ● ϕ 4 (C4) ● ϕ 6 (C6)



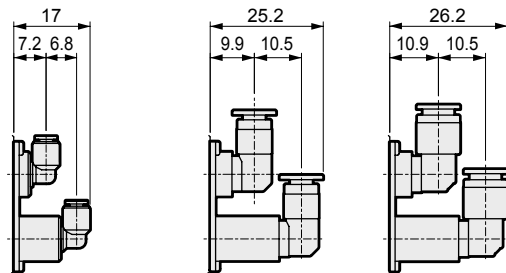
● Fitting straight, single plug

- ϕ 1.8 (CFNC) ● ϕ 1.8 (C18NC) ● ϕ 4 (C4NC) ● ϕ 6 (C6NC) ● ϕ 1.8 (CFNO) ● ϕ 1.8 (C18NO) ● ϕ 4 (C4NO) ● ϕ 6 (C6NO)



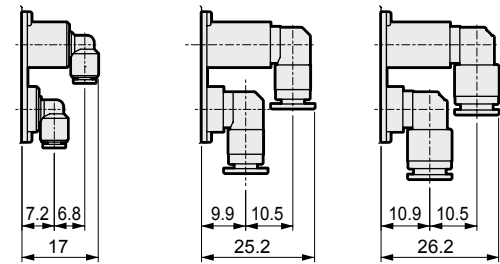
● Fitting L type (upward)

- ϕ 1.8 (CL18) ● ϕ 4 (CL4) ● ϕ 6 (CL6)



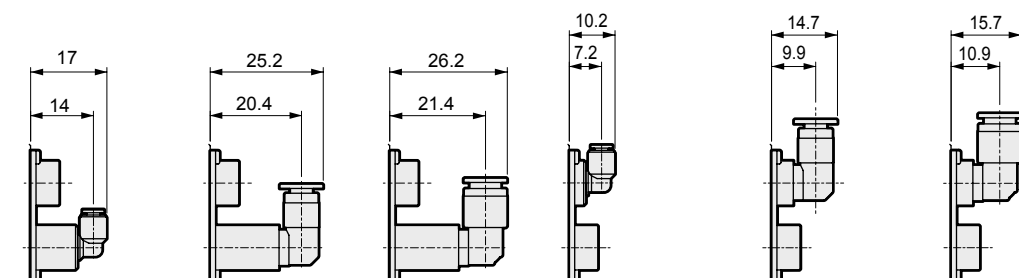
● Fitting L type (downward)

- ϕ 1.8 (CD18) ● ϕ 4 (CD4) ● ϕ 6 (CD6)



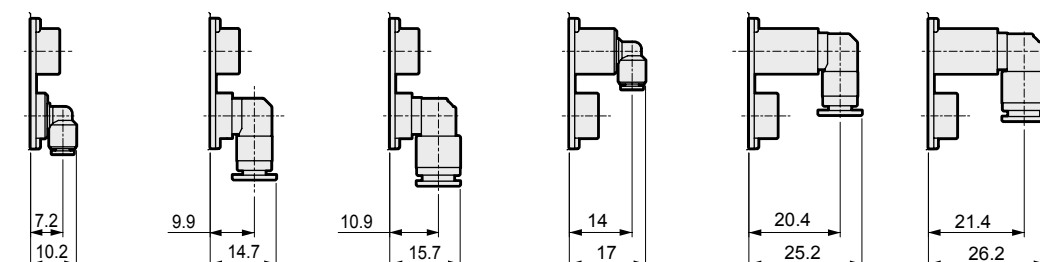
● Fitting L type (upward), single plug

- ϕ 1.8 (CL18NC) ● ϕ 4 (CL4NC) ● ϕ 6 (CL6NC) ● ϕ 1.8 (CL18NO) ● ϕ 4 (CL4NO) ● ϕ 6 (CL6NO)



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

- ϕ 1.8 (CD18NC) ● ϕ 4 (CD4NC) ● ϕ 6 (CD6NC) ● ϕ 1.8 (CD18NO) ● ϕ 4 (CD4NO) ● ϕ 6 (CD6NO)



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

M4GB1-D Series

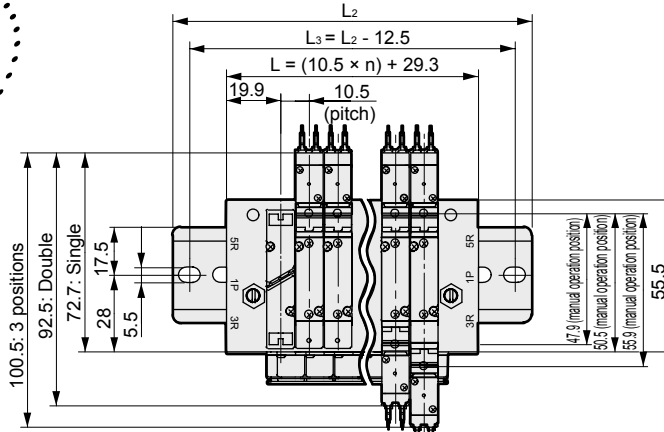
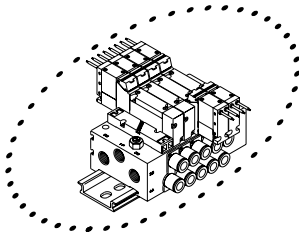
Individual wiring manifold; base piping

Dimensions

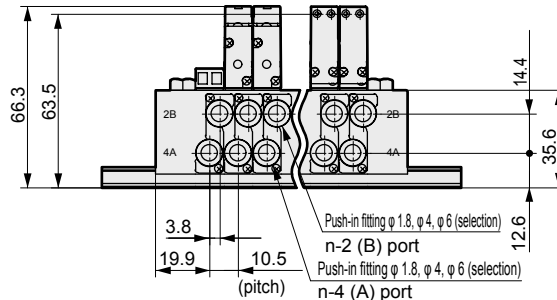
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4GB1

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

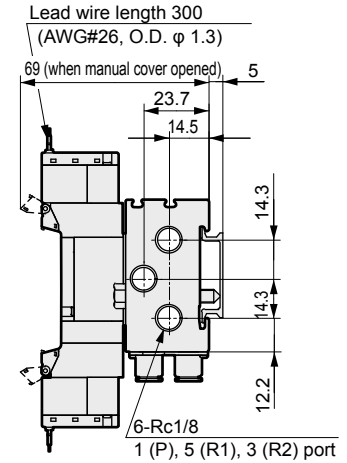


(1st station) ... (n-th station)

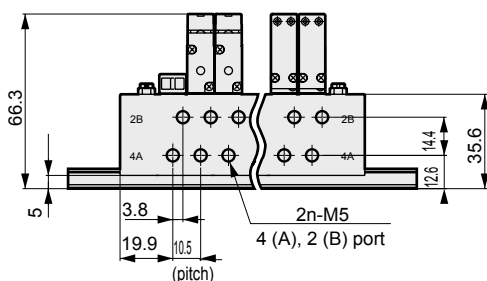
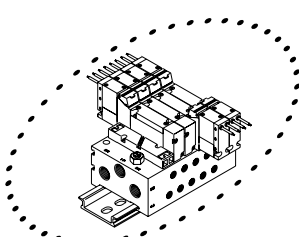


Note 1 This can be changed to direct mount specifications.

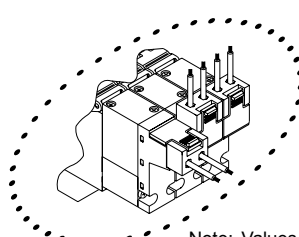
Note 2 The dimension of dual 3 port valve integrated type is the same as that of the double type.



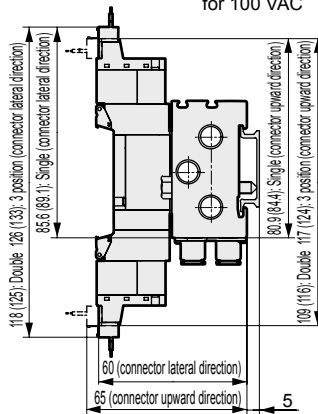
- DIN rail installation (D)
M5 female thread type (M5)



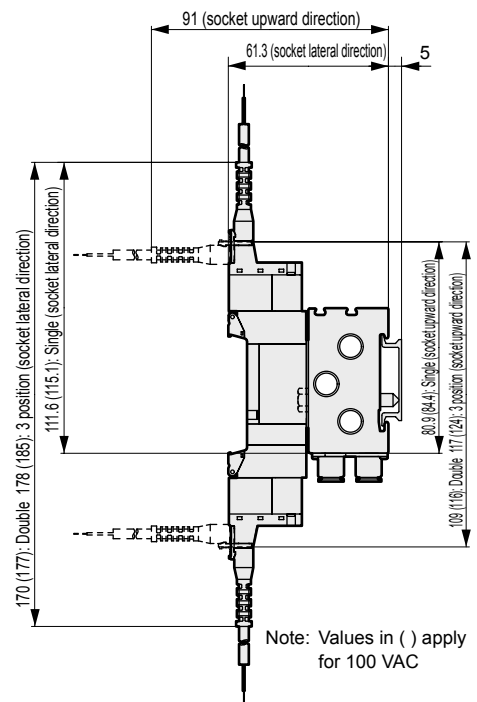
- DIN rail installation (D)
E type connector type (E)



Note: Values in () apply for 100 VAC



- EJ type connector type (E**J)

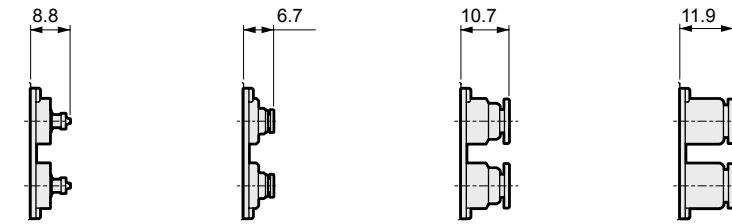


Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	50.3	60.8	71.3	81.8	92.3	102.8	113.3	123.8	134.3	144.8	155.3	165.8	176.3	186.8	197.3
L ₂	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0	212.5	225.0	237.5	237.5
L ₃	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5	200.0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

Dimensions

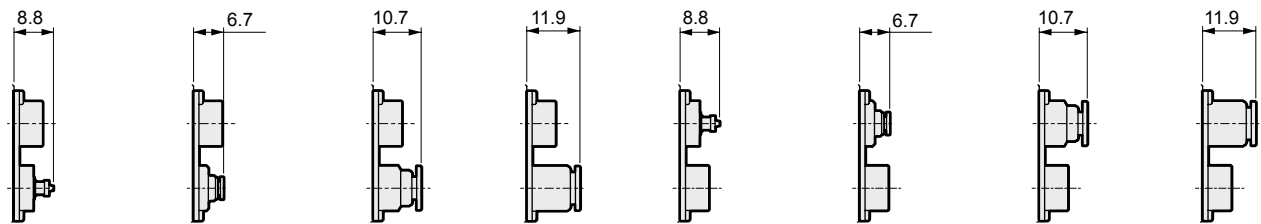
● Fitting straight

- ϕ 1.8 (CF) ● ϕ 1.8 (C18) ● ϕ 4 (C4) ● ϕ 6 (C6)



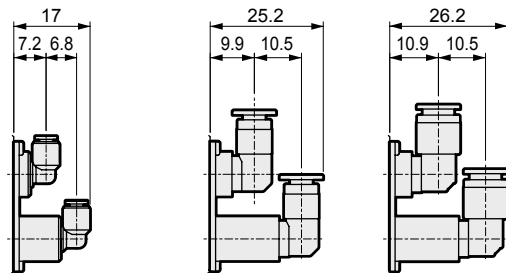
● Fitting straight, single plug

- ϕ 1.8 (CFNC) ● ϕ 1.8 (C18NC) ● ϕ 4 (C4NC) ● ϕ 6 (C6NC) ● ϕ 1.8 (CFNO) ● ϕ 1.8 (C18NO) ● ϕ 4 (C4NO) ● ϕ 6 (C6NO)



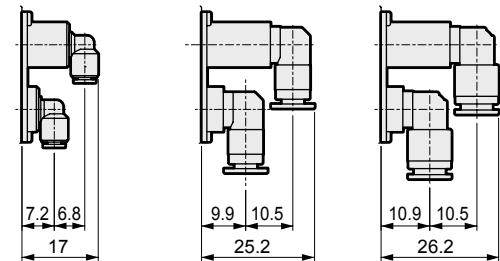
● Fitting L type (upward)

- ϕ 1.8 (CL18) ● ϕ 4 (CL4) ● ϕ 6 (CL6)



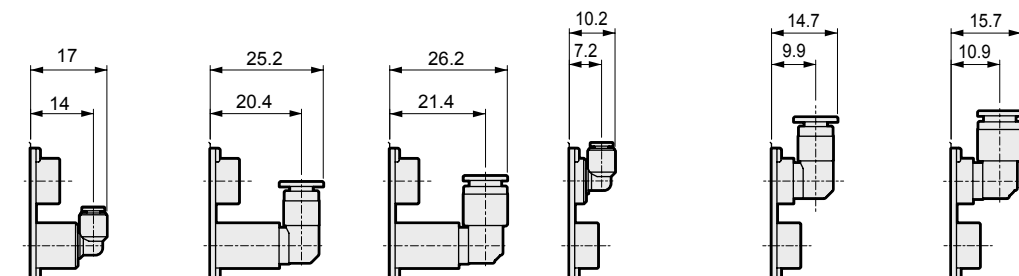
● Fitting L type (downward)

- ϕ 1.8 (CD18) ● ϕ 4 (CD4) ● ϕ 6 (CD6)



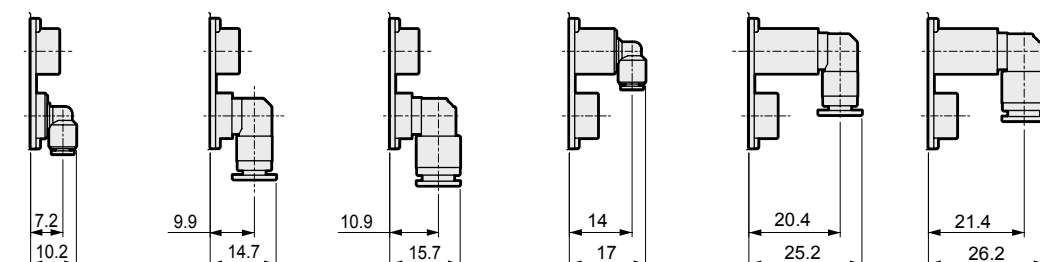
● Fitting L type (upward), single plug

- ϕ 1.8 (CL18NC) ● ϕ 4 (CL4NC) ● ϕ 6 (CL6NC) ● ϕ 1.8 (CL18NO) ● ϕ 4 (CL4NO) ● ϕ 6 (CL6NO)



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

- ϕ 1.8 (CD18NC) ● ϕ 4 (CD4NC) ● ϕ 6 (CD6NC) ● ϕ 1.8 (CD18NO) ● ϕ 4 (CD4NO) ● ϕ 6 (CD6NO)



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

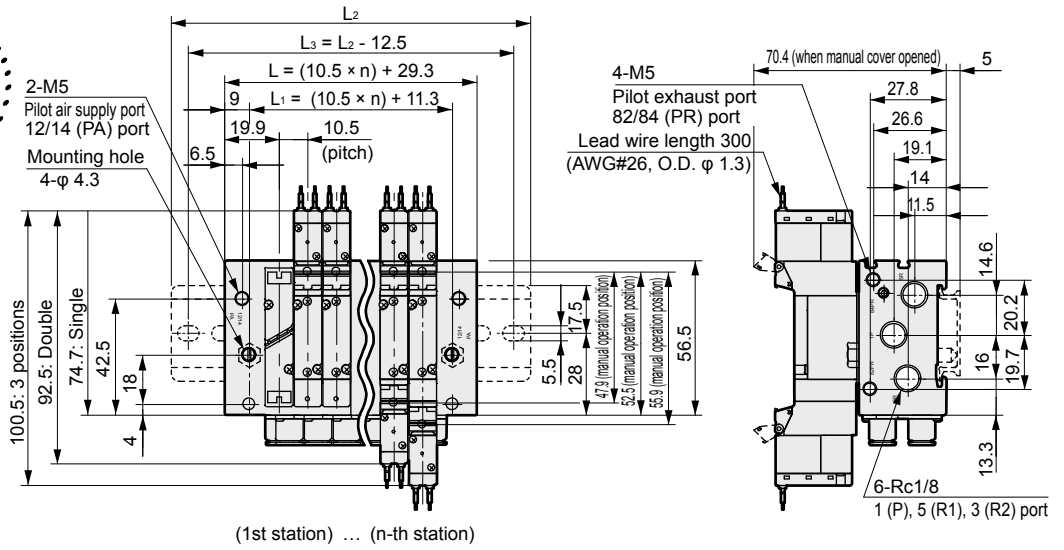
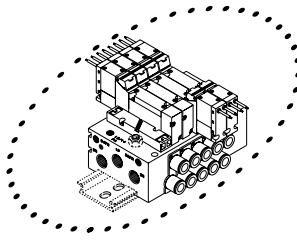
M4GB1 Series

Individual wiring manifold; base piping

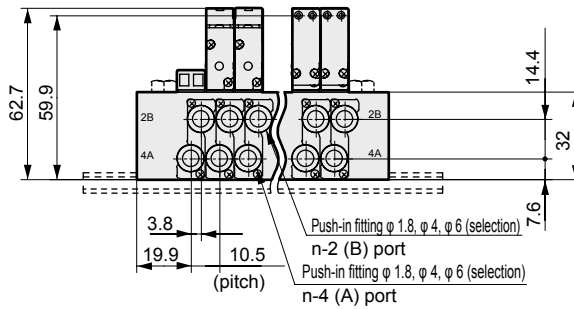
Dimensions

M4GB1

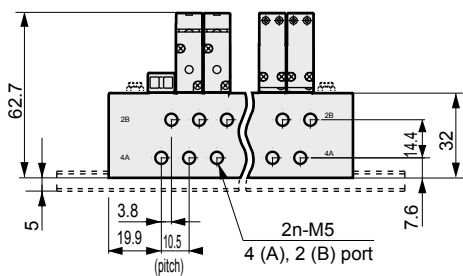
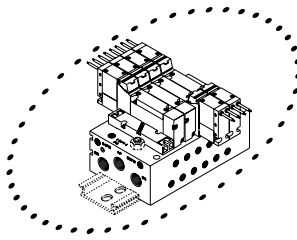
- External pilot (K)
Grommet lead wire (blank)



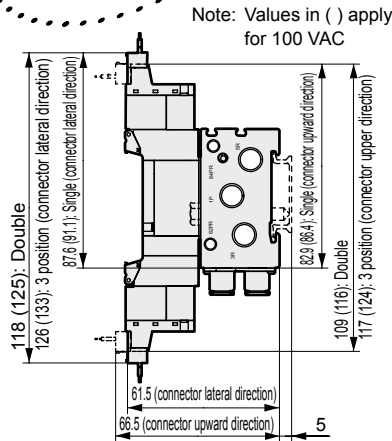
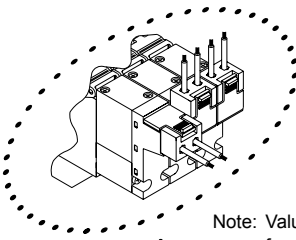
(1st station) ... (n-th station)



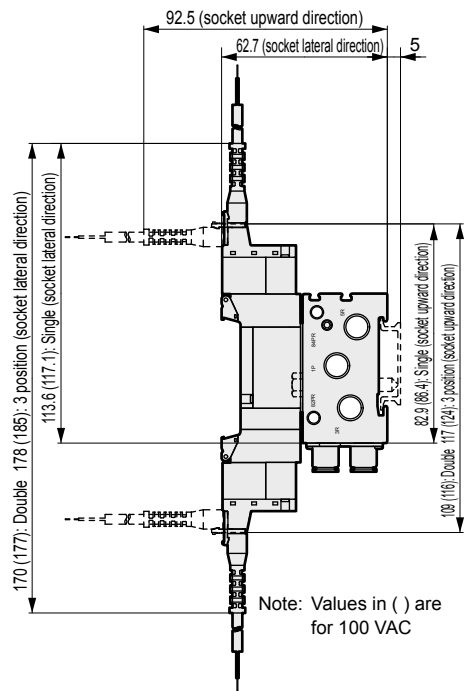
- External pilot (K)
M5 female thread type (M5)



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



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

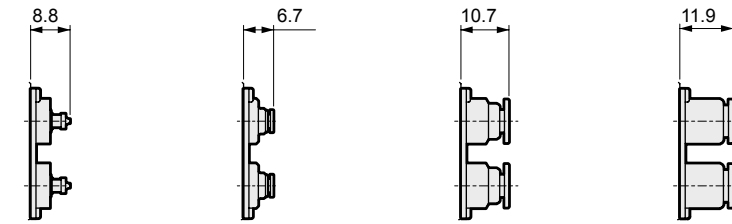


Station no.	2	3	4	5	6	7	8	9	10	11	12
L	50.3	60.8	71.3	81.8	92.3	102.8	113.3	123.8	134.3	144.8	155.3
L ₁	32.3	42.8	53.3	63.8	74.3	84.8	95.3	105.8	116.3	126.8	137.3
L ₂	100.0	112.5	112.5	125.0	137.5	150.0	162.5	175.0	175.0	187.5	200.0
L ₃	87.5	100.0	100.0	112.5	125.0	137.5	150.0	162.5	162.5	175.0	187.5

Dimensions

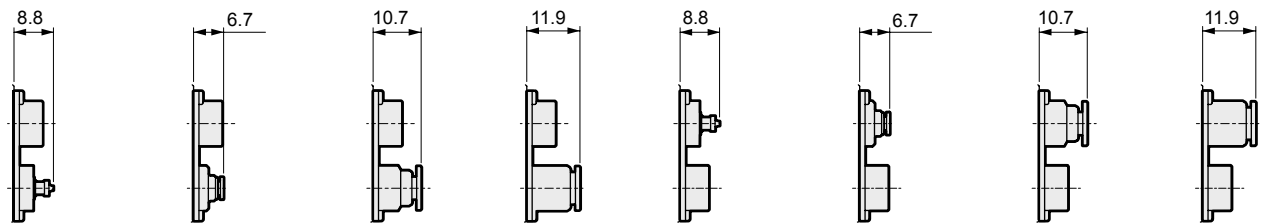
● Fitting straight

- φ 1.8 (CF) ● φ 1.8 (C18) ● φ 4 (C4) ● φ 6 (C6)



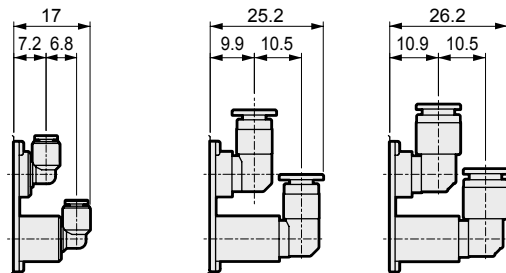
● Fitting straight, single plug

- φ 1.8 (CFNC) ● φ 1.8 (C18NC) ● φ 4 (C4NC) ● φ 6 (C6NC) ● φ 1.8 (CFNO) ● φ 1.8 (C18NO) ● φ 4 (C4NO) ● φ 6 (C6NO)



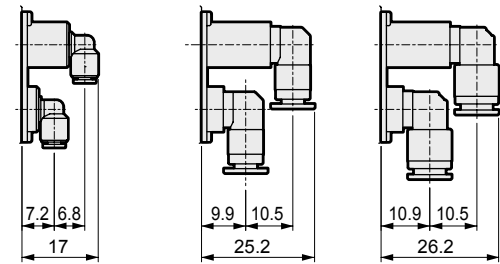
● Fitting L type (upward)

- φ 1.8 (CL18) ● φ 4 (CL4) ● φ 6 (CL6)



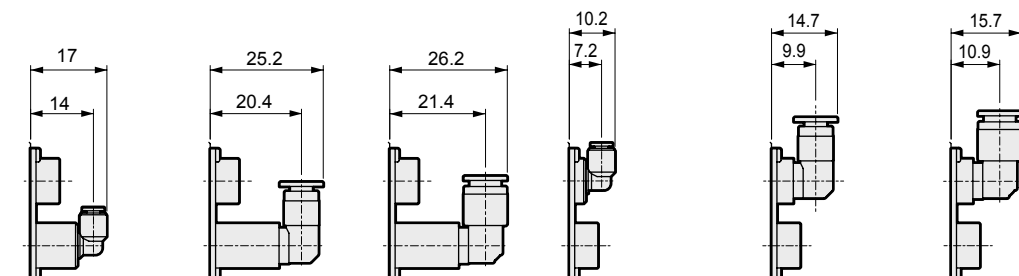
● Fitting L type (downward)

- φ 1.8 (CD18) ● φ 4 (CD4) ● φ 6 (CD6)



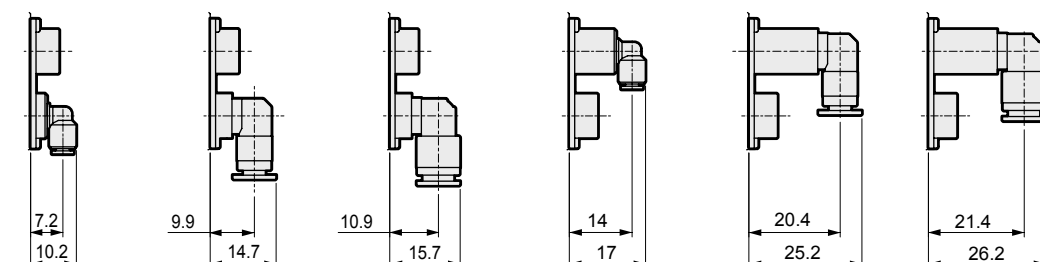
● Fitting L type (upward), single plug

- φ 1.8 (CL18NC) ● φ 4 (CL4NC) ● φ 6 (CL6NC) ● φ 1.8 (CL18NO) ● φ 4 (CL4NO) ● φ 6 (CL6NO)



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

- φ 1.8 (CD18NC) ● φ 4 (CD4NC) ● φ 6 (CD6NC) ● φ 1.8 (CD18NO) ● φ 4 (CD4NO) ● φ 6 (CD6NO)



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

M4GB2 Series

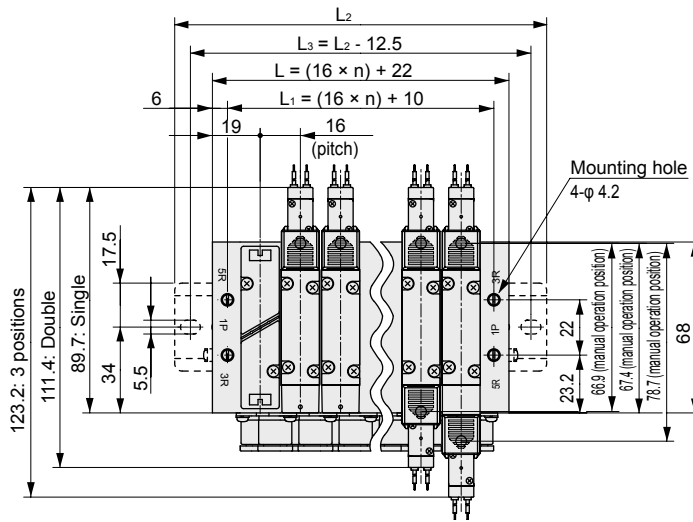
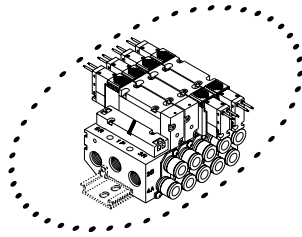
Individual wiring manifold; base piping

Dimensions

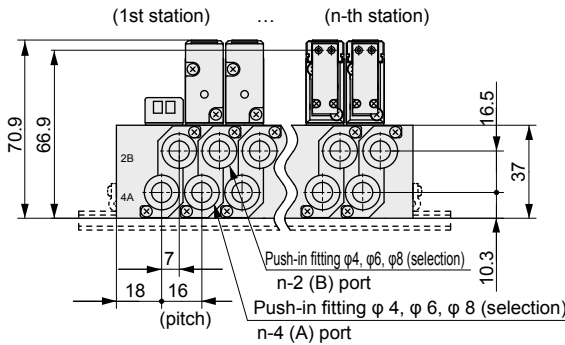
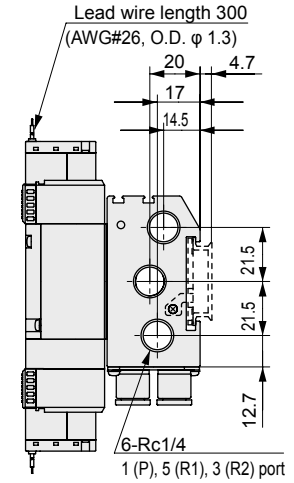
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/
LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
-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

M4GB2

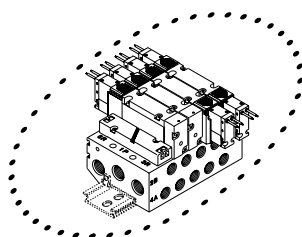
● Grommet lead wire (blank)



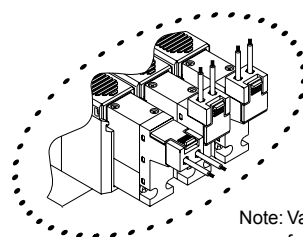
Note The dimension of dual 3 port valve integrated type is the same as that of the double type.



● Rc1/8 female thread type (06)

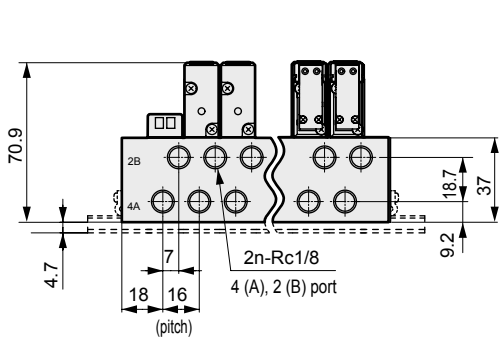


● E type connector type (E)

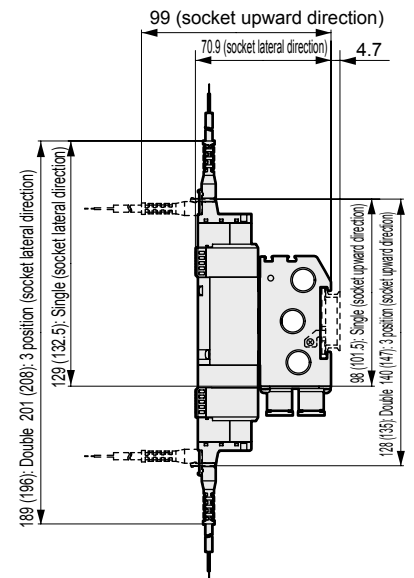
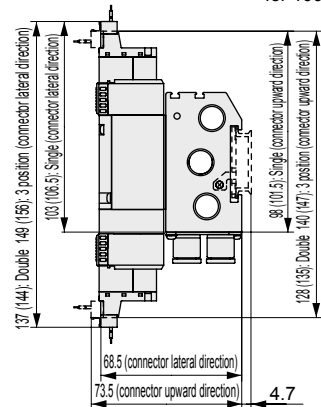


● EJ type connector type (E**J)

Note: Values in () apply for 100 VAC



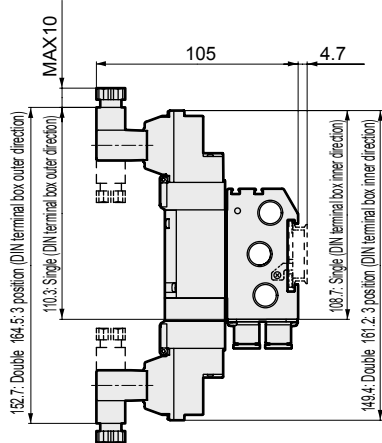
Note: Values in () apply for 100 VAC



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	54	70	86	102	118	134	150	166	182	198	214	230	246	262	278	294	310	326	342
L ₁	42	58	74	90	106	122	138	154	170	186	202	218	234	250	266	282	298	314	330
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

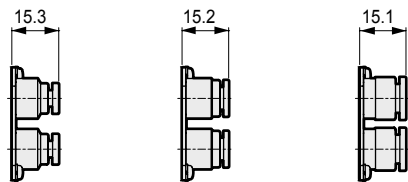
● DIN terminal box type (B)



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

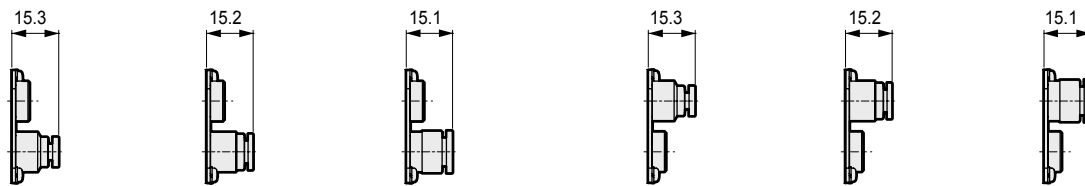
● Fitting straight

- ϕ 4 (C4)
- ϕ 6 (C6)
- ϕ 8 (C8)



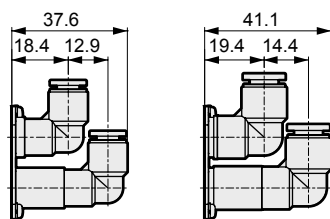
● Fitting straight, single plug

- ϕ 4 (C4NC)
- ϕ 6 (C6NC)
- ϕ 8 (C8NC)
- ϕ 4 (C4NO)
- ϕ 6 (C6NO)
- ϕ 8 (C8NO)



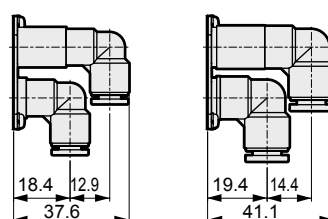
● Fitting L type (upward)

- ϕ 6 (CL6)
- ϕ 8 (CL8)



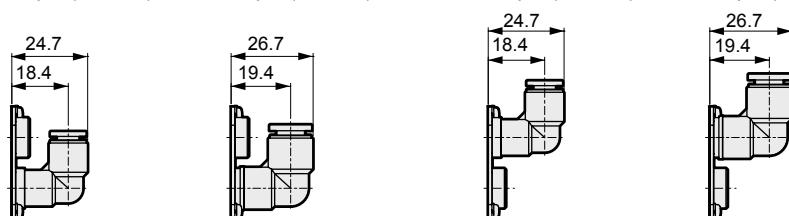
● Fitting L type (downward)

- ϕ 6 (CD6)
- ϕ 8 (CD8)



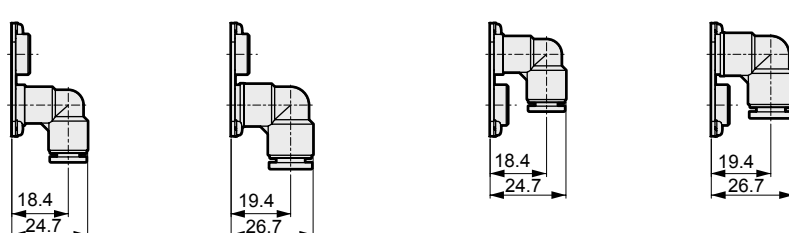
● Fitting L type (upward), single plug

- ϕ 6 (CL6NC)
- ϕ 8 (CL8NC)
- ϕ 6 (CL6NO)
- ϕ 8 (CL8NO)



● Fitting L type (downward), single plug

- ϕ 6 (CD6NC)
- ϕ 8 (CD8NC)
- ϕ 6 (CD6NO)
- ϕ 8 (CD8NO)



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

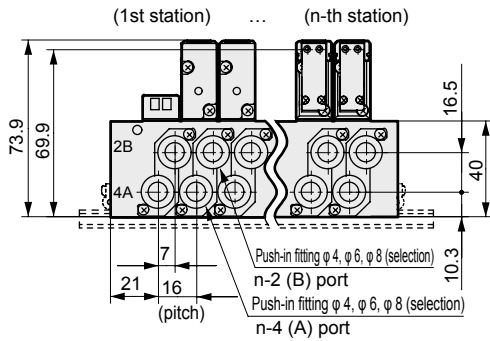
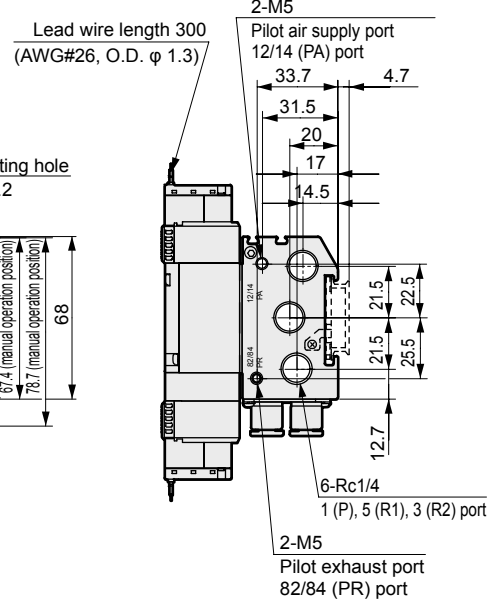
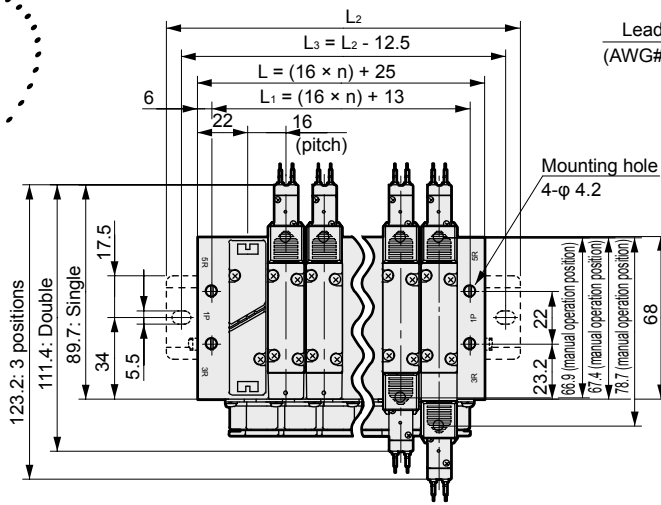
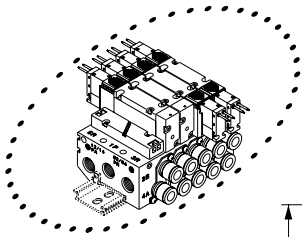
M4GB2 Series

Individual wiring manifold; base piping

Dimensions

M4GB2

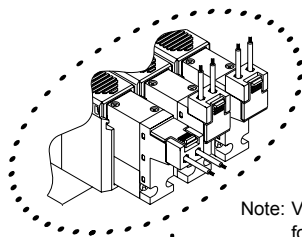
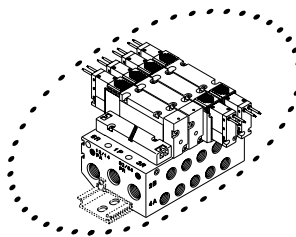
- External pilot (K)
Grommet lead wire (blank)



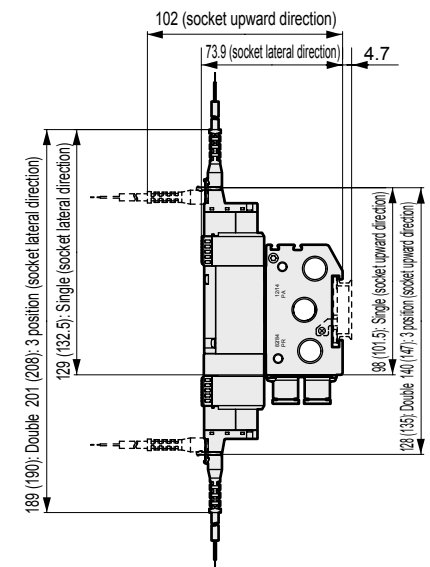
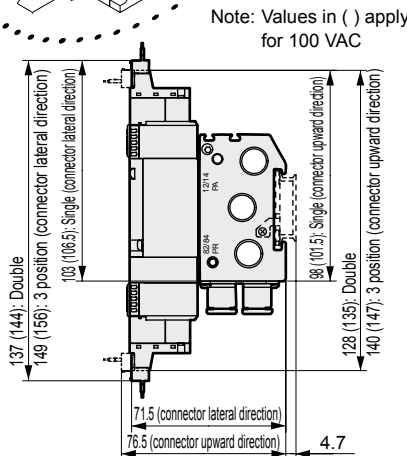
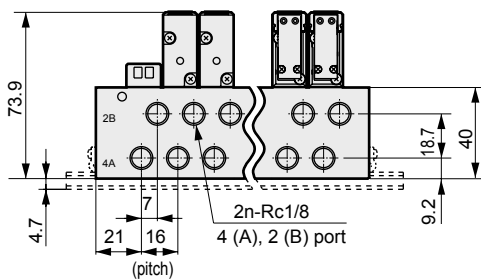
- External pilot (K)
Rc1/8 female thread type (06)

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

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



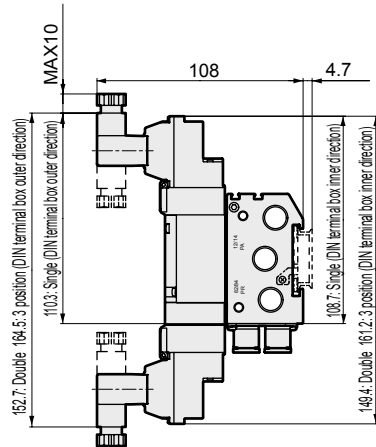
Note: Values in () apply for 100 VAC



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	57	73	89	105	121	137	153	169	185	201	217	233	249	265	281	297	313	329	345
L ₁	45	61	77	93	109	125	141	157	173	189	205	221	237	253	269	285	301	317	333
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

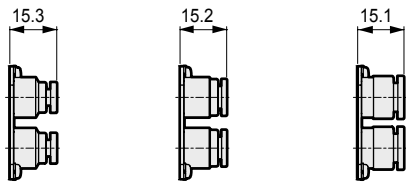
- External pilot (K)
- DIN terminal box type (B)



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

- Fitting straight

- φ 4 (C4)
- φ 6 (C6)
- φ 8 (C8)



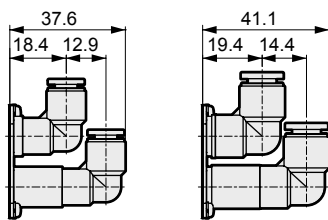
- Fitting straight, single plug

- φ 4 (C4NC)
- φ 6 (C6NC)
- φ 8 (C8NC)
- φ 4 (C4NO)
- φ 6 (C6NO)
- φ 8 (C8NO)



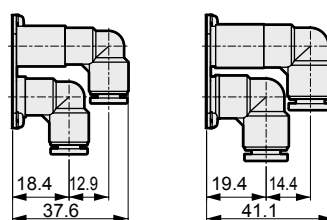
- Fitting L type (upward)

- φ 6 (CL6)
- φ 8 (CL8)



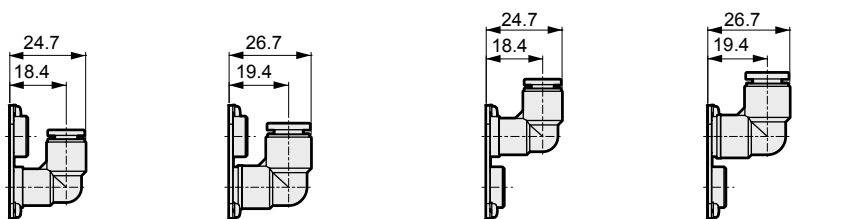
- Fitting L type (downward)

- φ 6 (CD6)
- φ 8 (CD8)



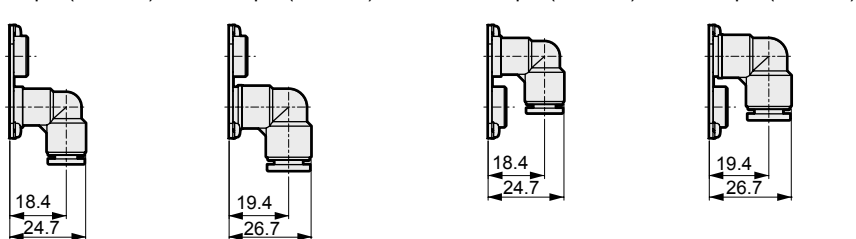
- Fitting L type (upward), single plug

- φ 6 (CL6NC)
- φ 8 (CL8NC)
- φ 6 (CL6NO)
- φ 8 (CL8NO)



- Fitting L type (downward), single plug

- φ 6 (CD6NC)
- φ 8 (CD8NC)
- φ 6 (CD6NO)
- φ 8 (CD8NO)



4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GB3 Series

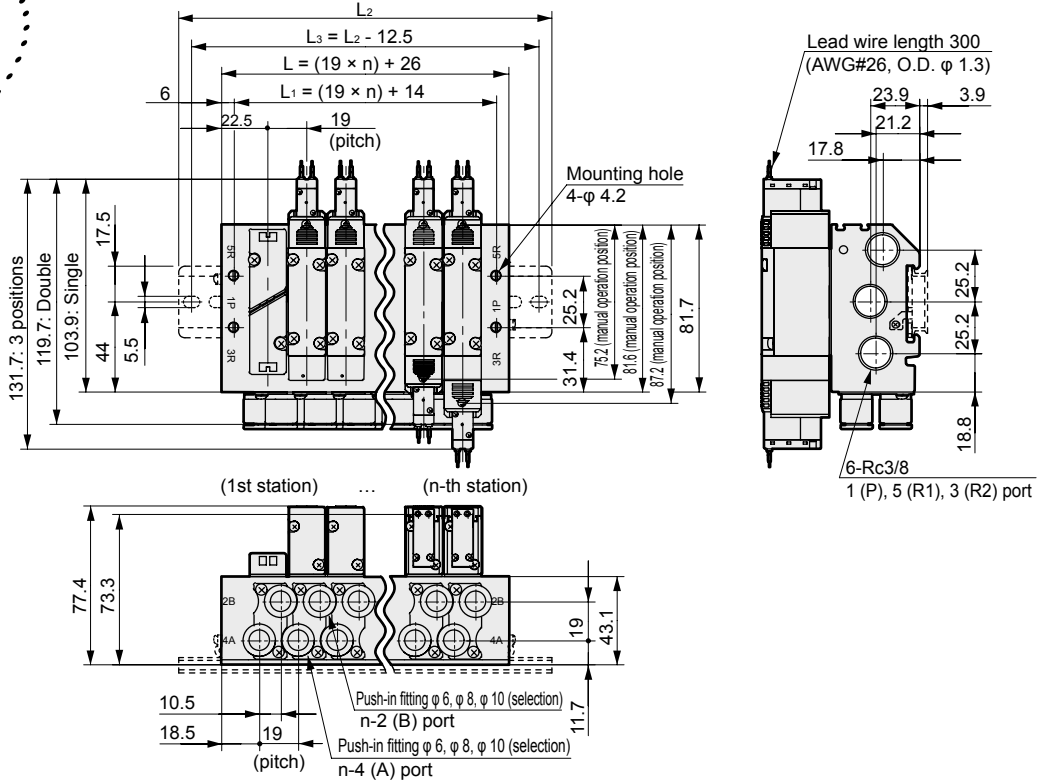
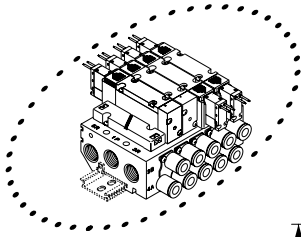
Individual wiring manifold; base piping

Dimensions

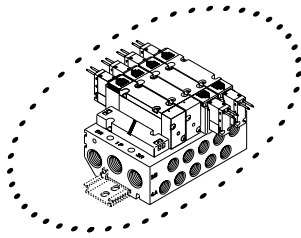
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
-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

M4GB3

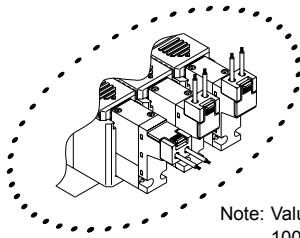
- Grommet lead wire (blank)



- RC1/4 female thread type (08)

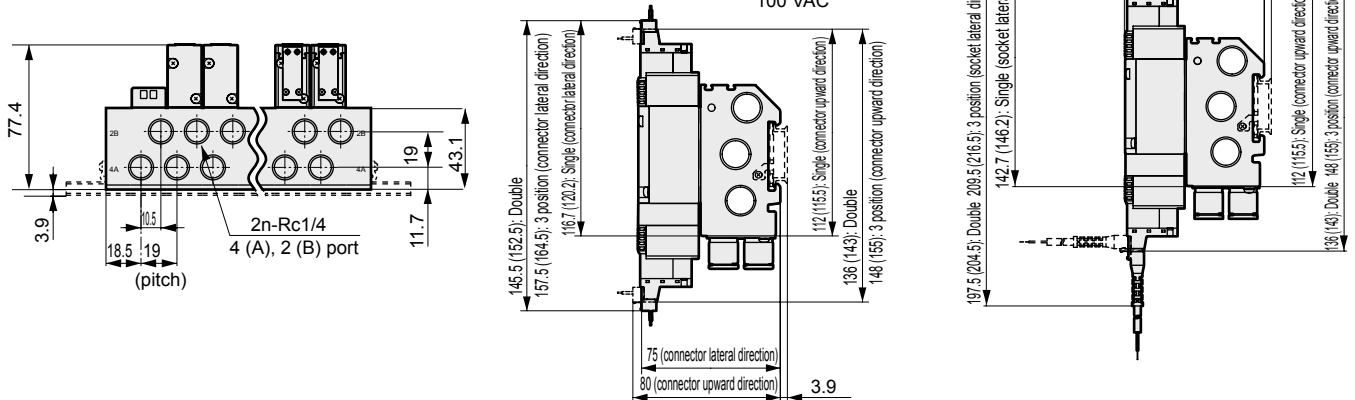


- E type connector type (E)



- EJ type connector type (E**J)

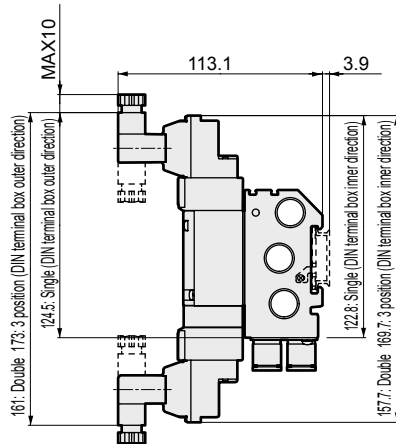
Note: Values in () apply for 100 VAC



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	64	83	102	121	140	159	178	197	216	235	254	273	292	311	330	349	368	387	406
L ₁	52	71	90	109	128	147	166	185	204	223	242	261	280	299	318	337	356	375	394
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				

Dimensions

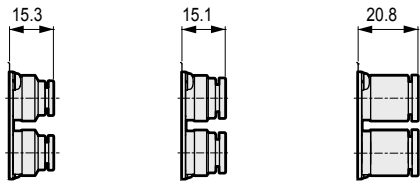
● DIN terminal box type (B)



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

● Fitting straight

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



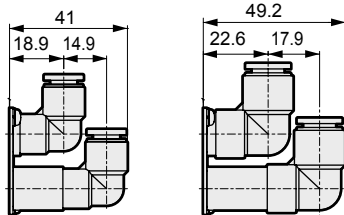
● Fitting straight, single plug

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



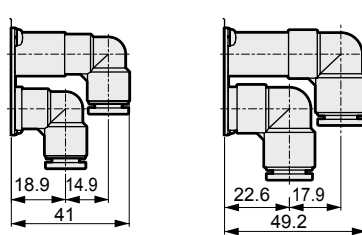
● Fitting L type (upward)

- $\phi 8$ (CL8)
- $\phi 10$ (CL10)



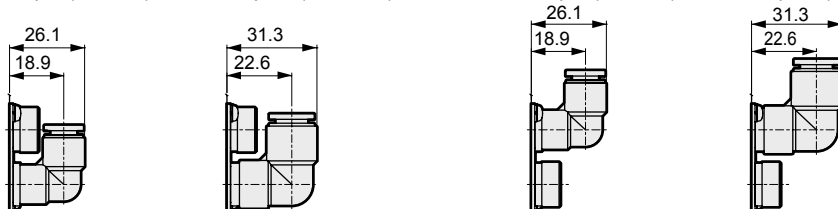
● Fitting L type (downward)

- $\phi 8$ (CD8)
- $\phi 10$ (CD10)



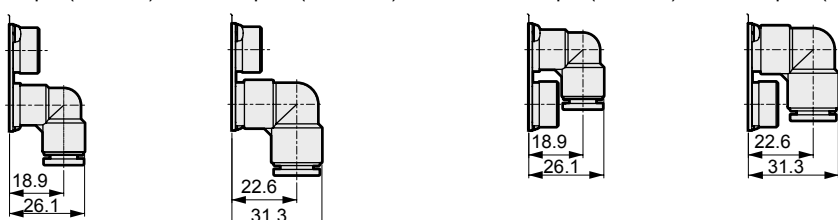
● Fitting L type (upward), single plug

- $\phi 8$ (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)



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

M4GB3 Series

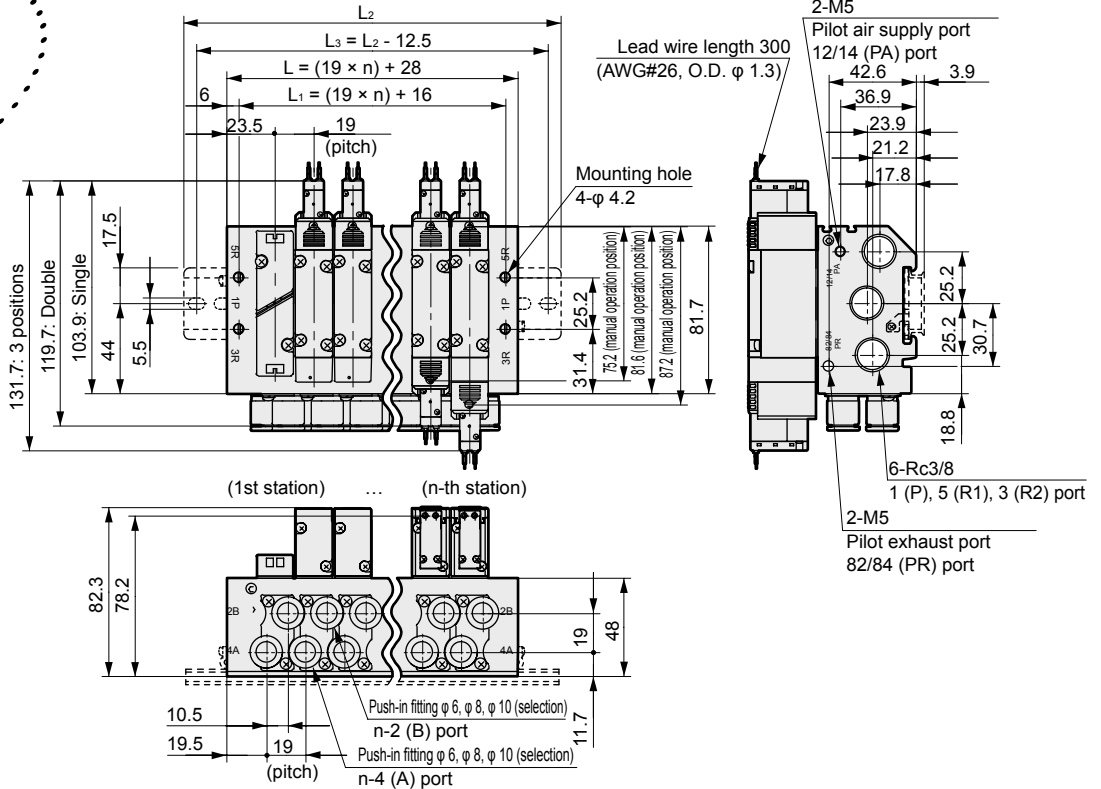
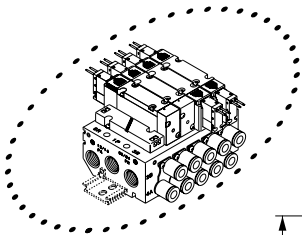
Individual wiring manifold; base piping

Dimensions

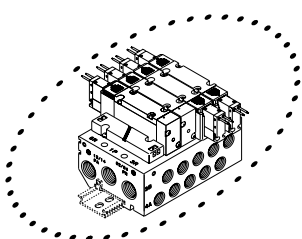
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4GB3

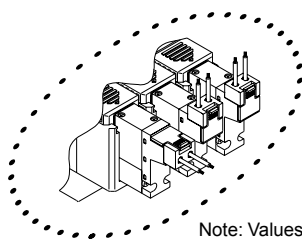
- External pilot (K)
Grommet lead wire (blank)



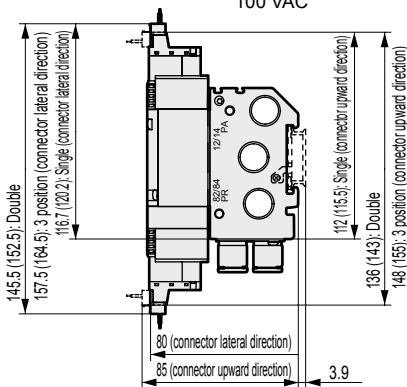
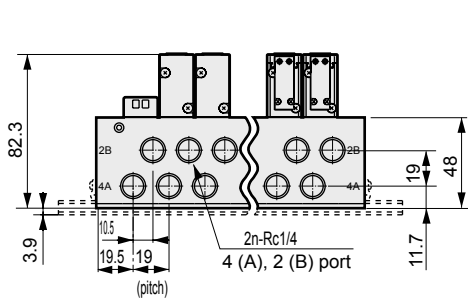
- External pilot (K)
Rc1/4 female thread type (08)



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

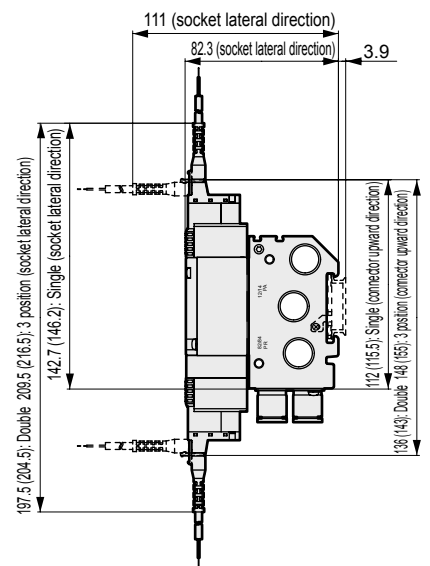


Note: Values in () apply for 100 VAC



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

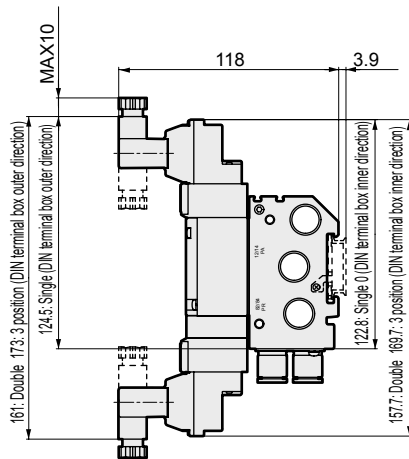
Note: Values in () apply for 100 VAC



Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
L	66	85	104	123	142	161	180	199	218	237	256	275	294	313	332	351	370	389	408
L ₁	54	73	92	111	130	149	168	187	206	225	244	263	282	301	320	339	358	377	396
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

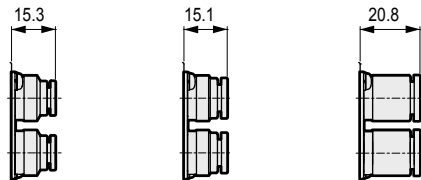
● DIN terminal box type (B)



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

● Fitting straight

- φ 6 (C6)
- φ 8 (C8)
- φ 10 (C10)



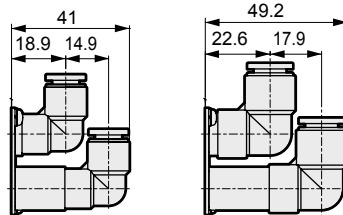
● Fitting straight, single plug

- φ 6 (C6NC)
- φ 8 (C8NC)
- φ 10 (C10NC)
- φ 6 (C6NO)
- φ 8 (C8NO)
- φ 10 (C10NO)



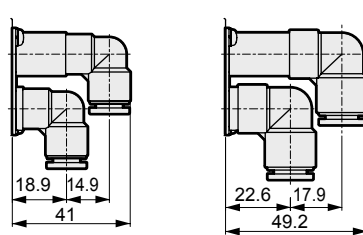
● Fitting L type (upward)

- φ 8 (CL8)
- φ 10 (CL10)



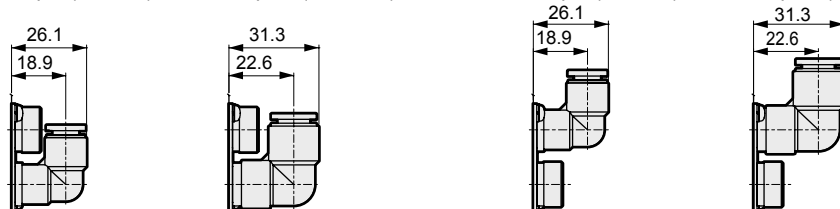
● Fitting L type (downward)

- φ 8 (CD8)
- φ 10 (CD10)



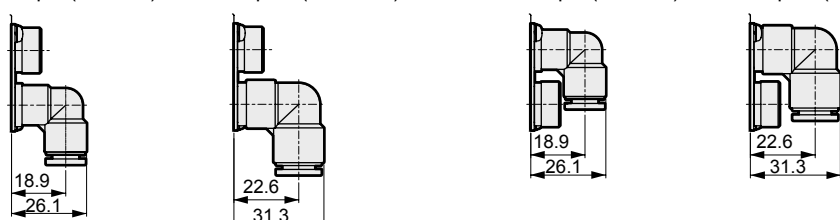
● Fitting L type (upward), single plug

- φ 8 (CL8NC)
- φ 10 (CL10NC)
- φ 8 (CL8NO)
- φ 10 (CL10NO)



● Fitting L type (downward), single plug

- φ 8 (CD8NC)
- φ 10 (CD10NC)
- φ 8 (CD8NO)
- φ 10 (CD10NO)



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

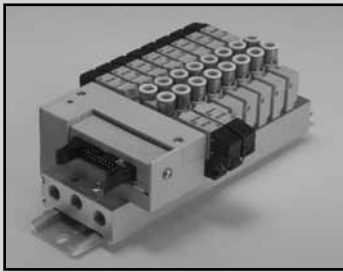
Discontinue

Reduced wiring manifold (common terminal block/D sub-connector/flat cable connector)
Body piping
Direct mount type/DIN rail mount type

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

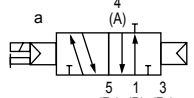
● Applicable cylinder bore size: φ 20 to φ 100

* Refer to page 124 for serial transmission type.

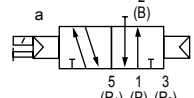


JIS symbol

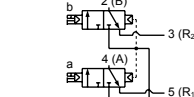
● 3 port valve
2-position single N.C. type



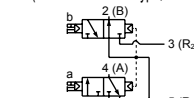
2-position single N.O. type



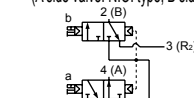
● Dual 3 port valve integrated type (A side valve: N.C. type, B side valve: N.C. type)



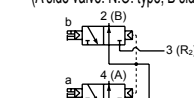
(A side valve: N.C. type, B side valve: N.O. type)



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

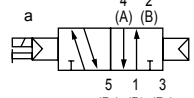


(A side valve: N.O. type, B side valve: N.O. type)

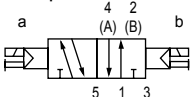


● 5 port valve

2-position single

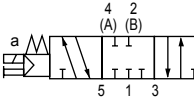


2-position double

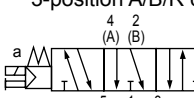


3-position

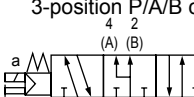
all ports closed



3-position A/B/R connection



3-position P/A/B connection



Manifold common specifications

Descriptions		
Manifold type		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		Valve top 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

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 and 0.7 MPa.

Electrical specification

Descriptions		
Rated voltage	DC	12, 24
Voltage fluctuation range		±10%
Holding current	24 VDC	0.025
	A 12 VDC	0.050
Power consumption	24 VDC	0.6
	W 12 VDC	0.6
Thermal class		B
Temperature rise °C		50
Surge suppressor		Zener diode
Indicator		LED

Individual specifications

Descriptions		M3GA1/M4GA1		M3GA2/M4GA2		M3GA3/M4GA3	
		T*		T*		T*	
		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					
Port size	A/B port	Barbed fitting φ 1.8 Push-in fitting φ 1.8, φ 4, φ 6 M5		Push-in fitting φ 4, φ 6, φ 8 Rc1/8		Push-in fitting φ 6, φ 8, φ 10 Rc1/4	
	P/R1/R2 port	Rc1/8		Rc1/4		Rc3/8	
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	98n + 468	149n + 554	151n + 583

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.

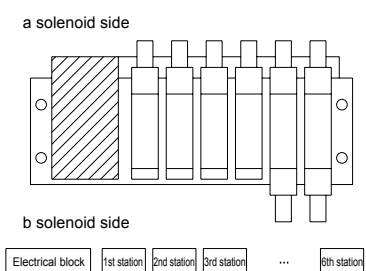
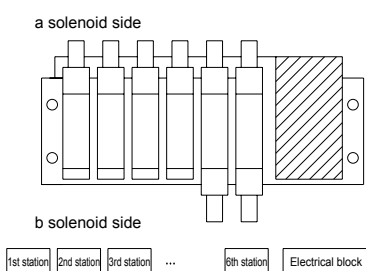
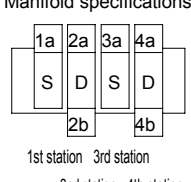
Flow characteristics

Model no.	Solenoid 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	0.66	0.22	
	2-position	0.99	0.20	0.70	0.12	
	3-position	All ports closed	0.94	0.23	0.99	0.09
		ABR connection	0.93	0.18	0.70	0.02
	PAB connection	1.1	0.28	1.0	0.12	
M3GA2 M4GA2	Dual 3 port valve integrated type	1.7	0.40	1.7	0.32	
	2-position	2.3	0.36	1.7	0.33	
	3-position	All ports closed	2.1	0.35	2.4	0.37
		ABR connection	2.2	0.37	1.8	0.29
PAB connection		2.4	0.34	2.5	0.33	
M3GA3 M4GA3	2-position	3.2	0.37	2.5	0.28	
	3-position	All ports closed	2.9	0.35	3.2	0.35
		ABR connection	3.0	0.34	2.6	0.27
		PAB connection	3.3	0.30	3.3	0.32

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

Note 2: Values for 2-position, dual 3 port valve integrated type, and ABR connection are the values when check valve is integrated.

Wiring specifications

Descriptions	T10*	T11*	T30*	T50*	T51*	T52*	T53*																																
	Centralized terminal block type	Centralized terminal block type	D sub-connector	Flat cable 20 pin type	Flat cable 20 pin type	Flat cable 10 pin type	Flat cable 26 pin type																																
Connector and terminal block specifications	M3 thread tightening type 16 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	14 points	24 points	24 points	16 points	18 points	8 points	24 points																																
Manifold internal wiring	Details on page 384 to 391																																						
Electrical block position	Left side: T* 				Right side: T*R 																																		
Arrangement type	(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																															

Ozone proof specifications

 /
 Cutting oil proof type specifications

Select the option "A" of (F) in how to order on page 114.

Clean room specifications

 (Catalog no. CB-033SA)

- 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

4GA/B
 M4GA/B
 4GA4/B4
 MN4GA/B
 4GA/B (Master)
 MN3E
 MN4E
 W4GA/B2
 W4GB4
 4TB
 4L2-4/LMFO
 MN3S0
 MN4S0
 4SA/B0
 4KA/B
 4KA/B (Master)
 4F
 4F (Master)
 PV5G
 GMF
 PV5
 GMF
 PV5S-0
 3QR
 3QB
 3MA/B0
 3PA/B
 P/MB
 NP/NAP
 NVP
 4F*0E
 HMV
 HSV
 2QV
 3QV
 SKH
 PCD
 Silencer
 Total air system
 Total air system (Gamma)
 Ending

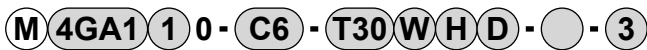
M³₄GA1/2/3-T*(D) Series

Reduced wiring manifold; body piping

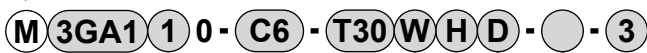
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E/MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0/MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G/GMF
- PV5/GMF
- PV5S-0
- 3QR/3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP/NVP
- 4F*0E
- HMV/HSV
- 2QV/3QV
- SKH
- PCD
- Silencer
-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

How to order

Manifold model no.



3 port manifold model no.



Discrete valve for mounting base



3 port discrete valve for mounting base



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

B Solenoid position

A Model no.

C Port size

D Reduced wiring connection
Zener diode is used for a surge suppressor.

E Terminal and connector pin wiring

F Option

G Mount type

H Station no.

I Voltage

- Refer to page 387 for the model no. of the cable with a D sub-connector.
- Refer to page 383 for the model no. of the cable for a flat cable connector.

⚠ Note on model no. selection

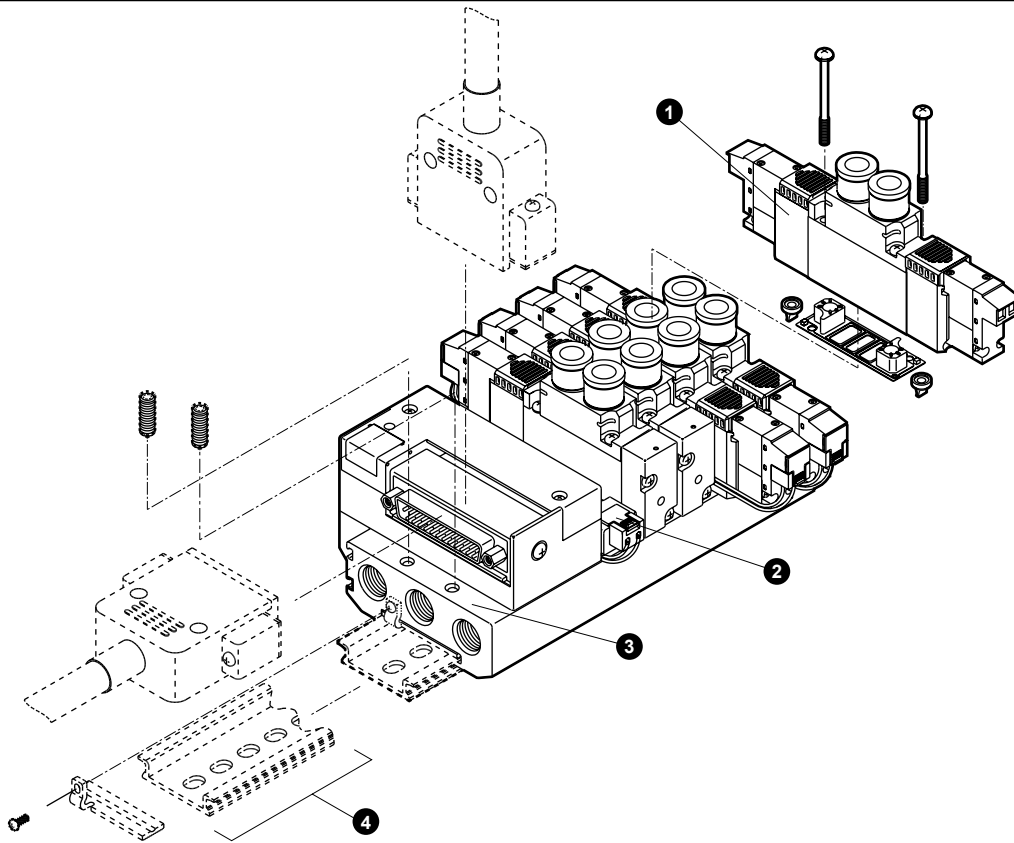
- Note 1 Select M4GA*80 when mixing with 3, 5 port valves.
Select M3GA*80 when mixing with the masking plate.
- Note 2 Combination with the external pilot (K) is not available.
Dimensions are the same as the respective 2-position double.
- Note 3 The push-in fitting cannot be mixed with the discrete 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 3-position all ports closed and PAB connection are not provided with check valve (H).
Refer to page 439 for details on check valve.
- Note 6 Contact CKD when using a vacuum with the external pilot (K).
- Note 7 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 154 to 156 for details.

*Always indicate "Manifold specifications" (page 168 to 179).

		A Model no.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
Symbol	Descriptions						
B Solenoid 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						
	B side valve: Normally closed						
67	Dual 3 port valve integrated type Note 1, 2		●				
	A side valve: Normally closed						
	B side valve: Normally open						
76	Dual 3 port valve integrated type Note 1, 2		●				
	A side valve: Normally open						
	B side valve: Normally closed						
77	Dual 3 port valve integrated type Note 1, 2	●	●				
	A side valve: Normally open						
	B side valve: Normally open						
8	Mix manifold (In case of multiple solenoid positions)	●	●	●	●	●	●
C Port size							
Port	A/B port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8					
C18	φ 1.8 push-in fitting for fiber tube (applicable tube UP-9402-**) (2)			(2)			
C4	φ 4 push-in fitting (2) (3)		(3)	(2)	(3)		
C6	φ 6 push-in fitting (2) (3) (4)		(3)	(4)	(2)	(3)	(4)
C8	φ 8 push-in fitting (3) (4)			(3)	(4)		
CF	φ 1.8 barbed fitting for fiber tube (applicable tube UP-9102-**) (2)			(2)			
C10	φ 10 push-in fitting (4)			(4)			
CX	Push-in fitting mix Note 3 (2) (3) (4)	(2)	(3)	(4)	(2)	(3)	(4)
M5	M5 (2)			(2)			
O6	Rc1/8 (3)			(3)			
O8	Rc1/4 (4)			(4)			
D Reduced wiring connection (light and surge suppressor provided as standard)							
T10	Common terminal block (M3 thread)	●	●	●	●	●	●
T10R	Common terminal block (M3 thread)	●	●	●	●	●	●
T11	Common terminal block (push tightening)	●	●	●	●	●	●
T11R	Common terminal block (push tightening)	●	●	●	●	●	●
T30	D sub-connector	●	●	●	●	●	●
T30R	D sub-connector	●	●	●	●	●	●
T50	20 pin flat cable connector (with power supply terminal)	●	●	●	●	●	●
T50R	20 pin flat cable connector (with power supply terminal)	●	●	●	●	●	●
T51	20 pin flat cable connector (without power supply terminal)	●	●	●	●	●	●
T51R	20 pin flat cable connector (without power supply terminal)	●	●	●	●	●	●
T52	10 pin flat cable connector (without power supply terminal)	●	●	●	●	●	●
T52R	10 pin flat cable connector (without power supply terminal)	●	●	●	●	●	●
T53	26 pin flat cable connector (without power supply terminal)	●	●	●	●	●	●
T53R	26 pin flat cable connector (without power supply terminal)	●	●	●	●	●	●
E Terminal and connector pin wiring							
Blank	Standard wiring Note 4	●	●	●	●	●	●
W	Double wiring Note 4	●	●	●	●	●	●
F 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	●	●	●	●	●	●
F	A/B port filter integrated (P port: Standard)	●	●	●	●	●	●
Z1	Air supply spacer Note 7	●	●	●	●	●	●
Z2	In stop valve spacer Note 7	●	●	●	●	●	●
G Mount type							
Blank	Direct mount type	●	●	●	●	●	●
D	DIN rail mount type	●	●	●	●	●	●
H Station no.							
2	2 stations						
to	to						
20	Refer to page 112 for the max. station no. for each model.						
I Voltage							
3	24 VDC	●	●	●	●	●	●
4	12 VDC	●	●	●	●	●	●

is not available.

Manifold components explanation and parts list



Main components list

No.	Component name	Model no.	Descriptions	Remarks						
1	Discrete valve for mounting base	4GA**9- <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> Connection Port size -A2N Option Voltage </div> <div style="display: flex; justify-content: space-between; font-size: 0.8em; margin-top: 5px;"> Solenoid position Series flow rate size </div>	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 114						
2	Masking plate	<table style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <tr> <td style="width: 15%;">3G1/4G1</td> <td style="width: 15%;">4G1-MP</td> </tr> <tr> <td>3G2/4G2</td> <td>4G2-MP</td> </tr> <tr> <td>3G3/4G3</td> <td>4G3-MP</td> </tr> </table>	3G1/4G1	4G1-MP	3G2/4G2	4G2-MP	3G3/4G3	4G3-MP	Masking plate Gasket Set screw 2	* 3G3/4G3 has two PR check valves.
3G1/4G1	4G1-MP									
3G2/4G2	4G2-MP									
3G3/4G3	4G3-MP									
3	Manifold base assembly	M4GA*-00- <div style="display: flex; justify-content: space-between; font-size: 0.8em;"> Reduced wiring connection Option Station no. </div> <div style="display: flex; justify-content: space-between; font-size: 0.8em; margin-top: 5px;"> Series flow rate size </div>	Manifold base Electrical block							
4	DIN rail kit			Details on page 161						

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.																													
-	Coil assembly	4G-A2N*-COIL-Voltage Blank: Standard A: Ozone/cutting oil proof		Cartridge type push-in fitting and related parts	<table style="width: 100%; border-collapse: collapse; font-size: 0.8em;"> <tr> <td rowspan="5" style="width: 10%; text-align: center;">4G1</td> <td style="width: 50%;">φ 1.8 straight type</td> <td style="width: 35%;">4G1-JOINT-C18</td> </tr> <tr> <td>φ 4 straight type</td> <td>4G1-JOINT-C4</td> </tr> <tr> <td>φ 6 straight type</td> <td>4G1-JOINT-C4</td> </tr> <tr> <td>φ 1.8 barbed type</td> <td>4G1-JOINT-CF</td> </tr> <tr> <td>Plug cartridge</td> <td>4G1-JOINT-CPG</td> </tr> <tr> <td rowspan="5" style="text-align: center;">4G2</td> <td>φ 4 straight type</td> <td>4G2-JOINT-C4</td> </tr> <tr> <td>φ 6 straight type</td> <td>4G2-JOINT-C6</td> </tr> <tr> <td>φ 8 straight type</td> <td>4G2-JOINT-C8</td> </tr> <tr> <td>Plug cartridge</td> <td>4G2-JOINT-CPG</td> </tr> <tr> <td rowspan="5" style="text-align: center;">4G3</td> <td>φ 6 straight type</td> <td>4G3-JOINT-C6</td> </tr> <tr> <td>φ 8 straight type</td> <td>4G3-JOINT-C8</td> </tr> <tr> <td>φ 10 straight type</td> <td>4G3-JOINT-C10</td> </tr> <tr> <td>Plug cartridge</td> <td>4G3-JOINT-CPG</td> </tr> </table>	4G1	φ 1.8 straight type	4G1-JOINT-C18	φ 4 straight type	4G1-JOINT-C4	φ 6 straight type	4G1-JOINT-C4	φ 1.8 barbed type	4G1-JOINT-CF	Plug cartridge	4G1-JOINT-CPG	4G2	φ 4 straight type	4G2-JOINT-C4	φ 6 straight type	4G2-JOINT-C6	φ 8 straight type	4G2-JOINT-C8	Plug cartridge	4G2-JOINT-CPG	4G3	φ 6 straight type	4G3-JOINT-C6	φ 8 straight type	4G3-JOINT-C8	φ 10 straight type	4G3-JOINT-C10	Plug cartridge	4G3-JOINT-CPG
4G1	φ 1.8 straight type	4G1-JOINT-C18																																
	φ 4 straight type	4G1-JOINT-C4																																
	φ 6 straight type	4G1-JOINT-C4																																
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	φ 8 straight type	4G2-JOINT-C8																																
	Plug cartridge	4G2-JOINT-CPG																																
	4G3	φ 6 straight type	4G3-JOINT-C6																															
φ 8 straight type		4G3-JOINT-C8																																
φ 10 straight type		4G3-JOINT-C10																																
Plug cartridge		4G3-JOINT-CPG																																
-		A type connector socket assembly Details on page 401	<div style="display: flex; justify-content: space-between; font-size: 0.8em;"> Series flow rate size Row no. </div> 4G*-SOCKET-ASSY-A** Blank: Left side, R: Right side A: aSOL side, B: bSOL side n: Specify the position of the valve to be connected																															

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/MB
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4GA1-T* Series

Reduced wiring manifold; body piping

Dimensions

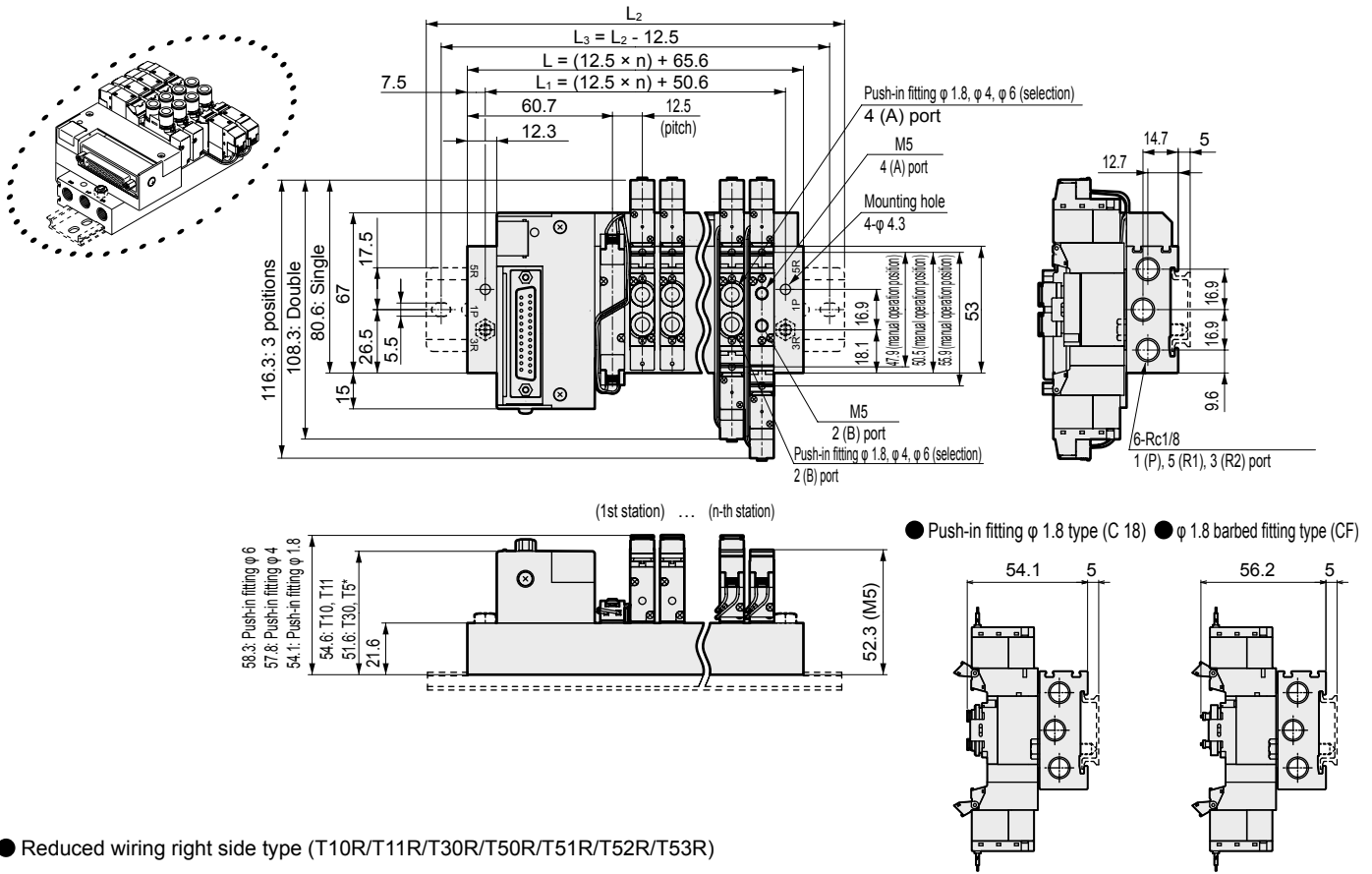


M4GA1

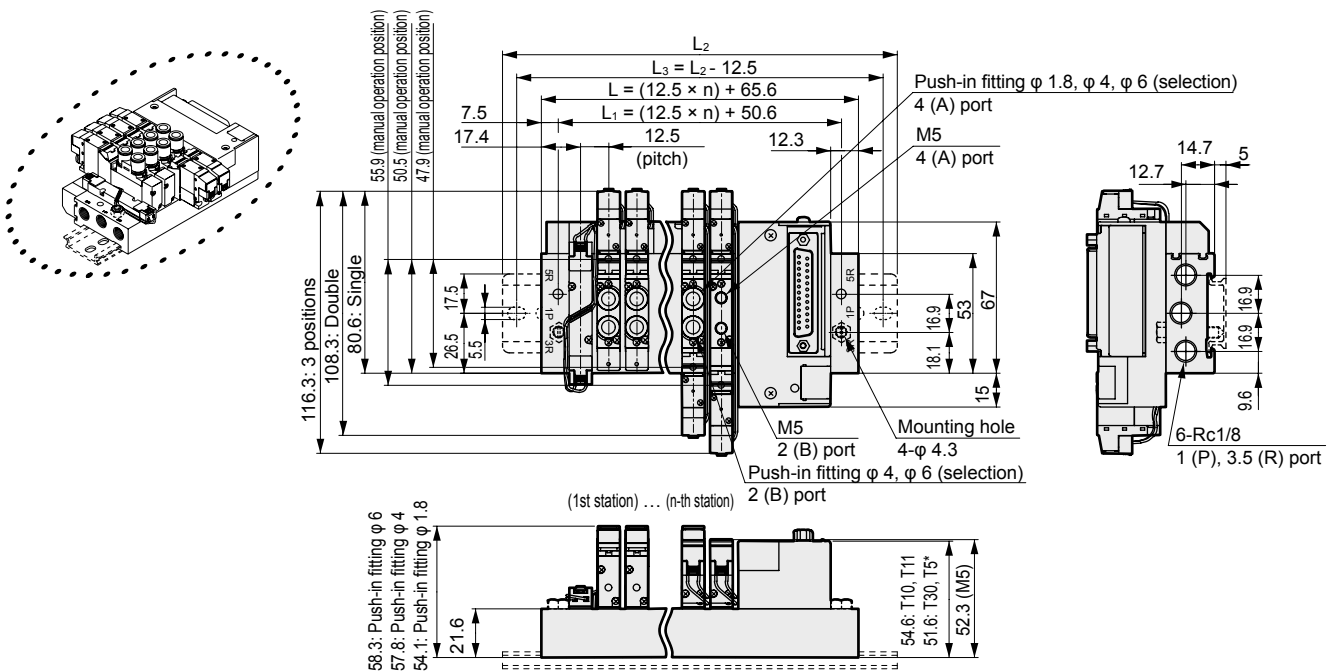
● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

* This drawing shows T30. Refer to page 122 to 123 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				

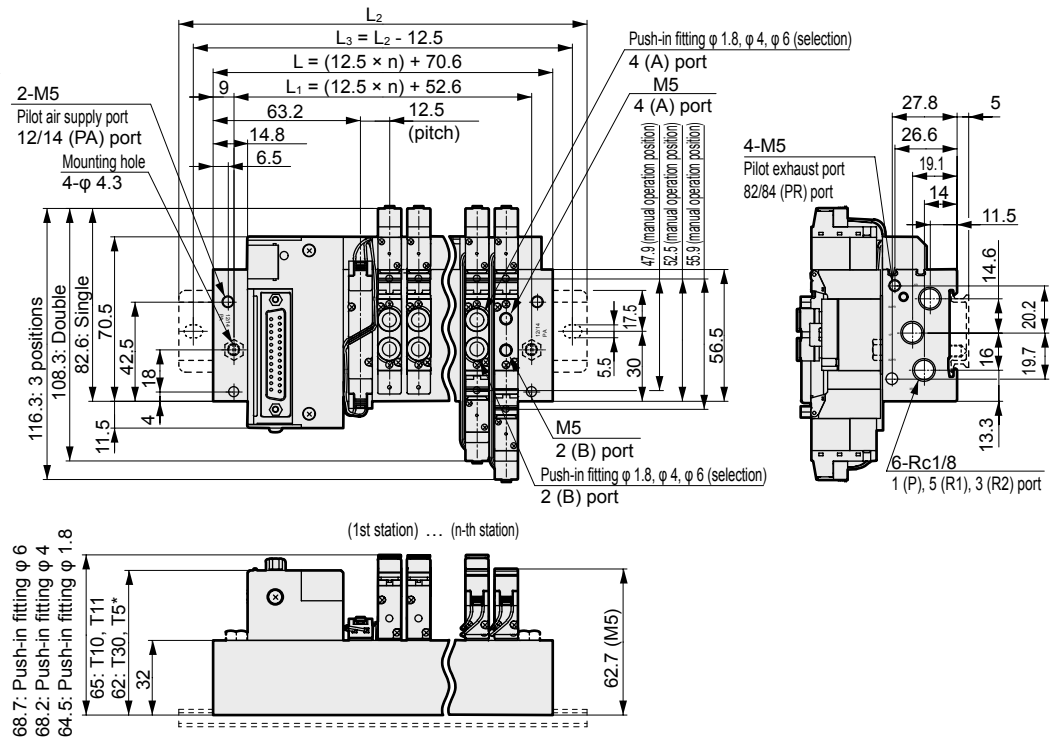
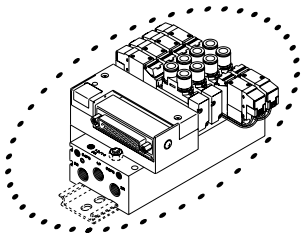
Dimensions

M4GA1

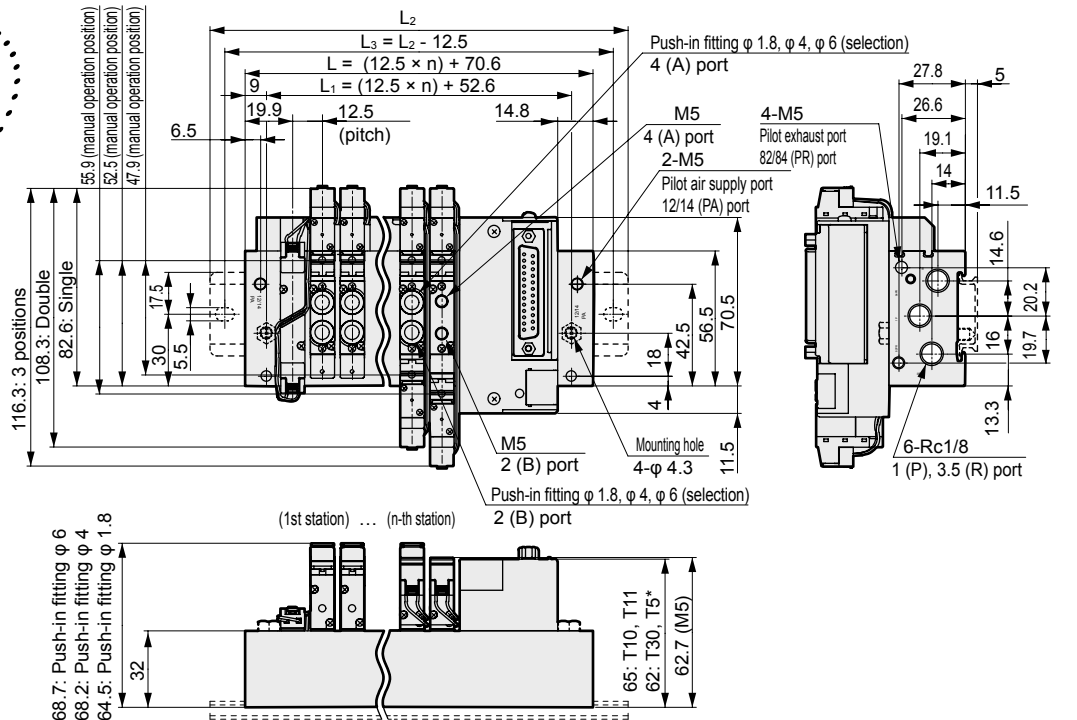
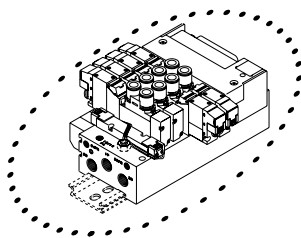
- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53) external pilot (K)

* This drawing shows T30. Refer to page 122 to 123 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

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA2-T* Series

Reduced wiring manifold; body piping

Dimensions

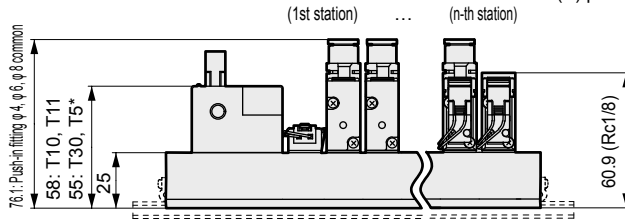
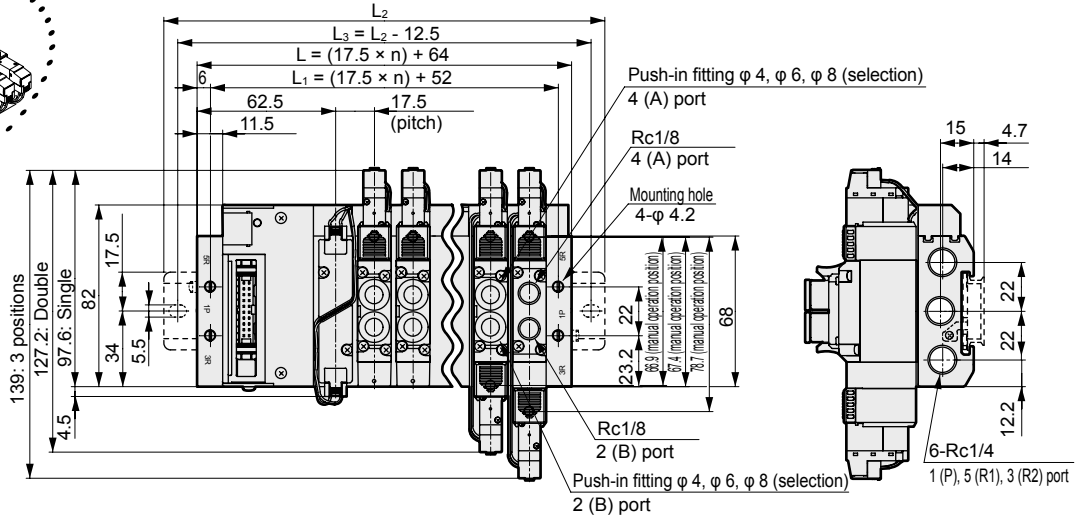
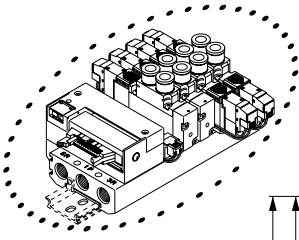


M4GA2

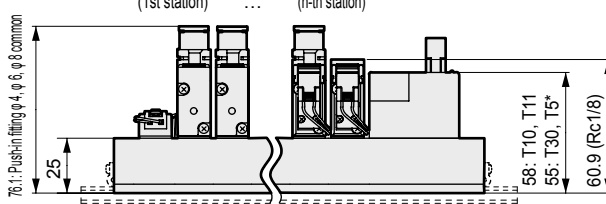
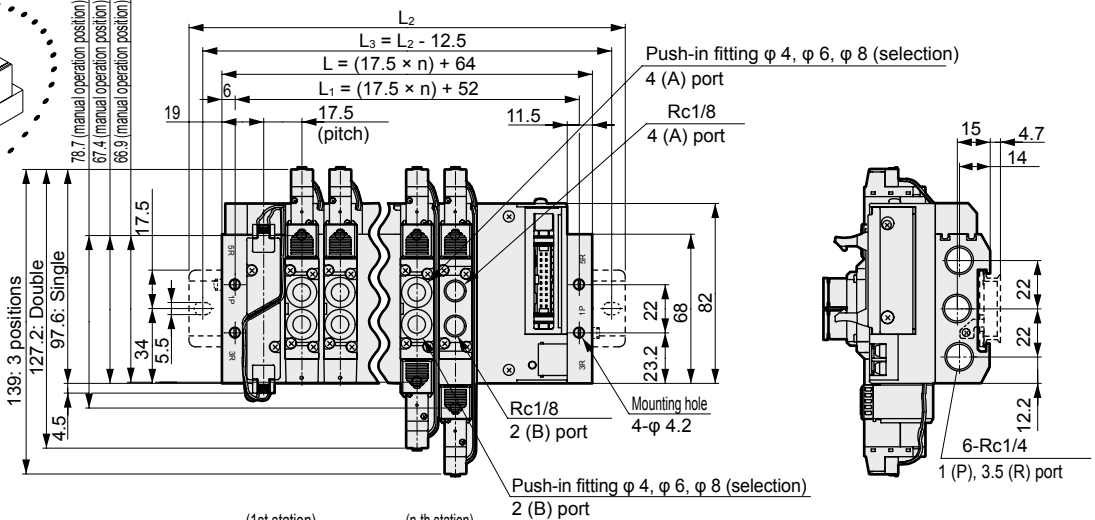
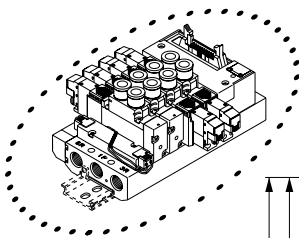
● Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)

* This drawing shows T30. Refer to page 122 to 123 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				

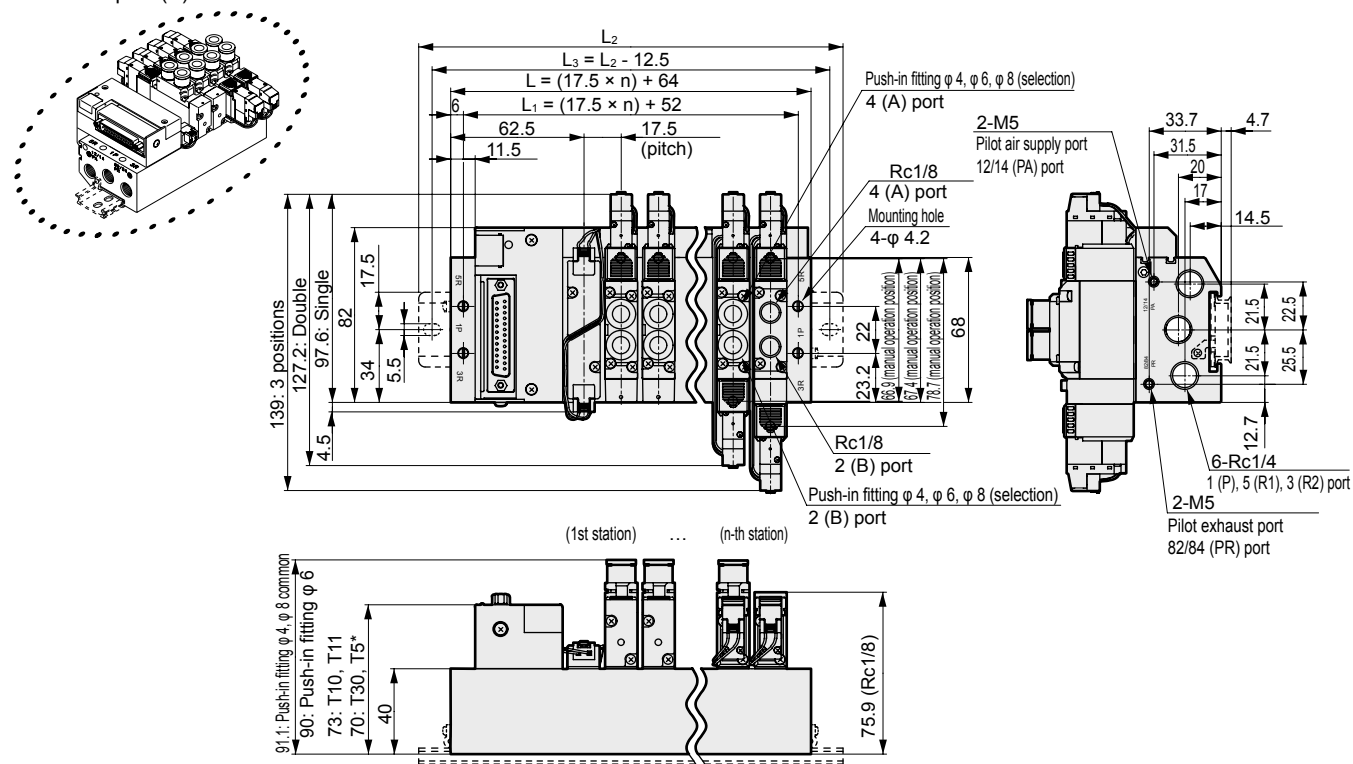
Dimensions



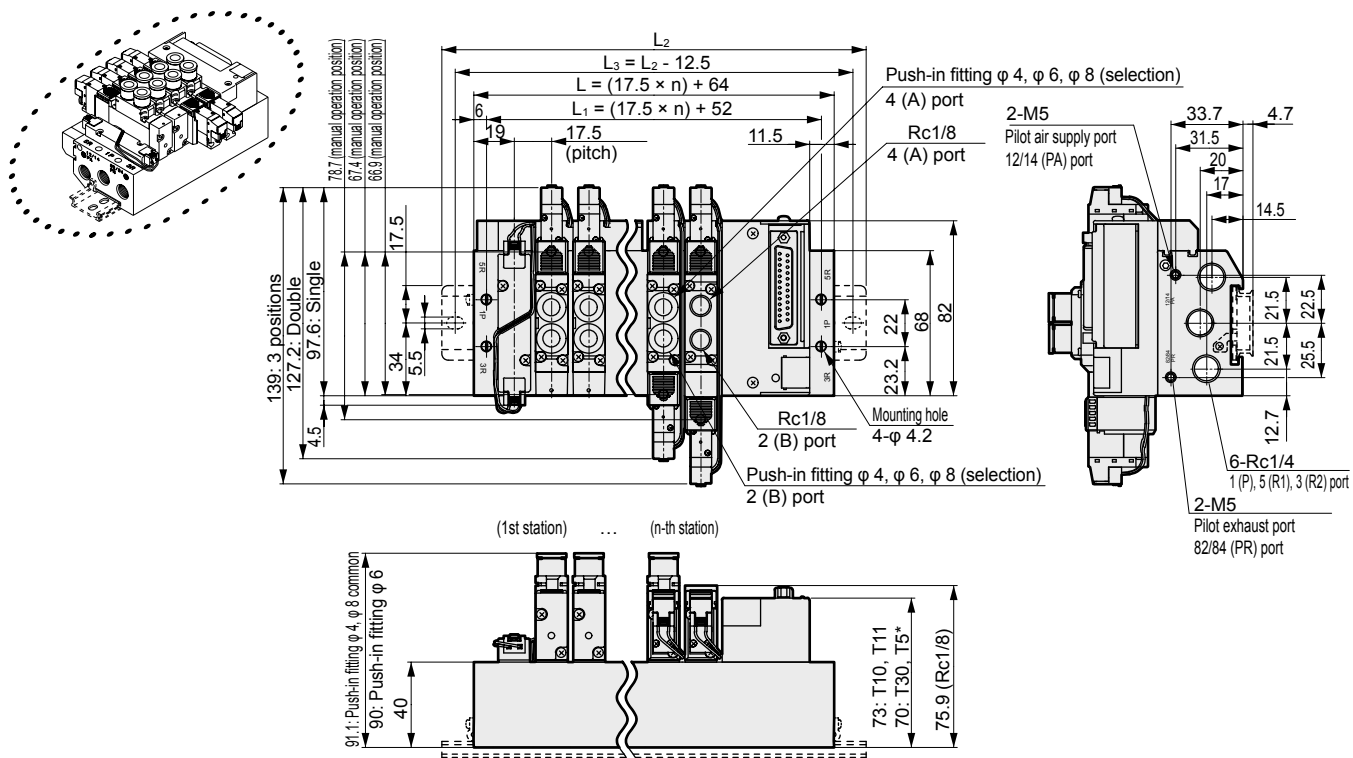
M4GA2

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

* This drawing shows T30. Refer to page 122 to 123 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				

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4GA3-T* Series

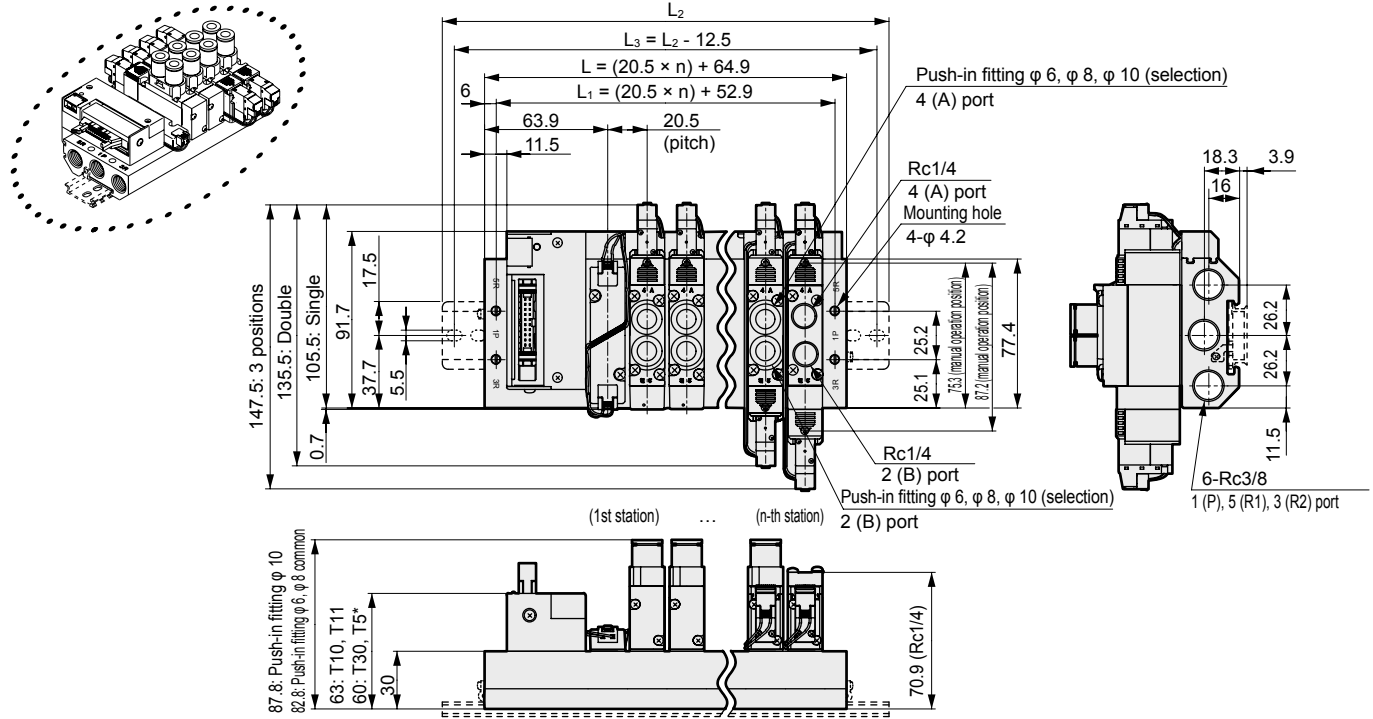
Reduced wiring manifold; body piping

Dimensions

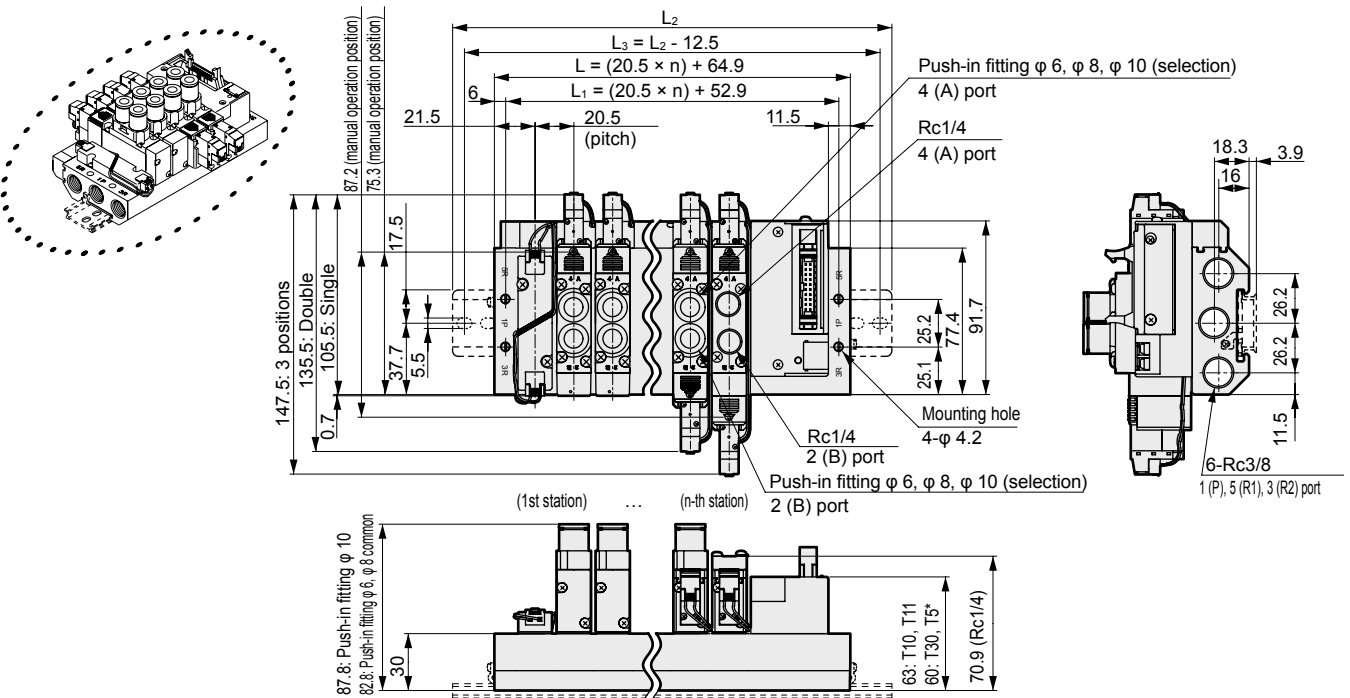
M4GA3

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

* This drawing shows T30. Refer to page 122 to 123 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	425.0	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	412.5	425.0

Dimensions

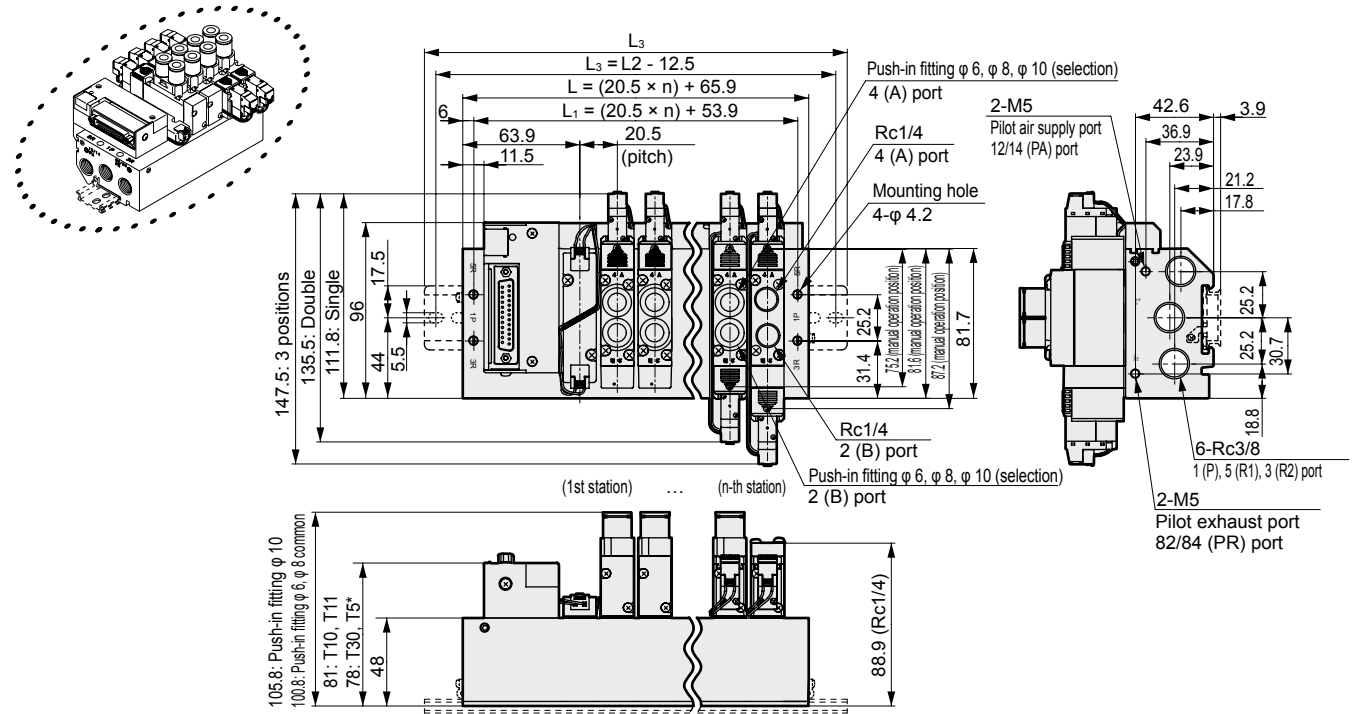


M4GA3

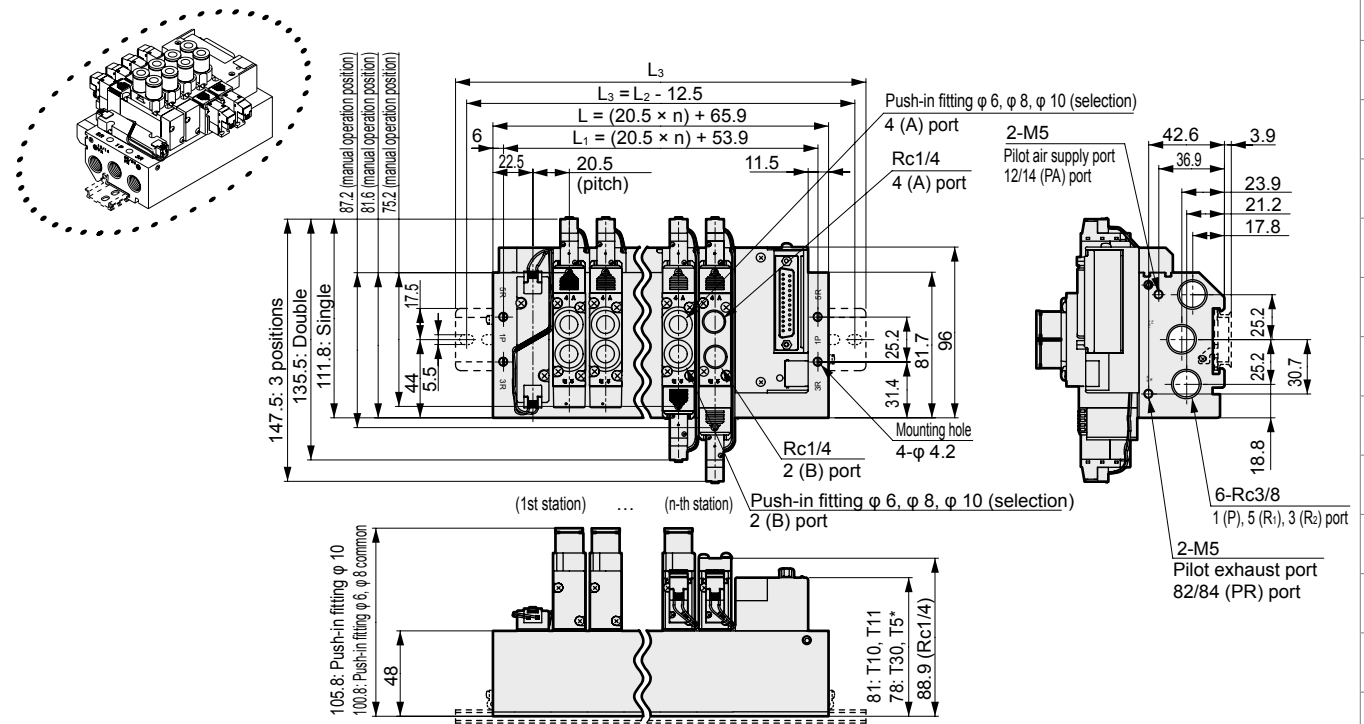
- Reduced wiring left side type (T10/T11/T30/T50/T51/T52/T53)
external pilot (K)

* This drawing shows T30. Refer to page 122 to 123 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	225.0	250.0	275.0	300.0	325.0	350.0	375.0	400.0	425.0	450.0	475.0	500.0
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	412.5	425.0

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

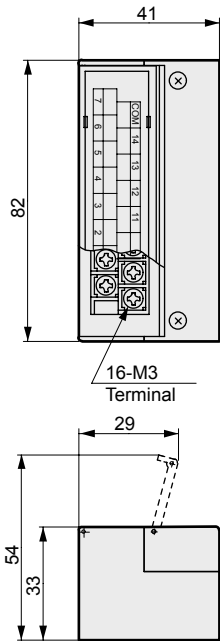
M4GA-T* Series

Reduced wiring manifold; body piping

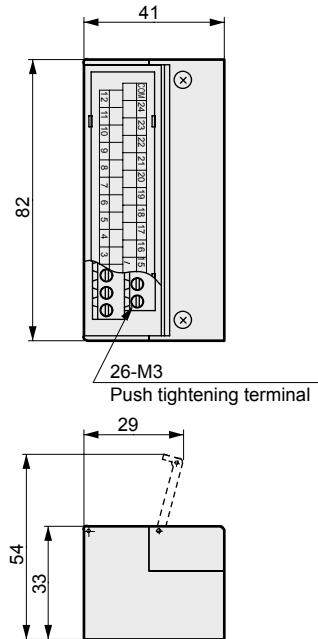
Electrical block part: dimensions

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

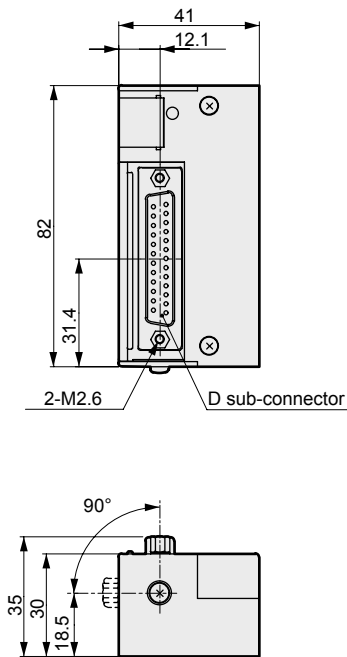
● Common terminal block (M3 thread) T10



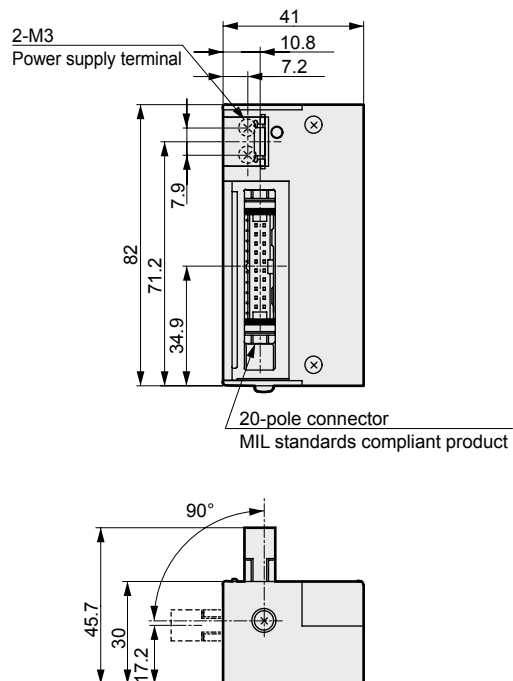
● Common terminal block (push tightening) T11



● D sub-connector T30

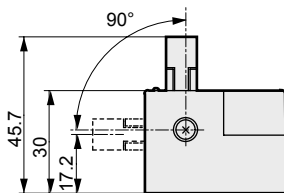
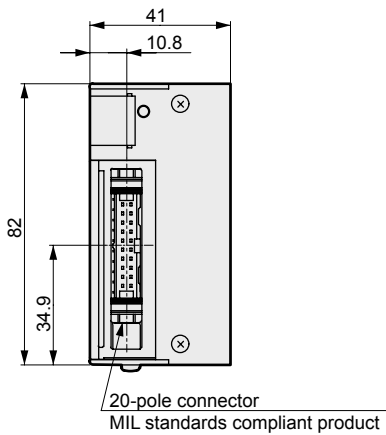


● 20 pin flat cable connector (with power supply terminal) T50

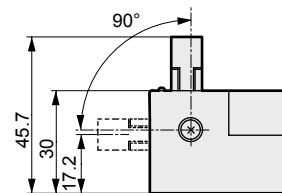
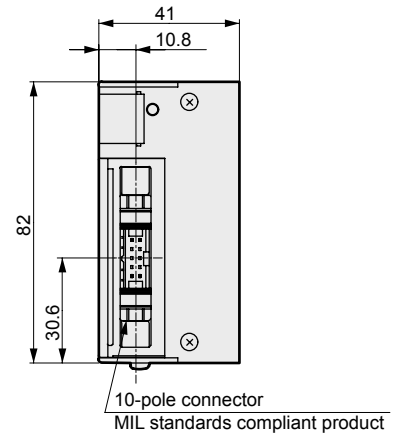


Electrical block part: dimensions

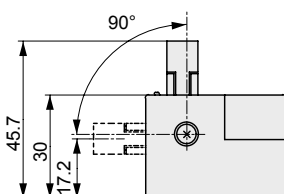
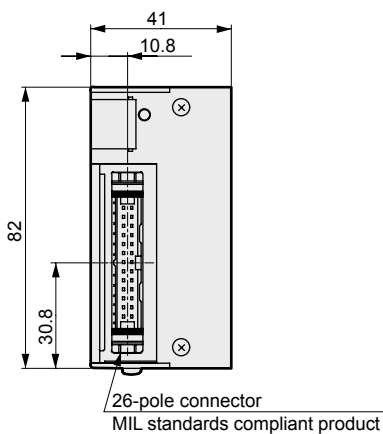
- 20 pin flat cable connector (without power supply terminal)
T51



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



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



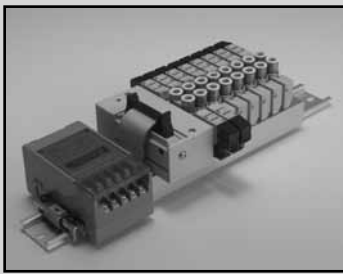
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

Discontinue

Reduced wiring manifold (serial transmission)
Body piping
DIN rail mount type

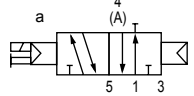
M3GA1/2/3-T6D Series M4GA1/2/3-T6D Series

● Applicable cylinder bore size: ϕ 20 to ϕ 100

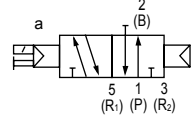


JIS symbol

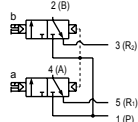
● 3 port valve
2-position single N.C. type



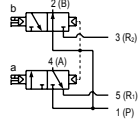
2-position single N.O. type



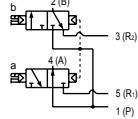
● Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



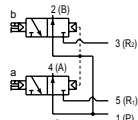
(A side valve: N.C. type, B side valve: N.O. type)



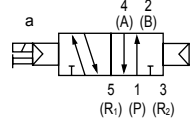
(A side valve: N.O. type, B side valve: N.C. type)



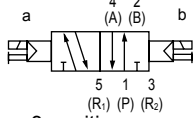
(A side valve: N.O. type, B side valve: N.O. type)



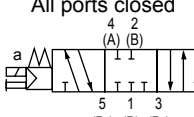
● 5 port valve
2-position single



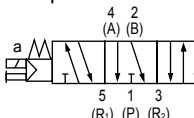
2-position double



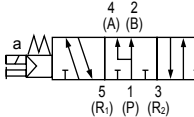
3-position



3-position A/B/R connection



3-position P/A/B connection



Manifold common specifications

Descriptions		Serial transmission integrated base
Manifold type		Serial transmission integrated base
Mounting method		DIN rail mounting
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		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

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 and 0.7 MPa.

Electrical specification

Descriptions		Rated voltage V DC
Rated voltage V DC		24
Voltage fluctuation range		±10%
Holding current A		0.025
Power consumption W		0.6
Thermal class		B
Temperature rise °C		50
Surge suppressor		Zener diode
Indicator		LED

Individual specifications

Descriptions	M3GA1/M4GA1	M3GA2/M4GA2	M3GA3/M4GA3	
Max. station no.	Standard	16 stations	16 stations	
	External pilot	12 stations	16 stations	
Max. number of solenoid	Depending on slave unit specifications and output points			
Port size	A/B port	Barbed fitting ϕ 1.8 Push-in fitting ϕ 1.8, ϕ 4, ϕ 6 M5	Push-in fitting ϕ 4, ϕ 6, ϕ 8 Rc1/8	Push-in fitting ϕ 6, ϕ 8, ϕ 10 Rc1/4
	P/R1/R2 port	Rc1/8	Rc1/4	Rc3/8
Manifold base weight calculation formula (n: station no.) g	Standard	31n + 375	56n + 444	86n + 501
	External pilot	46n + 494	98n + 615	151n + 731

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

Flow characteristics

Model no.	Solenoid 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	0.66	0.22	
	2-position	0.99	0.20	0.70	0.12	
	3-position	All ports closed	0.94	0.23	0.99	0.09
		ABR connection	0.93	0.18	0.70	0.02
	PAB connection	1.1	0.28	1.0	0.12	
M3GA2 M4GA2	Dual 3 port valve integrated type	1.7	0.40	1.7	0.32	
	2-position	2.3	0.36	1.7	0.33	
	3-position	All ports closed	2.1	0.35	2.4	0.37
		ABR connection	2.2	0.37	1.8	0.29
	PAB connection	2.4	0.34	2.5	0.33	
M3GA3 M4GA3	2-position	3.2	0.37	2.5	0.28	
	3-position	All ports closed	2.9	0.35	3.2	0.35
		ABR connection	3.0	0.34	2.6	0.27
		PAB connection	3.3	0.30	3.3	0.32

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

Note 2: Values for 2-position, dual 3 port valve integrated type, and ABR connection are the values when check valve is integrated.

Serial transmission slave unit specifications (refer to page 398 for the applicable PLC table)

Descriptions	T6G1 <small>Note 1</small>	T6C0 <small>Note 2</small> T6C1	T6A0 <small>Note 3</small> T6A1	T6E0 T6E1	T6J0 <small>Note 3</small> T6J1
	Network name	CC-Link	CompoBus/S	UNIWIRE System	S-LINK
Power supply voltage	Unit side	24 VDC ±10%			
	Valve side	24 VDC +10% -5%			
Current consumption	Unit side	100 mA or less (when all output points are ON)			
	Valve side	15 mA or less (when all output points are OFF)			
Output points	16 point	T6*0: 8 point T6*1: 16 point			
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.

Ozone proof specifications

 /
 Cutting oil proof type specifications

Select the option "A" of (F) in how to order on page 126.

Clean room specifications

 (Catalog no. CB-033SA)

- 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

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M³₄ GA1/2/3-T6D Series

Reduced wiring manifold; body piping; serial transmission

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

How to order

Manifold model no.

M **4GA1** **1** **0** - **C6** - **T6A0** **W** **H** **D** - **8** - **3**

3 port manifold model no.

M **3GA1** **1** **0** - **C6** - **T6A0** **W** **H** **D** - **8** - **3**

Discrete valve for mounting base

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

Discrete 3 port valve for mounting base

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

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

B Solenoid position

A Model no.

C Port size

E Terminal and connector pin wiring

D Serial transmission
Zener diode is used for a surge suppressor.

F Option

G Station no.

H Voltage

⚠ Note on model no. selection

Note 1 Select M4GA*80 when mixing with 3, 5 port valves.
Select M3GA*80 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 3-position all ports closed and PAB connection are not provided with check valve (H).
Refer to page 439 for details on the check valve.

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

Note 7 Specify the spacer mounting position and quantity in manifold specifications.
Stacking multiple spacers is not supported.
Combination with the masking plate is not supported.

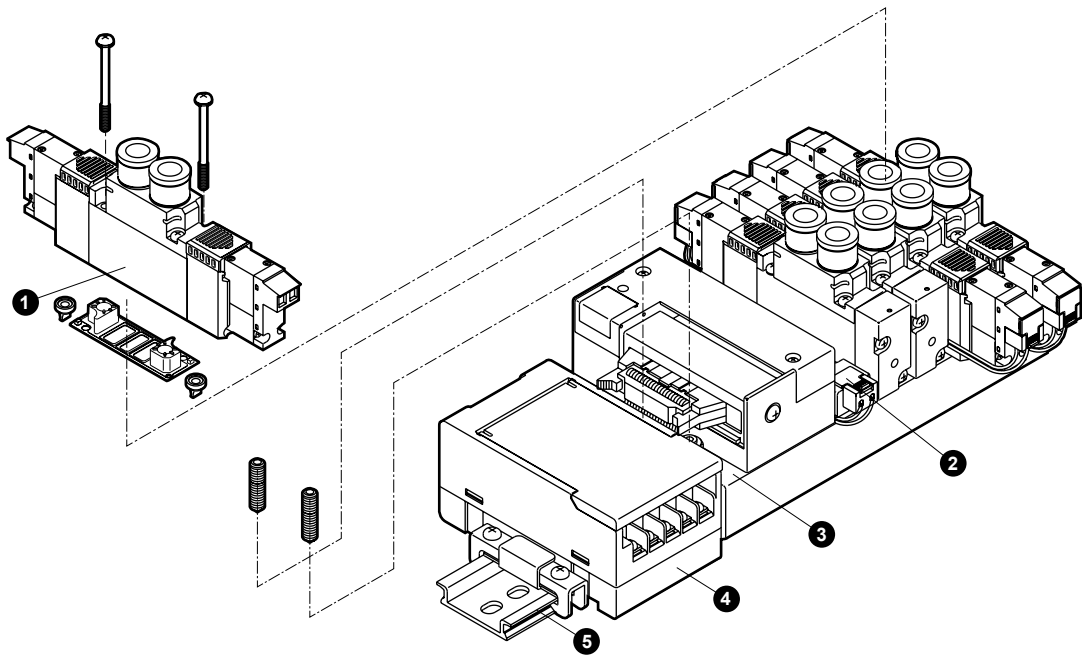
Refer to page 154 to 156 for details.

* Always indicate "Manifold specifications" (page 168 to 179).

		A Model no.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
B Solenoid 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					
		B side valve: Normally closed					
67	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally closed					
		B side valve: Normally open					
76	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally open					
		B side valve: Normally closed					
77	Dual 3 port valve integrated type Note 1, 2	A side valve: Normally open					
		B side valve: Normally open					
8	Mix manifold (In case of multiple solenoid positions)	●	●	●	●	●	●
C Port size							
Port	A/B port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8					
C18	φ 1.8 push-in fitting for fiber tube (applicable tube UP-9402-**)	(2)		(2)			
C4	φ 4 push-in fitting	(2)	(3)	(2)	(3)		
C6	φ 6 push-in fitting	(2)	(3)	(4)	(2)	(3)	
C8	φ 8 push-in fitting		(3)	(4)	(3)	(4)	
C10	φ 10 push-in fitting			(4)		(4)	
CF	φ 1.8 barbed fitting for fiber tube (applicable tube UP-9102-**)	(2)		(2)			
CX	Push-in fitting mix Note 3	(2)	(3)	(4)	(2)	(3)	
M5	M5	(2)		(2)			
06	Rc1/8		(3)		(3)		
08	Rc1/4			(4)		(4)	
D Serial transmission (light and surge suppressor provided as standard)							
T6A0	UNIWIRES SYSTEM 8 points	●	●	●	●	●	
T6A1	UNIWIRES SYSTEM 16 points	●	●	●	●	●	
T6C0	CompoBus/S 8 points	●	●	●	●	●	
T6C1	CompoBus/S 16 points	●	●	●	●	●	
T6E0	S-LINK 8 points	●	●	●	●	●	
T6E1	S-LINK 16 points	●	●	●	●	●	
T6G1	CC-Link 16 points	●	●	●	●	●	
T6J0	UNIWIRES H SYSTEM 8 points	●	●	●	●	●	
T6J1	UNIWIRES H SYSTEM 16 points	●	●	●	●	●	
E Terminal and connector pin wiring							
Blank	Standard wiring Note 4	●	●	●	●	●	
W	Double wiring Note 4	●	●	●	●	●	
F 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	●	●	●	●	●	
F	A/B port filter integrated (P port: Standard)	●	●	●	●	●	
Z1	Air supply spacer Note 7	●	●	●	●	●	
Z2	In stop valve spacer Note 7	●	●	●	●	●	
G Station no.							
2	2 stations						
to	to						
16	Refer to page 124 for the max. station no. for each model.	●	●	●	●	●	
H Voltage							
3	24 VDC	●	●	●	●	●	

is not available.

Manifold components explanation and parts list



Main components list

No.	Component name	Model no.	Descriptions	Remarks						
1	Discrete valve for mounting base	4GA**9- Port size - A2N Option - Voltage Solenoid position Series flow rate size	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 126						
2	Masking plate	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 15%; border: 1px solid black;">3G1/4G1</td> <td style="width: 15%; border: 1px solid black;">4G1-MP</td> </tr> <tr> <td style="border: 1px solid black;">3G2/4G2</td> <td style="border: 1px solid black;">4G2-MP</td> </tr> <tr> <td style="border: 1px solid black;">3G3/4G3</td> <td style="border: 1px solid black;">4G3-MP</td> </tr> </table>	3G1/4G1	4G1-MP	3G2/4G2	4G2-MP	3G3/4G3	4G3-MP	Masking plate Gasket Set screw 2	*3G2/4G2 and 3G3/4G3 have two PR check valves.
3G1/4G1	4G1-MP									
3G2/4G2	4G2-MP									
3G3/4G3	4G3-MP									
3	Manifold base assembly	M4GA*-00- T56 - Option - Station no. Series flow rate size	Manifold base Electrical block							
4	Serial transmission slave unit	4G-OPP3 - Wiring method	Serial transmission slave unit	Details on page 131						
5	DIN rail kit			Details on page 161						

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.																																							
-	Coil assembly	4G-A2N-* - COIL - Voltage Blank: standard A: Ozone/cutting oil proof	-	Cartridge type push-in fitting and related parts	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 10%; text-align: center;">4G1</td> <td style="width: 15%;">φ 1.8 straight type</td> <td style="width: 75%;">4G1-JOINT-C18</td> </tr> <tr> <td></td> <td>φ 4 straight type</td> <td>4G1-JOINT-C4</td> </tr> <tr> <td></td> <td>φ 6 straight type</td> <td>4G1-JOINT-C6</td> </tr> <tr> <td></td> <td>φ 1.8 barbed type</td> <td>4G1-JOINT-CF</td> </tr> <tr> <td></td> <td>Plug cartridge</td> <td>4G1-JOINT-CPG</td> </tr> <tr> <td style="text-align: center;">4G2</td> <td>φ 4 straight type</td> <td>4G2-JOINT-C4</td> </tr> <tr> <td></td> <td>φ 6 straight type</td> <td>4G2-JOINT-C6</td> </tr> <tr> <td></td> <td>φ 8 straight type</td> <td>4G2-JOINT-C8</td> </tr> <tr> <td></td> <td>Plug cartridge</td> <td>4G2-JOINT-CPG</td> </tr> <tr> <td style="text-align: center;">4G3</td> <td>φ 6 straight type</td> <td>4G3-JOINT-C6</td> </tr> <tr> <td></td> <td>φ 8 straight type</td> <td>4G3-JOINT-C8</td> </tr> <tr> <td></td> <td>φ 10 straight type</td> <td>4G3-JOINT-C10</td> </tr> <tr> <td></td> <td>Plug cartridge</td> <td>4G3-JOINT-CPG</td> </tr> </table>	4G1	φ 1.8 straight type	4G1-JOINT-C18		φ 4 straight type	4G1-JOINT-C4		φ 6 straight type	4G1-JOINT-C6		φ 1.8 barbed type	4G1-JOINT-CF		Plug cartridge	4G1-JOINT-CPG	4G2	φ 4 straight type	4G2-JOINT-C4		φ 6 straight type	4G2-JOINT-C6		φ 8 straight type	4G2-JOINT-C8		Plug cartridge	4G2-JOINT-CPG	4G3	φ 6 straight type	4G3-JOINT-C6		φ 8 straight type	4G3-JOINT-C8		φ 10 straight type	4G3-JOINT-C10		Plug cartridge	4G3-JOINT-CPG
4G1	φ 1.8 straight type	4G1-JOINT-C18																																										
	φ 4 straight type	4G1-JOINT-C4																																										
	φ 6 straight type	4G1-JOINT-C6																																										
	φ 1.8 barbed type	4G1-JOINT-CF																																										
	Plug cartridge	4G1-JOINT-CPG																																										
4G2	φ 4 straight type	4G2-JOINT-C4																																										
	φ 6 straight type	4G2-JOINT-C6																																										
	φ 8 straight type	4G2-JOINT-C8																																										
	Plug cartridge	4G2-JOINT-CPG																																										
4G3	φ 6 straight type	4G3-JOINT-C6																																										
	φ 8 straight type	4G3-JOINT-C8																																										
	φ 10 straight type	4G3-JOINT-C10																																										
	Plug cartridge	4G3-JOINT-CPG																																										
-	A type connector Socket assembly Details on page 401	4G* - 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	-																																									

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
3MA/B0
3PA/B
P/MB
NP/NAP
NVP
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA1-T6D Series

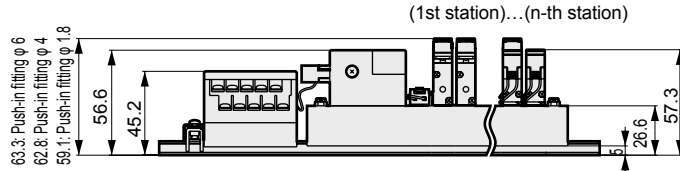
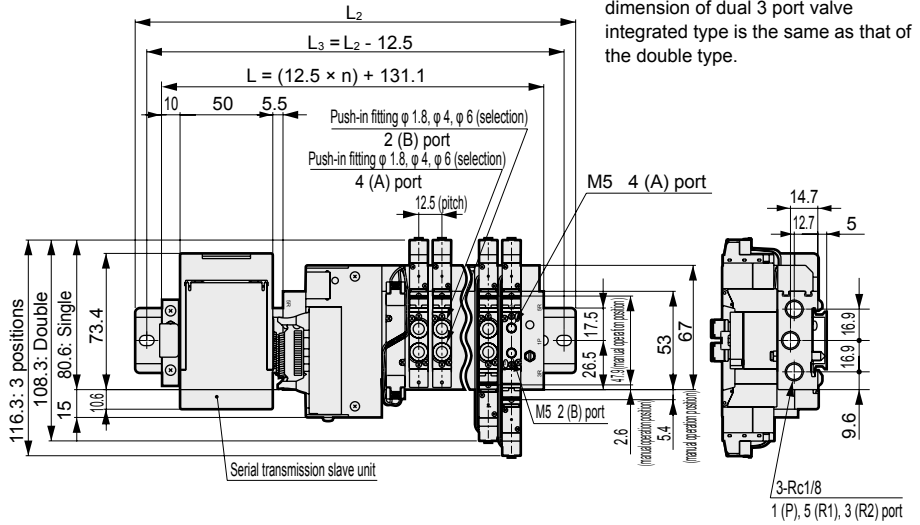
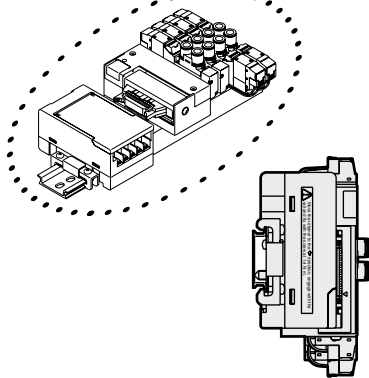
Reduced wiring manifold; body piping; serial transmission

Dimensions

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4GA1

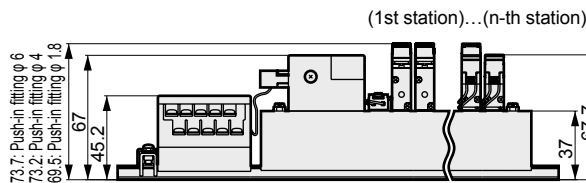
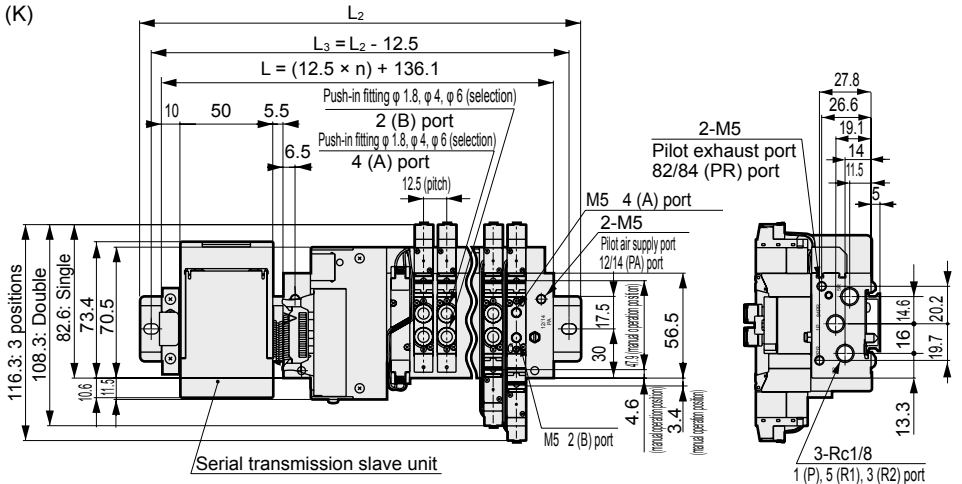
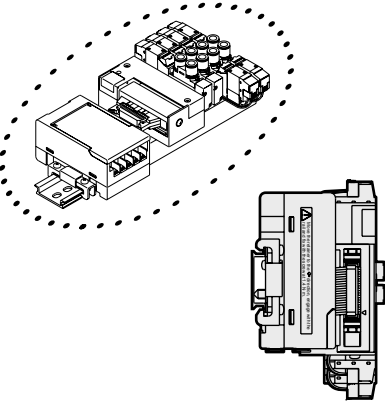
- Serial transmission (T6*)
DIN rail mounting type (D)



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	362.5	375
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	337.5	350	362.5

M4GA1

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



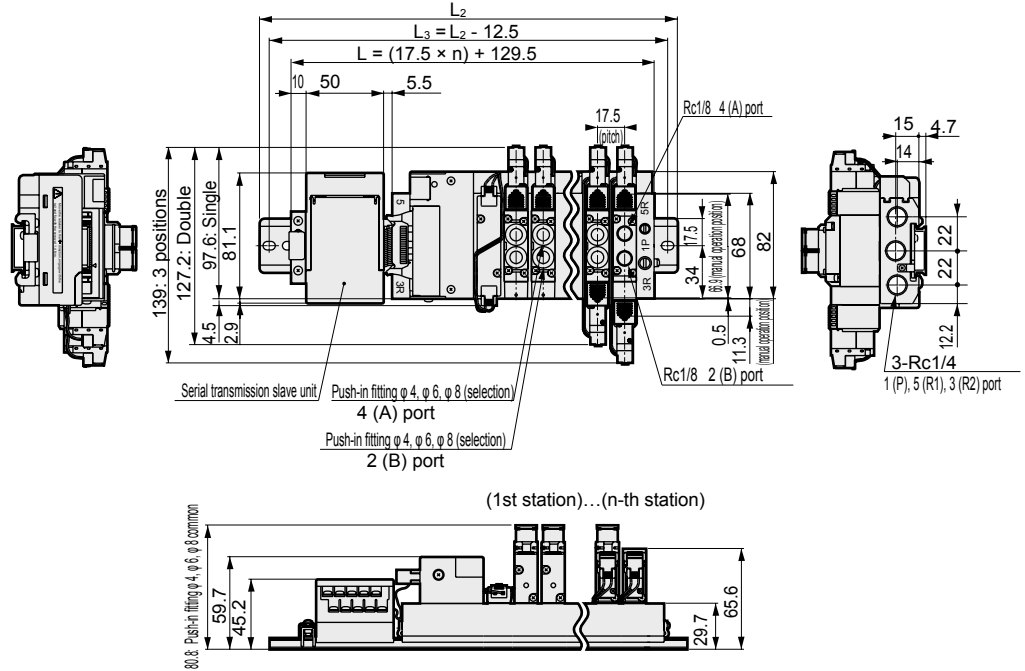
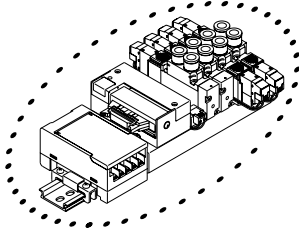
Station no.	2	3	4	5	6	7	8	9	10	11	12
L	161.1	173.6	186.1	198.6	211.1	223.6	236.1	248.6	261.1	273.6	286.1
L ₂	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5
L ₃	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0

Dimensions

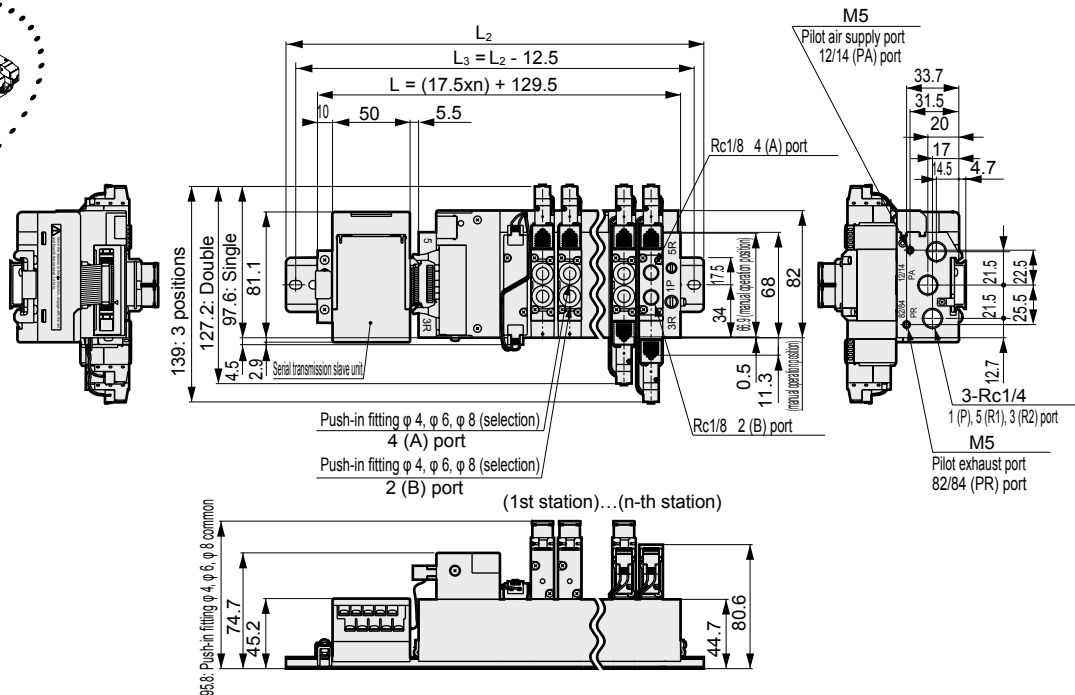
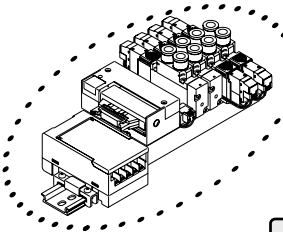


M4GA2

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



- 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

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA3-T6D Series

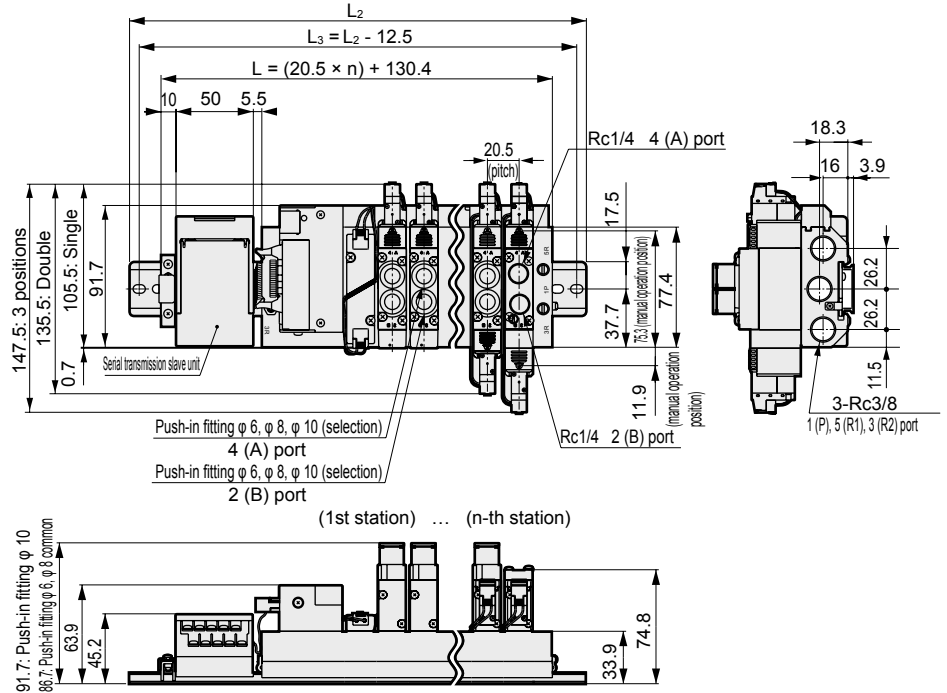
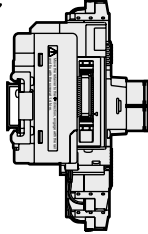
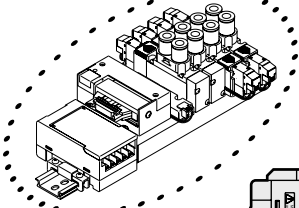
Reduced wiring manifold; body piping; serial transmission

Dimensions

M4GA3

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

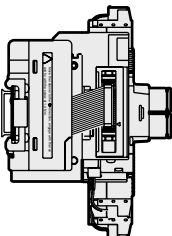
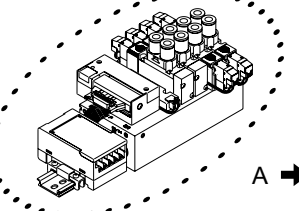
* For 2-position single 3 port valve, the port A or port B is a plug.



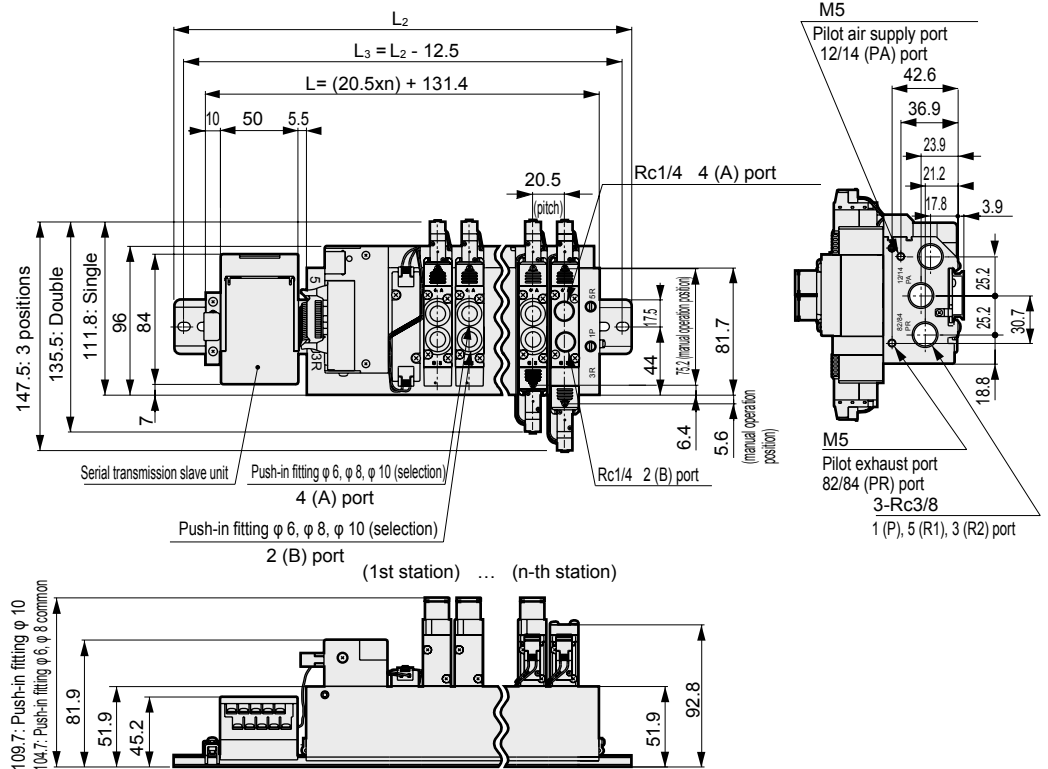
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	171.4	191.9	212.4	232.9	253.4	273.9	294.4	314.9	335.4	355.9	376.4	396.9	417.4	437.9	458.4
L ₂	212.5	237.5	262.5	275.0	300.0	325.0	337.5	362.5	387.5	400.0	425.0	437.5	462.5	487.5	500.0
L ₃	200.0	225.0	250.0	262.5	287.5	312.5	325.0	350.0	375.0	387.5	412.5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

M4GA3

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



A section view



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

Reduced wiring manifold; body piping; serial transmission

● Discrete serial transmission slave unit model no.

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

Ⓐ Wiring method

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

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

Discontinue

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

Base piping

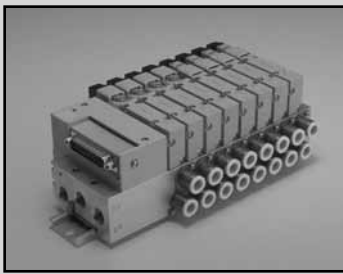
Direct mount type/DIN rail mount type

M3GB1/2-T*(D) Series

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

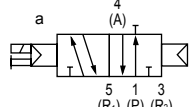
● Applicable cylinder bore size: ϕ 20 to ϕ 100

* Refer to page 146 for serial transmission type.

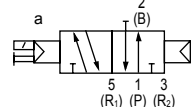


JIS symbol

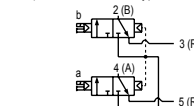
● 3 port valve
2-position single N.C. type



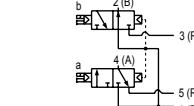
● 2-position single N.O. type



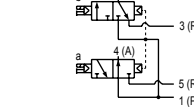
● Dual 3 port valve integrated type
(A side valve: N.C. type, B side valve: N.C. type)



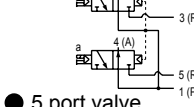
(A side valve: N.C. type, B side valve: N.O. type)



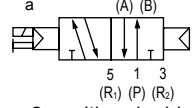
(A side valve: N.O. type, B side valve: N.C. type)



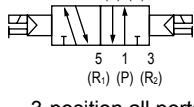
(A side valve: N.O. type, B side valve: N.O. type)



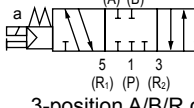
● 5 port valve
2-position single



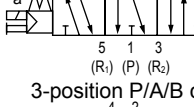
● 2-position double



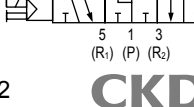
● 3-position all ports closed



● 3-position A/B/R connection



● 3-position P/A/B connection



Manifold common specifications

Descriptions		
Manifold type		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

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 and 0.7 MPa.

Electrical specification

Descriptions		
Rated voltage DC		12, 24
Voltage fluctuation range		±10%
Holding current	24 VDC	0.025
	A 12 VDC	0.050
Power consumption	24 VDC	0.6
	W 12 VDC	0.6
Thermal class		B
Temperature rise °C		50
Surge suppressor		Zener diode
Indicator		LED

Manifold individual specifications

Descriptions	M3GB1/M4GB1		M3GB2/M4GB2		M4GB3		
	T*		T*		T*		
	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		20 stations	16 stations	16 stations	
Port size	A/B port	Barbed fitting ϕ 1.8		Push-in fitting ϕ 4, ϕ 6, ϕ 8		Push-in fitting ϕ 6, ϕ 8, ϕ 10	
		Push-in fitting ϕ 1.8, ϕ 4, ϕ 6		Rc1/8		Rc1/4	
		M5		Rc1/8		Rc3/8	
Manifold base weight calculation formula (n: station no.)	Standard	43n + 335	45n + 348	80n + 398	82n + 431	124n + 548	126n + 582
	g External pilot	44n + 330	46n + 344	88n + 433	90n + 467	129n + 577	131n + 606

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.

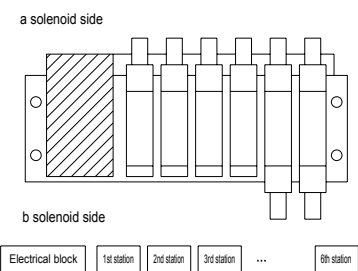
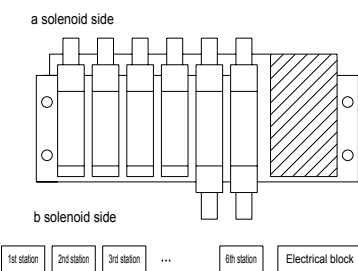
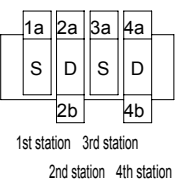
Flow characteristics

Model no.	Solenoid 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	0.67	0.23
	2-position		1.1	0.22	0.70	0.10
	3-position	All ports closed	0.98	0.22	1.0	0.11
		ABR connection	0.97	0.35	0.68	0.24
	PAB connection	1.1	0.38	0.99	0.22	
M3GB2 M4GB2	Dual 3 port valve integrated type		1.7	0.44	1.6	0.30
	2-position		2.4	0.34	1.7	0.31
	3-position	All ports closed	2.2	0.34	2.4	0.29
		ABR connection	2.2	0.34	1.8	0.27
	PAB connection	2.4	0.29	2.4	0.29	
M4GB3	2-position		3.5	0.34	2.6	0.27
	3-position	All ports closed	3.1	0.33	3.3	0.22
		ABR connection	3.0	0.30	2.7	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 for 2-position, dual 3 port valve integrated type, and ABR connection are the values when check valve is integrated.

Wiring specifications

Descriptions	T10*	T11*	T30*	T50*	T51*	T52*	T53*																																
	Centralized terminal block type	Centralized terminal block type	D sub-connector	Flat cable 20 pin type	Flat cable 20 pin type	Flat cable 10 pin type	Flat cable 26 pin type																																
Connector and terminal block specifications	M3 thread tightening type 16 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	14 points	24 points	24 points	16 points	18 points	8 points	24 points																																
Manifold internal wiring	Details on page 384 to 391																																						
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" style="font-size: small;"> <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" style="font-size: small;"> <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																															

Ozone proof specifications / Cutting oil proof type specifications

Select the option "A" of (F) in how to order on page 134.

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

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

● Particle 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**

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GB1/2/3-T* Series

Reduced wiring manifold; base piping

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

How to order

Manifold model no.

M **4GB1** **1** **0** - **C6** - **T30** **W** **H** **D** - **8** - **3**

3 port manifold model no.

M **3GB1** **66** **0** - **C6** - **T30** **W** **H** **D** - **8** - **3**

Discrete valve for mounting base

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

3 port discrete valve for mounting base

3GB1 **66** **9** - **00** - **A2N** **H** - **3**

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

B Solenoid position

A Model no.

C Port size

E Terminal and connector pin wiring

D Reduced wiring connection
Zener diode is used for a surge suppressor.

- Refer to page 387 for the model no. of the cable with a D sub-connector.
- Refer to page 383 for the model no. of the cable for a flat cable connector.

Note on model no. selection

- Note 1 Select M4GB*80 when mixing with 3, 5 port valves.
Select M3GB*80 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 (upward) (downward).
- Note 5 Blank ... Wired based on the type of valve used.
W ... Wired for the double solenoid regardless of the type of valve used.
- Note 6 3-position all ports closed and PAB connection are not provided with check valve (H). Refer to page 439 for details on check valve.
- Note 7 Contact CKD when using a vacuum with the external pilot (K).
- Note 8 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 154 to 156 for details.

F Option

G Mount type

H Station no.

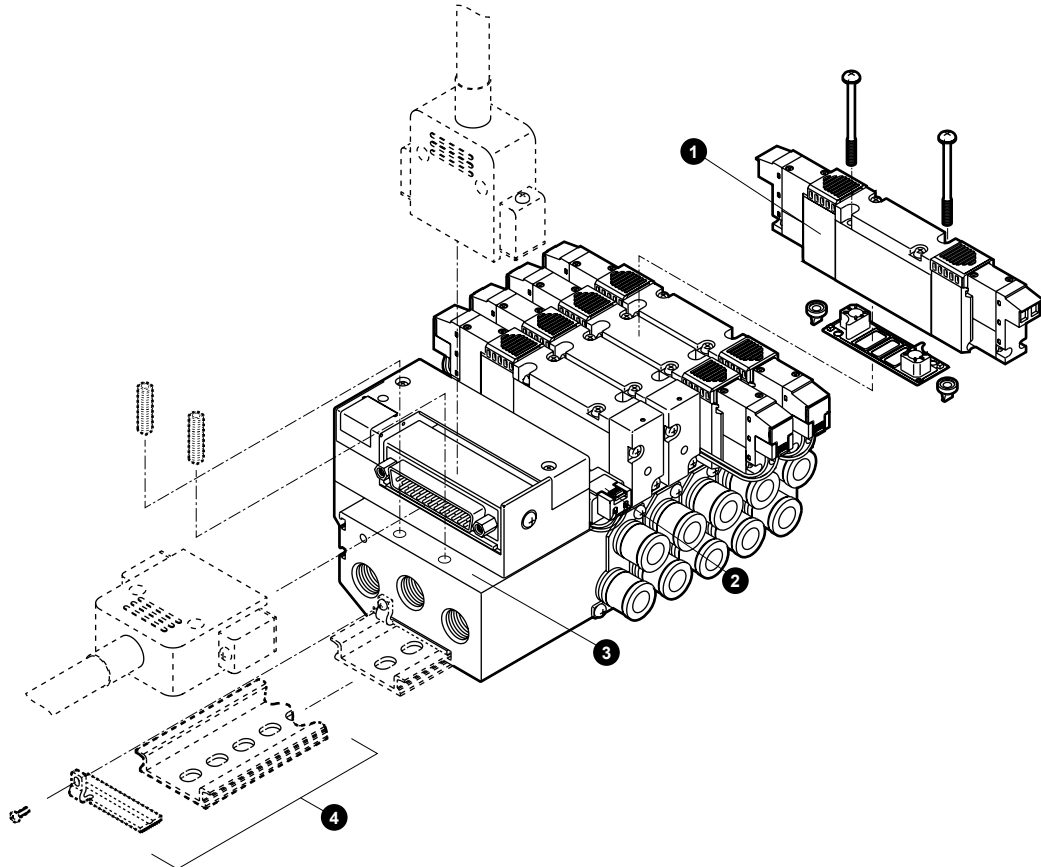
I Voltage

*Always indicate "Manifold specifications" (page 168 to 179).

		A Model no.				
		3GB1	3GB2	4GB1	4GB2	4GB3
Symbol	Descriptions					
B Solenoid 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, 2 A side valve: Normally closed B side valve: Normally closed	●	●			
67	Dual 3 port valve integrated type Note 1, 2 A side valve: Normally closed B side valve: Normally open	●	●			
76	Dual 3 port valve integrated type Note 1, 2 A side valve: Normally open B side valve: Normally closed	●	●			
77	Dual 3 port valve integrated type Note 1, 2 A side valve: Normally open B side valve: Normally open	●	●			
8	Mix manifold (In case of multiple solenoid positions)	●	●	●	●	●
C Port size						
Port	A/B port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8				
C18	φ 1.8 push-in fitting for fiber tube (applicable tube UP-9402-**)	(2)	(2)			
C4	φ 4 push-in fitting	(2)	(3)	(2)	(3)	
C6	φ 6 push-in fitting	(2)	(3)	(2)	(3)	(4)
C8	φ 8 push-in fitting		(3)	(3)	(4)	(4)
C10	φ 10 push-in fitting					(4)
CL18	φ 1.8 push-in fitting L type (upward) for fiber tube (applicable tube UP-9402-**) (2)			(2)		
CL4	L type φ 4 push-in fitting (upward) Note 3, 4 (2)			(2)		
CL6	L type φ 6 push-in fitting (upward) Note 3, 4 (2) (3)			(2)	(3)	
CL8	L type φ 8 push-in fitting (upward) Note 3, 4 (3) (4)				(3)	(4)
CL10	L type φ 10 push-in fitting (upward) Note 3, 4 (4)					(4)
CD18	φ 1.8 push-in fitting L type (downward) for fiber tube (applicable tube UP-9402-**) (2)	(2)	(2)			
CD4	L type φ 4 push-in fitting (downward) (2)	(2)	(2)			
CD6	L type φ 6 push-in fitting (downward) (2) (3)	(2)	(3)	(2)	(3)	
CD8	L type φ 8 push-in fitting (downward) (3) (4)		(3)	(3)	(4)	
CD10	L type φ 10 push-in fitting (downward) (4)					(4)
CF	φ 1.8 barbed fitting for fiber tube (applicable tube UP-9102-**) (2)	(2)	(2)			
CX	Push-in fitting mix (2) (3)	(2)	(3)	(2)	(3)	(4)
M5	M5 (2)	(2)	(2)			
06	Rc1/8 (3)		(3)	(3)		
08	Rc1/4 (4)					(4)
D Reduced wiring connection (light and surge suppressor provided as standard)						
T10	Common terminal block (M3 thread)	●	●	●	●	●
T10R	Common terminal block (push tightening)	●	●	●	●	●
T11	Common terminal block (push tightening)	●	●	●	●	●
T11R	Common terminal block (push tightening)	●	●	●	●	●
T30	D sub-connector	●	●	●	●	●
T30R	D sub-connector	●	●	●	●	●
T50	20 pin flat cable connector (with power supply terminal)	●	●	●	●	●
T50R	20 pin flat cable connector (with power supply terminal)	●	●	●	●	●
T51	20 pin flat cable connector (without power supply terminal)	●	●	●	●	●
T51R	20 pin flat cable connector (without power supply terminal)	●	●	●	●	●
T52	10 pin flat cable connector (without power supply terminal)	●	●	●	●	●
T52R	10 pin flat cable connector (without power supply terminal)	●	●	●	●	●
T53	26 pin flat cable connector (without power supply terminal)	●	●	●	●	●
T53R	26 pin flat cable connector (without power supply terminal)	●	●	●	●	●
E Terminal and connector pin wiring						
Blank	Standard wiring Note 5	●	●	●	●	●
W	Double wiring 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	●	●	●	●	●
F	A/B port filter integrated (P port: Standard)	●	●	●	●	●
Z1	Individual air supply spacer Note 8	●	●	●	●	●
Z2	In stop valve spacer Note 8	●	●	●	●	●
G Mount type						
Blank	Direct mount type	●	●	●	●	●
D	DIN rail mount type	●	●	●	●	●
H Station no.						
2	2 stations	●	●	●	●	●
to	to	●	●	●	●	●
20	Refer to page 132 for the max. station no. for each model.	●	●	●	●	●
I Voltage						
3	24 VDC	●	●	●	●	●
4	12 VDC	●	●	●	●	●

is not available.

Manifold components explanation and parts list



Main components list

No.	Component name	Model no.	Descriptions	Remarks
1	Discrete valve for mounting base	3 4GB** 9 - 00 - A2N [Option] - [Voltage] Solenoid position Series flow rate size	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 134
2	Masking plate	3G1/4G1 4G1-MP 3G2/4G2 4G2-MP 3G3/4G3 4G3-MP	Masking plate Gasket Set screw 2	*3G3/4G3 has two PR check valves.
3	Manifold base assembly	M4GB* - [Connection Part size] - [Reduced wiring Connection] - [Option] - [Station no.] Series flow rate size	Manifold base Electrical block	
4	DIN rail kit			Details on page 161

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.
-	Coil assembly	4G - A2N - - COIL - [Voltage] Blank: standard A: Ozone/cutting oil proof	-	Cartridge type push-in fitting and related parts	φ 1.8 straight type 4G1-JOINT-C18
-	A type connector socket assembly Details on page 401	4G* - SOCKET - ASSY - A Blank: Left side, R: Right side A: aSOL side, B: bSOL side n: Specify the position of the valve to be connected			φ 4 straight type 4G1-JOINT-C4
					φ 6 straight type 4G1-JOINT-C6
					φ 1.8 elbow type 4G1-JOINT-CL18, CLL18
					φ 4 elbow type 4G1-JOINT-CL4, CLL4
					φ 6 elbow type 4G1-JOINT-CL6, CLL6
					φ 1.8 barbed type 4G1-JOINT-CF
					Plug cartridge 4G1-JOINT-CPG
					φ 4 straight type 4G2-JOINT-C4
					φ 6 straight type 4G2-JOINT-C6
					φ 8 straight type 4G2-JOINT-C8
					φ 6 elbow type 4G2-JOINT-CL6, CLL6
					φ 8 elbow type 4G2-JOINT-CL8, CLL8
					Plug cartridge 4G2-JOINT-CPG
					φ 6 straight type 4G3-JOINT-C6
					φ 8 straight type 4G3-JOINT-C8
					φ 10 straight type 4G3-JOINT-C10
					φ 8 elbow type 4G3-JOINT-CL8, CLL8
					φ 10 elbow type 4G3-JOINT-CL10, CLL10
					Plug cartridge 4G3-JOINT-CPG

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

M4GB1-T* Series

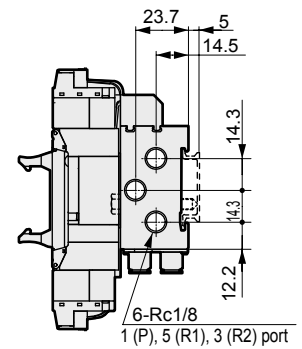
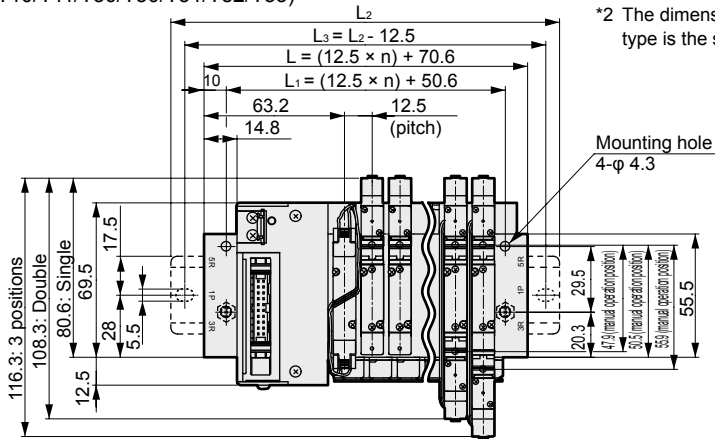
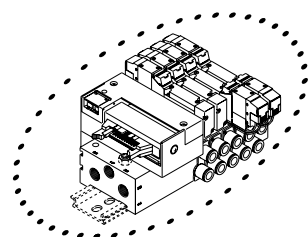
Reduced wiring manifold; base piping

Dimensions

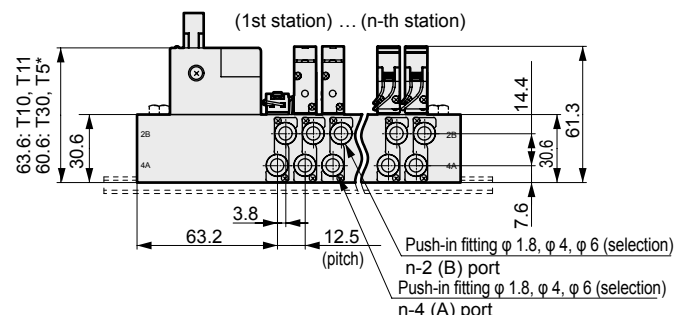
- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4GB1

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

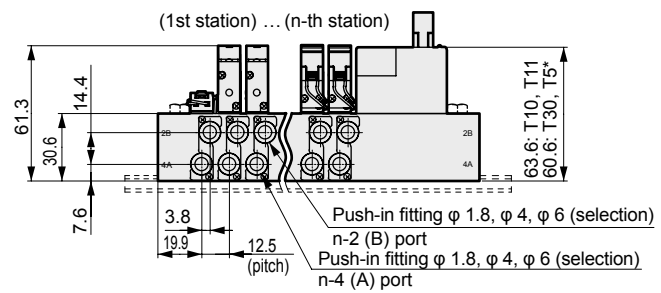
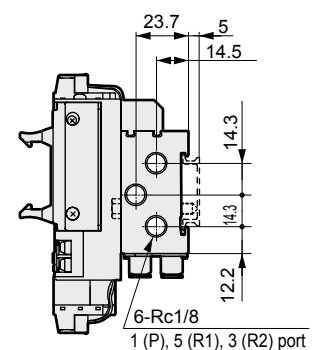
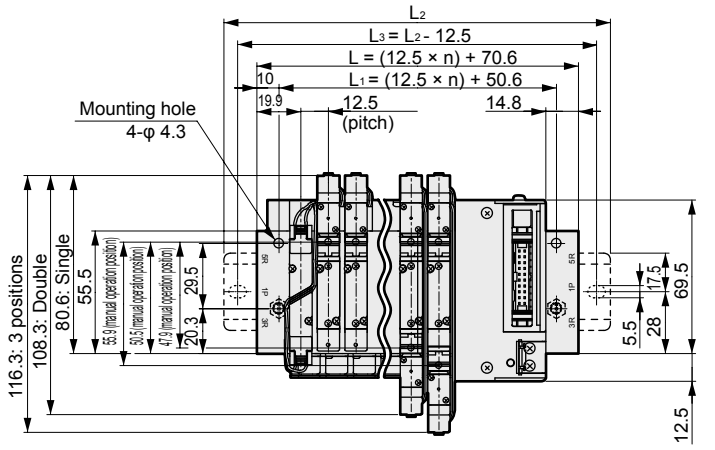
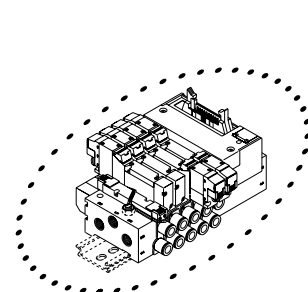


*1 This drawing shows T50. Refer to page 142 for detailed dimensions of the electrical block.
 *2 The dimension of dual 3 port valve integrated type is the same as that of the double type.



Note: Refer to page 143 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	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
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				

M4GB2-T* Series

Reduced wiring manifold; base piping

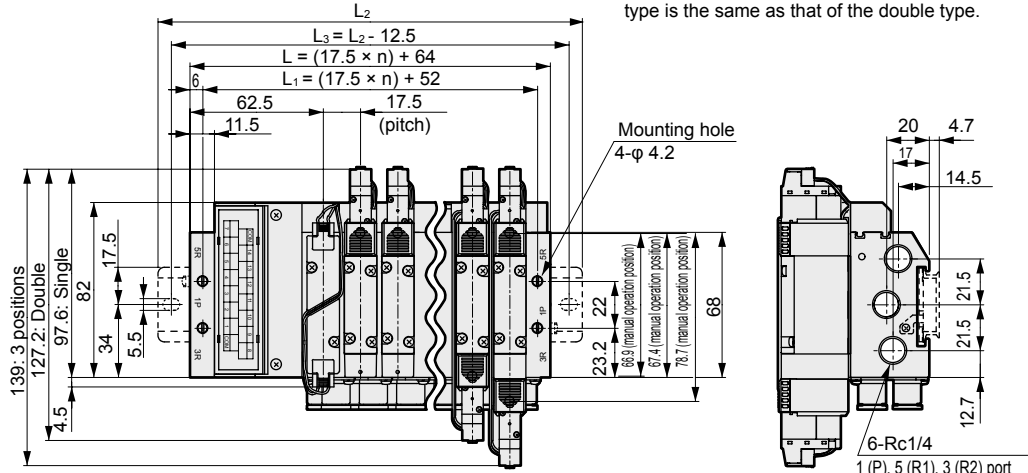
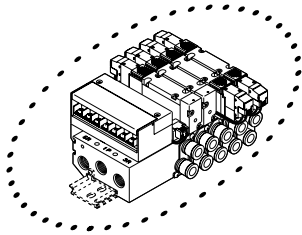
Dimensions

M4GB2

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

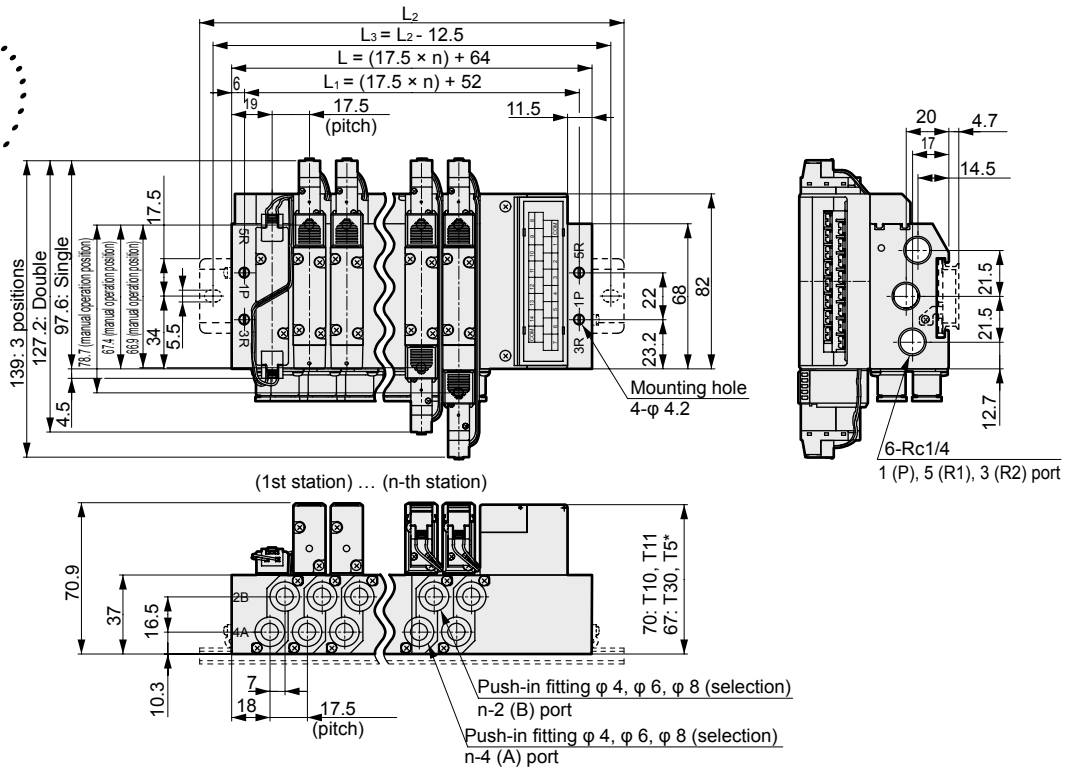
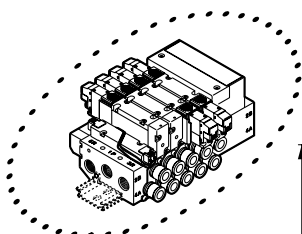
*1 This drawing shows T10. Refer to page 142 for detailed dimensions of the electrical block.

*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 144 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	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				

M4GB3-T* Series

Reduced wiring manifold; base piping

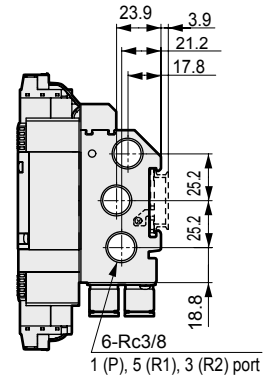
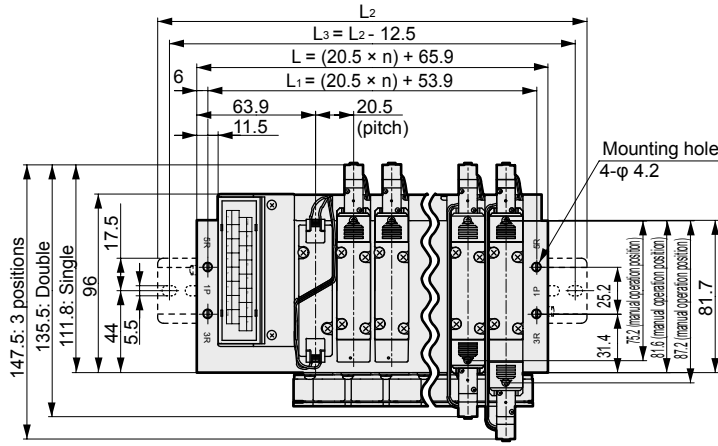
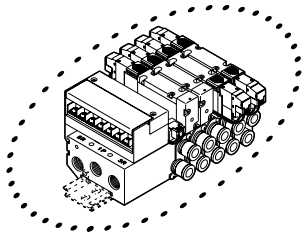
Dimensions



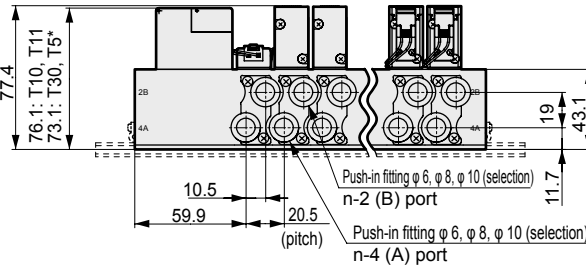
M4GB3

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

* This drawing shows T10. Refer to page 142 for detailed dimensions of the electrical block.

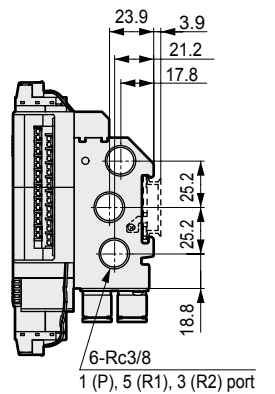
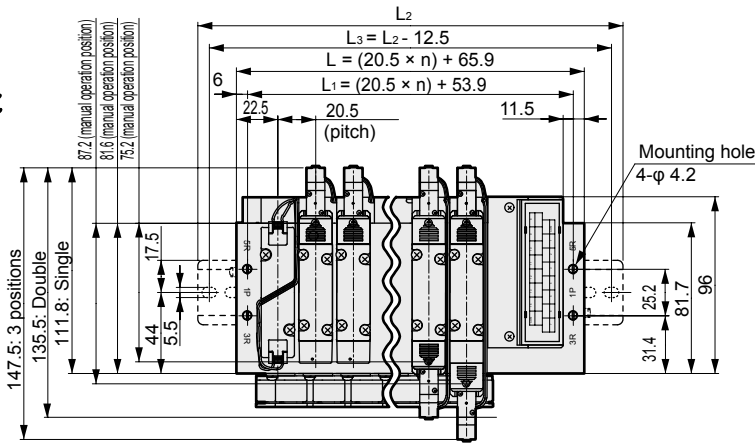
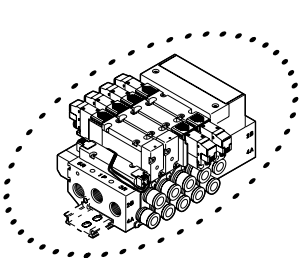


(1st station) ... (n-th station)

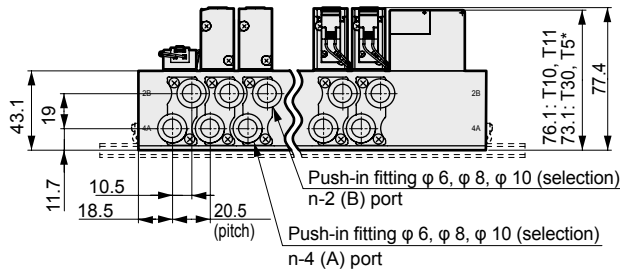


Note: Refer to page 145 for details on the push-in fitting elbow type (upward) (downward).

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



(1st station) ... (n-th station)



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

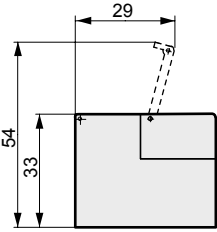
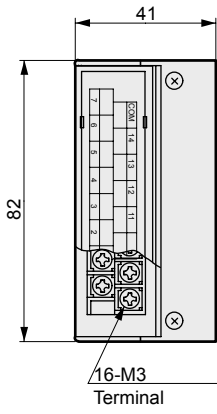
M4GB1/2/3-T* Series

Reduced wiring manifold; base piping

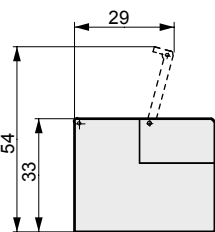
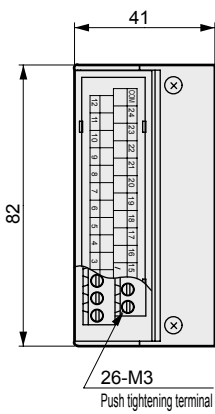
Reduced wiring part: dimensions

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

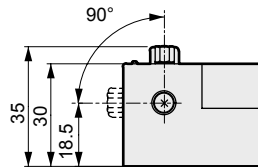
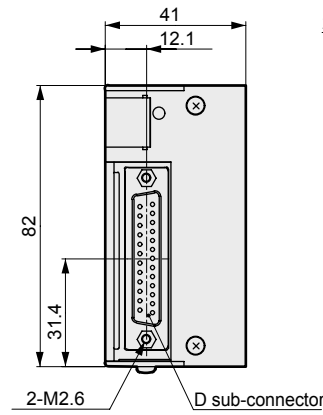
● Common terminal block (M3 thread) T10



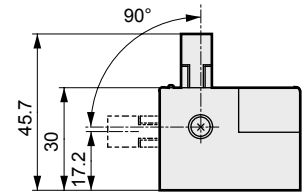
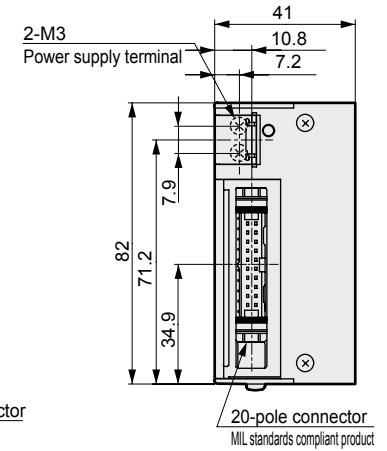
● Common terminal block (push tightening) T11



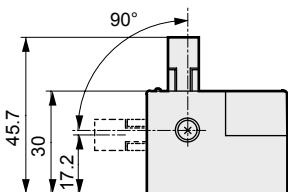
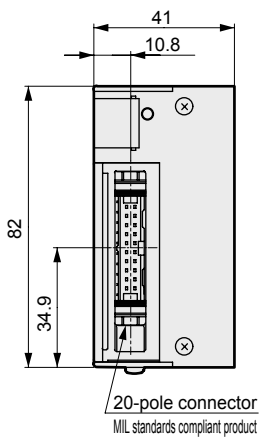
● D sub-connector T30



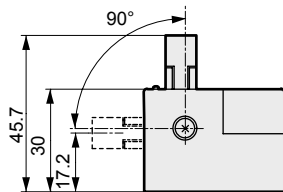
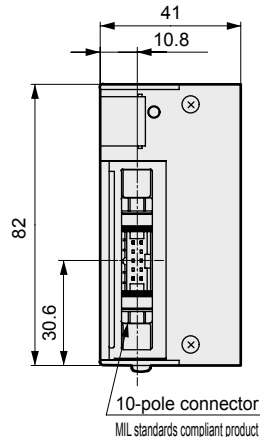
● 20 pin flat cable connector (with power supply terminal) T50



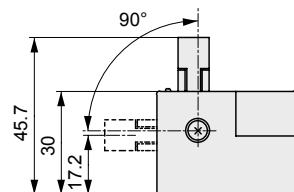
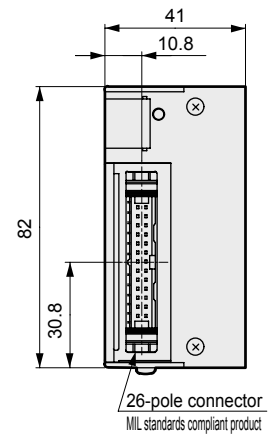
● 20 pin flat cable connector (without power supply terminal) T51



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



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

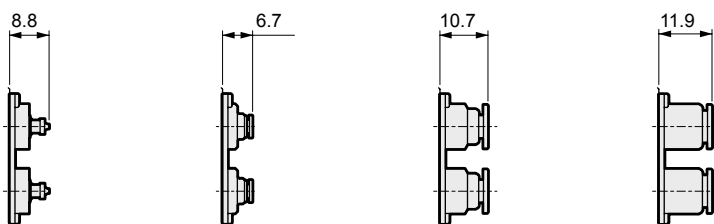


Dimensions

M4GB1

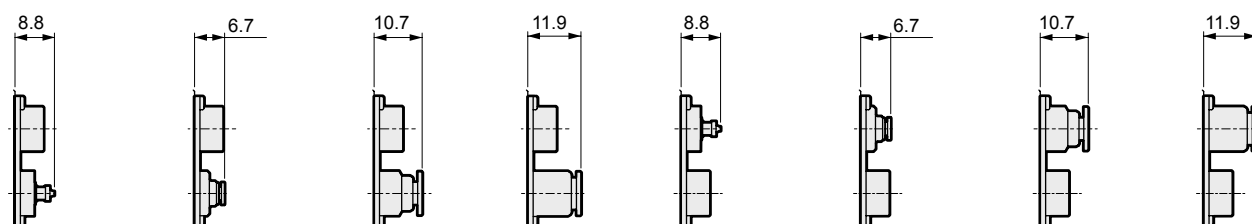
● Fitting straight

- ϕ 1.8 (CF)
- ϕ 1.8 (C18)
- ϕ 4 (C4)
- ϕ 6 (C6)



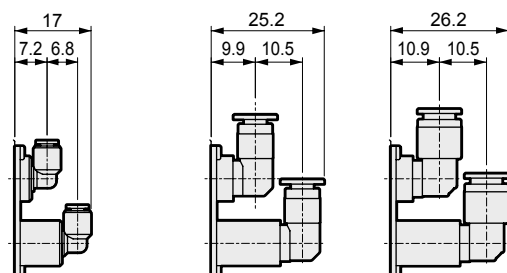
● Fitting straight, single plug

- ϕ 1.8 (CFNC)
- ϕ 1.8 (C18NC)
- ϕ 4 (C4NC)
- ϕ 6 (C6NC)
- ϕ 1.8 (CFNO)
- ϕ 1.8 (C18NO)
- ϕ 4 (C4NO)
- ϕ 6 (C6NO)



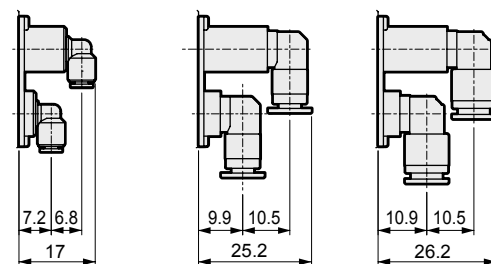
● Fitting L type (upward)

- ϕ 1.8 (CL18)
- ϕ 4 (CL4)
- ϕ 6 (CL6)



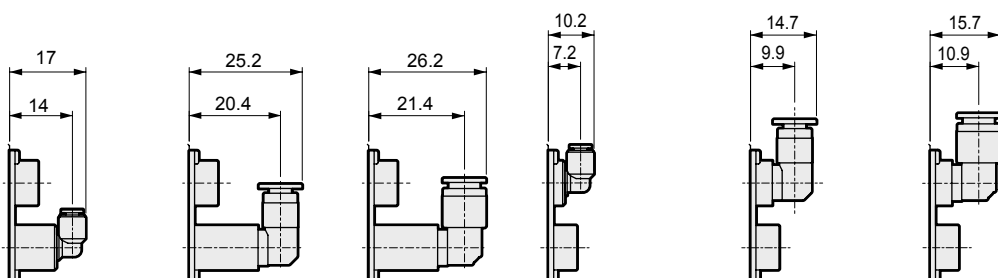
● Fitting L type (downward)

- ϕ 1.8 (CD18)
- ϕ 4 (CD4)
- ϕ 6 (CD6)



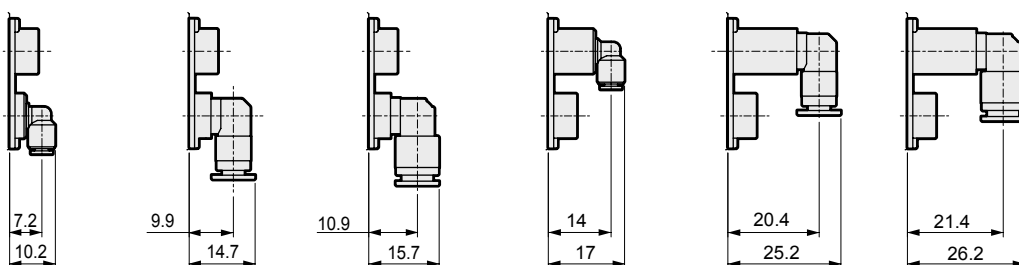
● Fitting L type (upward), single plug

- ϕ 1.8 (CL18NC)
- ϕ 4 (CL4NC)
- ϕ 6 (CL6NC)
- ϕ 1.8 (CL18NO)
- ϕ 4 (CL4NO)
- ϕ 6 (CL6NO)



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

- ϕ 1.8 (CD18NC)
- ϕ 4 (CD4NC)
- ϕ 6 (CD6NC)
- ϕ 1.8 (CD18NO)
- ϕ 4 (CD4NO)
- ϕ 6 (CD6NO)



4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GB1/2/3-T* Series

Reduced wiring manifold; base piping

Dimensions

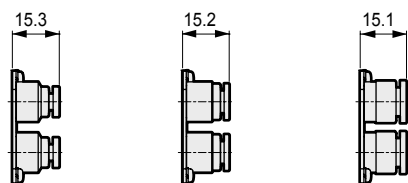
M4GB2

● Fitting straight

● φ 4 (C4)

● φ 6 (C6)

● φ 8 (C8)



● Fitting straight, single plug

● φ 4 (C4NC)

● φ 6 (C6NC)

● φ 8 (C8NC)

● φ 4 (C4NO)

● φ 6 (C6NO)

● φ 8 (C8NO)



● Fitting L type (upward)

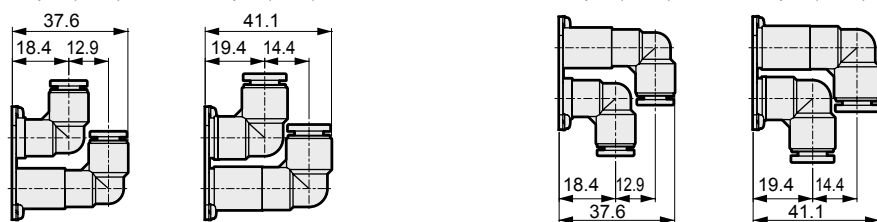
● φ 6 (CL6)

● φ 8 (CL8)

● Fitting L type (downward)

● φ 6 (CD6)

● φ 8 (CD8)



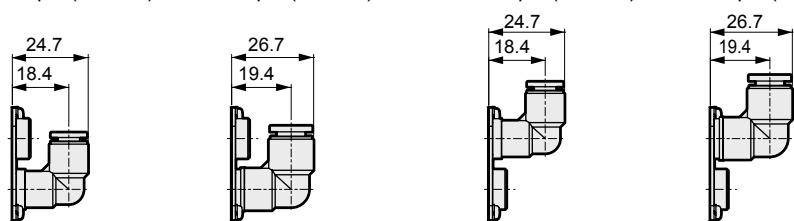
● Fitting L type (upward), single plug

● φ 6 (CL6NC)

● φ 8 (CL8NC)

● φ 6 (CL6NO)

● φ 8 (CL8NO)



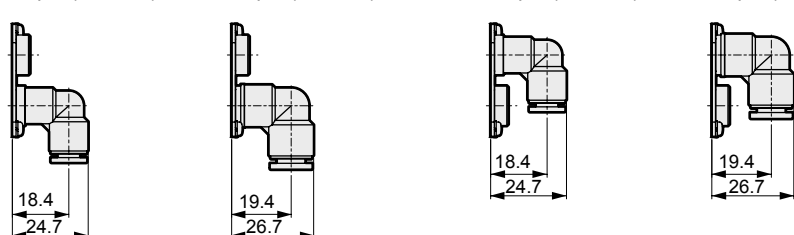
● Fitting L type (downward), single plug

● φ 6 (CD6NC)

● φ 8 (CD8NC)

● φ 6 (CD6NO)

● φ 8 (CD8NO)



4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

Dimensions

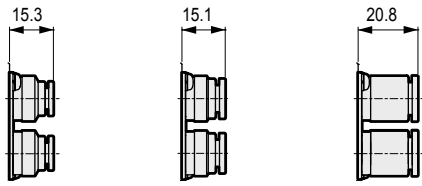
M4GB3

● Fitting straight

● φ 6 (C6)

● φ 8 (C8)

● φ 10 (C10)



● Fitting straight, single plug

● φ 6 (C6NC)

● φ 8 (C8NC)

● φ 10 (C10NC)

● φ 6 (C6NO)

● φ 8 (C8NO)

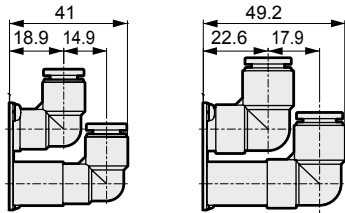
● φ 10 (C10NO)



● Fitting L type (upward)

● φ 8 (CL8)

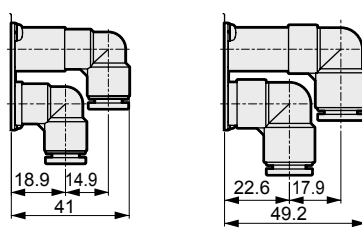
● φ 10 (CL10)



● Fitting L type (downward)

● φ 8 (CD8)

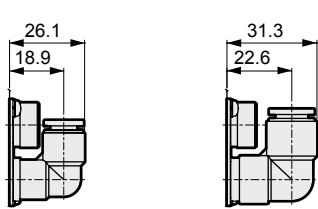
● φ 10 (CD10)



● Fitting L type (upward), single plug

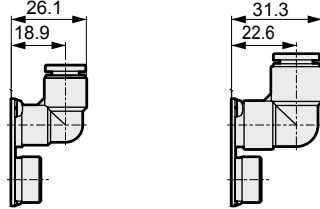
● φ 8 (CL8NC)

● φ 10 (CL10NC)



● φ 8 (CL8NO)

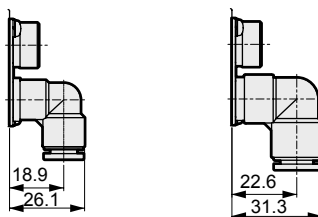
● φ 10 (CL10NO)



● Fitting L type (downward), single plug

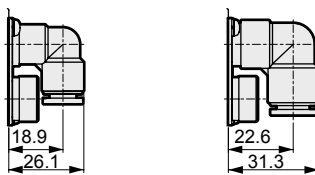
● φ 8 (CD8NC)

● φ 10 (CD10NC)



● φ 8 (CD8NO)

● φ 10 (CD10NO)



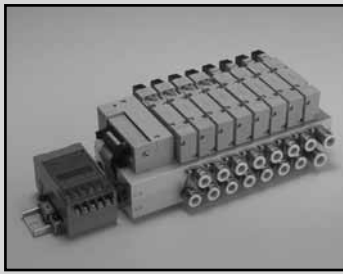
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

Discontinue

Reduced wiring manifold (serial transmission)
Base piping
DIN rail mount type

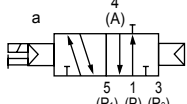
M3GB1/2-T6D Series M4GB1/2/3-T6D Series

● Applicable cylinder bore size: φ 20 to φ 100

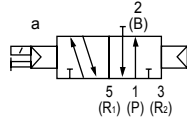


JIS symbol

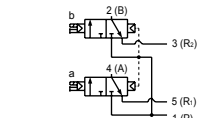
● 3 port valve 2-position single N.C. type



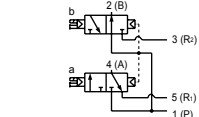
2-position single N.O. type



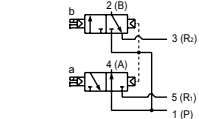
● Dual 3 port valve integrated type (A side valve: N.C. type, B side valve: N.C. type)



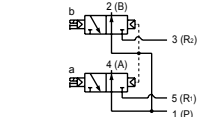
(A side valve: N.C. type, B side valve: N.O. type)



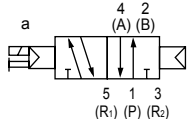
(A side valve: N.O. type, B side valve: N.C. type)



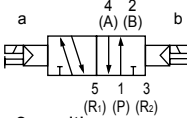
(A side valve: N.O. type, B side valve: N.O. type)



● 5 port valve 2-position single

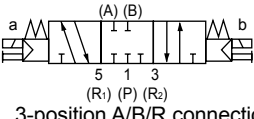


2-position double

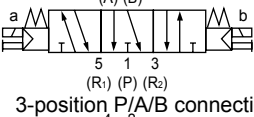


3-position

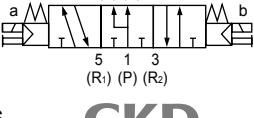
All ports closed



3-position A/B/R connection



3-position P/A/B connection



Manifold common specifications

Descriptions		Serial transmission integrated base
Manifold type		Serial transmission integrated base
Mounting method		DIN rail mounting
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

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 and 0.7 MPa.

Electrical specification

Descriptions		Rated voltage V _{DC}
Rated voltage V _{DC}		24
Voltage fluctuation range		±10%
Holding current A		0.025
Power consumption W		0.6
Thermal class		B
Temperature rise °C		50
Surge suppressor		Zener diode
Indicator		LED

Individual specifications

Descriptions		M3GB1/M4GB1	M3GB2/M4GB2	M4GB3
Max. station no.	Standard	16 stations	16 stations	16 stations
	External pilot	12 stations		
Max. number of solenoid		Depending on slave unit specifications and output points		
Port size	A/B port	Barbed fitting φ 1.8 Push-in fitting φ 1.8, φ 4, φ 6 M5	Push-in fitting φ 4, φ 6, φ 8 Rc1/8	Push-in fitting φ 6, φ 8, φ 10 Rc1/4
	P/R1/R2 port	Rc1/8	Rc1/4	Rc3/8
Manifold base weight calculation formula (n: station no.)	Standard	45n + 495	82n + 578	126n + 729
	External pilot	46n + 491	90n + 615	131n + 753

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

Flow characteristics

Model no.	Solenoid 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	0.67	0.23	
	2-position	1.1	0.22	0.70	0.10	
	3-position	All ports closed	0.98	0.22	1.0	0.11
		ABR connection	0.97	0.35	0.68	0.24
	PAB connection	1.1	0.38	0.99	0.22	
M3GB2 M4GB2	Dual 3 port valve integrated type	1.7	0.44	1.6	0.30	
	2-position	2.4	0.34	1.7	0.31	
	3-position	All ports closed	2.2	0.34	2.4	0.29
		ABR connection	2.2	0.34	1.8	0.27
	PAB connection	2.4	0.29	2.4	0.29	
M4GB3	2-position	3.5	0.34	2.6	0.27	
	3-position	All ports closed	3.1	0.33	3.3	0.22
		ABR connection	3.0	0.30	2.7	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 for 2-position, dual 3 port valve integrated type, and ABR connection are the values when check valve is integrated.

Serial transmission slave unit specifications (refer to page 398 for the applicable PLC table)

Descriptions		T6G1 ^{Note 1}	T6C0 ^{Note 2} T6C1	T6A0 ^{Note 3} T6A1	T6E0 T6E1	T6J0 ^{Note 3} T6J1
Network name		CC-Link	CompoBus/S	UNIWIRESYSTEM	S-LINK	UNIWIRESYSTEM H
Power supply voltage	Unit side	24 VDC ±10%		24 VDC +10% -5% (Unit power supply/valve power supply common terminal)		
	Valve side	24 VDC +10% -5%				
Current consumption	Unit side	100 mA or less (when all output points are ON)		100 mA or less (when all output points are ON) Load current is not included		
	Valve side	15 mA or less (when all output points are OFF)				
Output points		16 point	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.

Ozone proof specifications

 /
 Cutting oil proof type specifications

Select the option "A" of (F) in how to order on page 148.

Clean room specifications

 (Catalog no. CB-033SA)

- 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

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4F*0E
HMV
HSV
2QV
3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

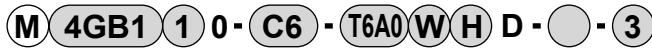
M4GB1/2/3-T6D Series

Reduced wiring manifold; base piping; serial transmission

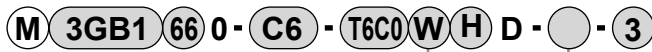
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/ LMF0
MN3S0 MN4S0
4SA/ B0
4KA/ B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S- 0
3QR 3QB
3MA/ B0
3PA/ B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

How to order

Manifold model no.



3 port manifold model no.



Discrete valve for mounting base



3 port discrete valve for mounting base



B Solenoid position

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

C Port size

D Serial transmission
Zener diode is used for a surge suppressor.

E Terminal and connector pin wiring

⚠ Note on model no. selection

Note 1 Select M4GB*80 when mixing with 3, 5 port valves.
Select M3GB*80 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* 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 short elbow.

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

Note 5 Blank ...Wired based on the type of valve used.
WWired for the double solenoid regardless of the type of valve used.

Note 6 3-position all ports closed and PAB connection are not provided with check valve (H). Refer to page 439 for details on check valve.

Note 7 Contact CKD when using a vacuum with the external pilot (K).

Note 8 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 pages 154 to 156 for details.

F Option

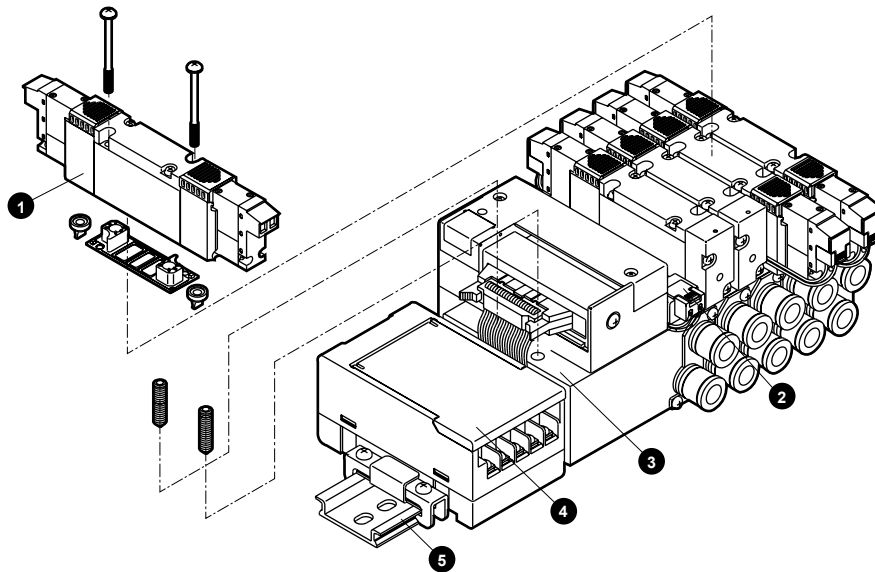
G Station no.

H Voltage

*Always indicate "Manifold specifications" (pages 168 to 179).

		A Model no.				
		3GB1	3GB2	4GB1	4GB2	4GB3
Symbol	Descriptions					
B Solenoid 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, 2	●	●			
	A side valve: Normally closed B side valve: Normally closed					
67	Dual 3 port valve integrated type Note 1, 2	●	●			
	A side valve: Normally closed B side valve: Normally open					
76	Dual 3 port valve integrated type Note 1, 2	●	●			
	A side valve: Normally open B side valve: Normally closed					
77	Dual 3 port valve integrated type Note 1, 2	●	●			
	A side valve: Normally open B side valve: Normally open					
8	Mix manifold (In case of multiple solenoid positions)	●	●	●	●	●
C Port size						
Port	A/B port	P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8				
C18	φ 1.8 push-in fitting for fiber tube (applicable tube UP-9402-**)	(2)		(2)		
C4	φ 4 push-in fitting	(2)	(3)	(2)	(3)	
C6	φ 6 push-in fitting	(2)	(3)	(2)	(3)	(4)
C8	φ 8 push-in fitting		(3)		(3)	(4)
C10	φ 10 push-in fitting					(4)
CL18	φ 1.8 L type push-in fitting for fiber tube (upward)(applicable tube UP-9402-**) (downward) Note 3, 4			(2)		
CL4	φ 4 L type push-in fitting for fiber tube (upward) Note 3, 4			(2)		
CL6	φ 6 L type push-in fitting for fiber tube (upward) Note 3, 4			(2)	(3)	
CL8	φ 8 L type push-in fitting for fiber tube (upward) Note 3, 4				(3)	(4)
CL10	φ 10 L type push-in fitting for fiber tube (upward) Note 3, 4					(4)
CD18	φ 1.8 L type push-in fitting for fiber tube (downward)(applicable tube UP-9402-**) (downward)	(2)		(2)		
CD4	φ 4 L type push-in fitting for fiber tube (downward)	(2)		(2)		
CD6	φ 6 L type push-in fitting for fiber tube (downward)	(2)	(3)	(2)	(3)	
CD8	φ 8 L type push-in fitting for fiber tube (downward)		(3)		(3)	(4)
CD10	φ 10 L type push-in fitting for fiber tube (downward)					(4)
CF	φ 1.8 barbed fitting for fiber tube (applicable tube UP-9102-**) (downward)	(2)		(2)		
CX	Push-in fitting mix	(2)	(3)	(2)	(3)	(4)
M5	M5	(2)		(2)		
06	Rc1/8		(3)		(3)	
08	Rc1/4					(4)
D Serial transmission (light and surge suppressor provided as standard)						
T6A0	UNIWIRESYSTEM 8 points	●	●	●	●	●
T6A1	UNIWIRESYSTEM 16 points	●	●	●	●	●
T6C0	CompoBus/S 8 points	●	●	●	●	●
T6C1	CompoBus/S 16 points	●	●	●	●	●
T6E0	S-LINK 8 points	●	●	●	●	●
T6E1	S-LINK 16 points	●	●	●	●	●
T6G1	CC-Link 16 points	●	●	●	●	●
T6J0	UNIWIRESYSTEM H SYSTEM 8 points	●	●	●	●	●
T6J1	UNIWIRESYSTEM H SYSTEM 16 points	●	●	●	●	●
E Terminal and connector pin wiring						
Blank	Standard wiring	Note 5	●	●	●	●
W	Double wiring	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	●	●	●	●	●
F	A/B port filter integrated (P port: Standard)	●	●	●	●	●
Z1	Air supply spacer	Note 8	●	●	●	●
Z2	In stop valve spacer	Note 8	●	●	●	●
G Station no.						
2	2 stations					
to	to	●	●	●	●	●
16	Refer to page 146 for the max. station no. per port size.					
H Voltage						
3	24 VDC	●	●	●	●	●
is not available.						

Manifold components explanation and parts list



Main parts list

No.	Component name	Model no.	Descriptions	Remarks
1	Discrete valve for mounting base	3GB**9 - 00 - A2N [Option] - [Voltage] 4 Solenoid position Series flow rate size	Discrete valve Gasket Set screw 2 PR check valve 2	Details on page 148
2	Masking plate	3G1/4G1 4G1-MP 3G2/4G2 4G2-MP 3G2/4G3 4G3-MP	Masking plate Gasket Set screw 2	*3G3/4G3 has two PR check valves.
3	Manifold base assembly	M4GB* - [Port size] - [T56] - [Option] - [Station no.] Series flow rate size	Manifold base Electrical block	
4	Serial transmission slave unit	4G-OPP3- [Wiring method]	Serial transmission slave unit	Details on page 153
5	DIN rail kit			Details on page 161

Parts list

No.	Parts name	Model no.	No.	Parts name	Model no.
-	Coil assembly	4G-A2N- [] -COIL- [Voltage] Blank: Standard A: Ozone/cutting oil specifications			
-	A type connector socket assembly Details on page 401	4G [] -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"> φ 1.8 straight type 4G1-JOINT-C18 φ 4 straight type 4G1-JOINT-C4 φ 6 straight type 4G1-JOINT-C6 φ 1.8 elbow type 4G1-JOINT-CL18,CLL18 φ 4 elbow type 4G1-JOINT-CL4,CLL4 φ 6 elbow type 4G1-JOINT-CL6,CLL6 φ 1.8 barbed type 4G1-JOINT-CF Plug cartridge 4G1-JOINT-CPG
				4G2	<ul style="list-style-type: none"> φ 4 straight type 4G2-JOINT-C4 φ 6 straight type 4G2-JOINT-C6 φ 8 straight type 4G2-JOINT-C8 φ 6 elbow type 4G2-JOINT-CL6,CLL6 φ 8 elbow type 4G2-JOINT-CL8,CLL8 Plug cartridge 4G2-JOINT-CPG
				4G3	<ul style="list-style-type: none"> φ 6 straight type 4G3-JOINT-C6 φ 8 straight type 4G3-JOINT-C8 φ 10 straight type 4G3-JOINT-C10 φ 8 elbow type 4G3-JOINT-CL8,CLL8 φ 10 elbow type 4G3-JOINT-CL10,CLL10 Plug cartridge 4G3-JOINT-CPG

4GA/B
 M4GA/B
 4GA4/B4
 MN4GA/B
 4GA/B (Master)
 MN3E
 MN4E
 W4GA/B2
 W4GB4
 4TB
 4L2-4/LMF0
 MN3S0
 MN4S0
 4SA/B0
 4KA/B
 4KA/B (Master)
 4F
 4F (Master)
 PV5G
 GMF
 PV5
 GMF
 PV5S-0
 3QR
 3QB
 3MA/B0
 3PA/B
 P/MB
 NP/NAP
 NVP
 4F*0E
 HMV
 HSV
 2QV
 3QV
 SKH
 PCD
 Silencer
 Total air system
 Total air system (Gamma)
 Ending

M4GB1-T6D Series

Reduced wiring manifold; base piping; serial transmission

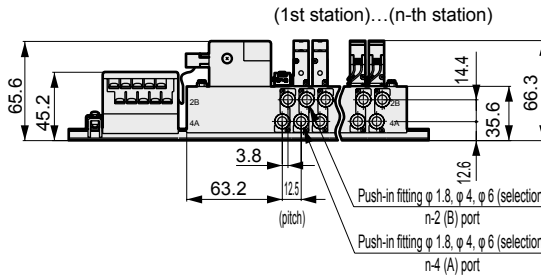
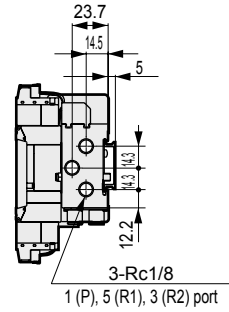
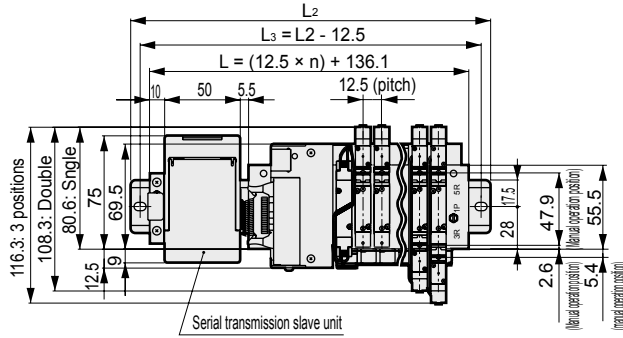
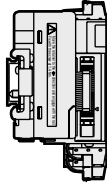
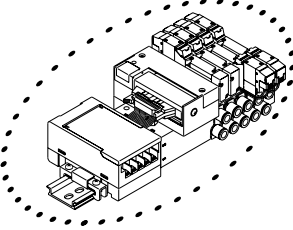
Dimensions



M4GB1

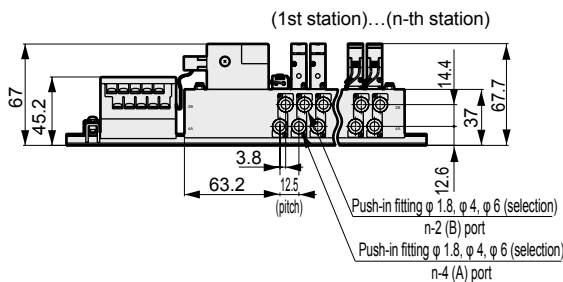
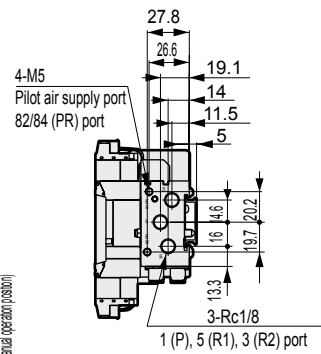
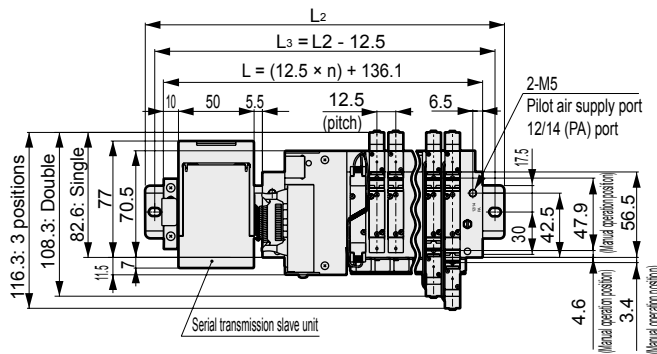
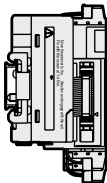
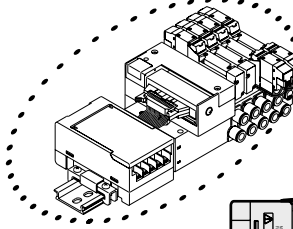
- Serial transmission (T6*)
DIN rail mounting type (D)

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



Note: Refer to page 143 for details on the push-in fitting elbow type (upward) (downward).

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



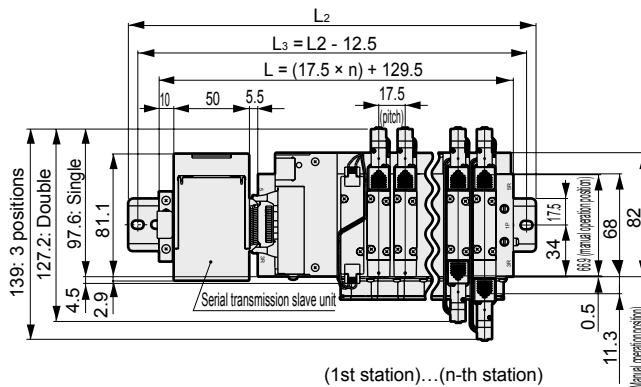
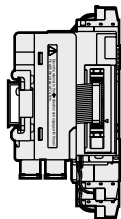
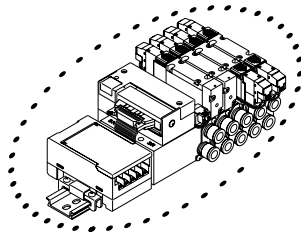
Station no.	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
L	161.1	173.6	186.1	198.6	211.1	223.6	236.1	248.6	261.1	273.6	286.1	298.6	311.1	323.6	336.1
L ₂	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350	362.5	375	387.5
L ₃	200.0	212.5	225.0	237.5	250.0	262.5	275.0	287.5	300.0	312.5	325.0	337.5	350	362.5	375

Dimensions

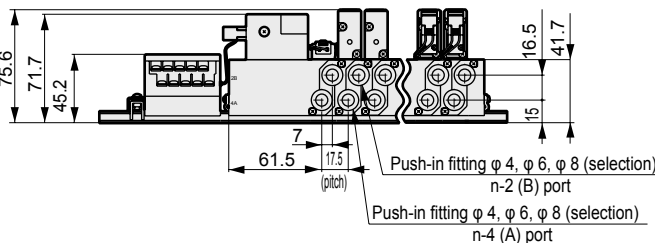
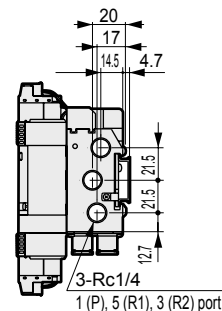


M4GB2

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

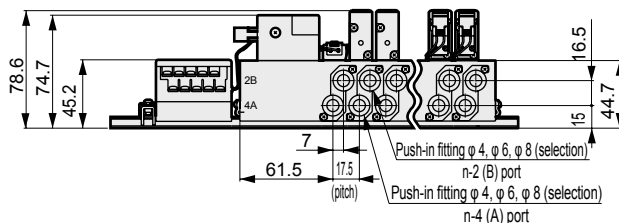
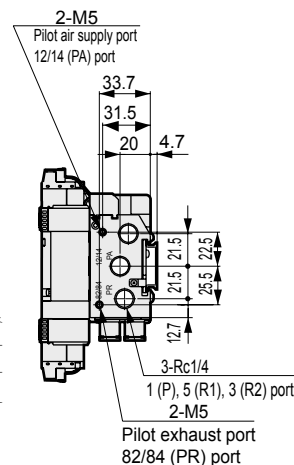
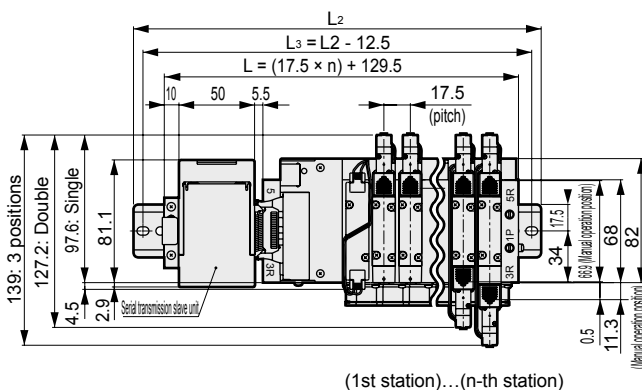
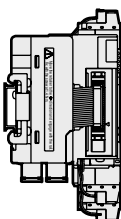
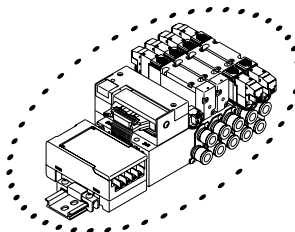


*The dimension of dual 3 port valve integrated type is the same as that of the double type.



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

Note: Refer to page 144 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	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

4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMFO
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GB3-T6D Series

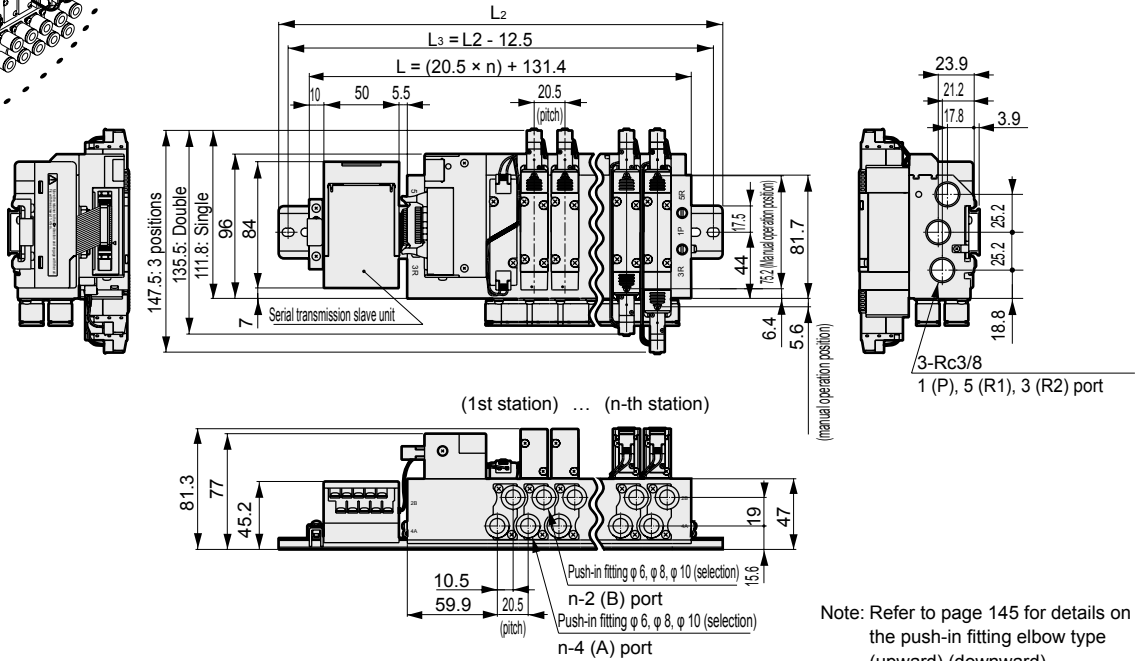
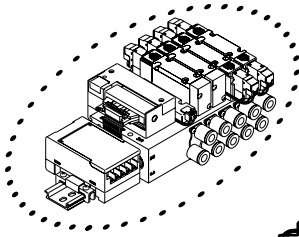
Reduced wiring manifold; base piping; serial transmission

Dimensions



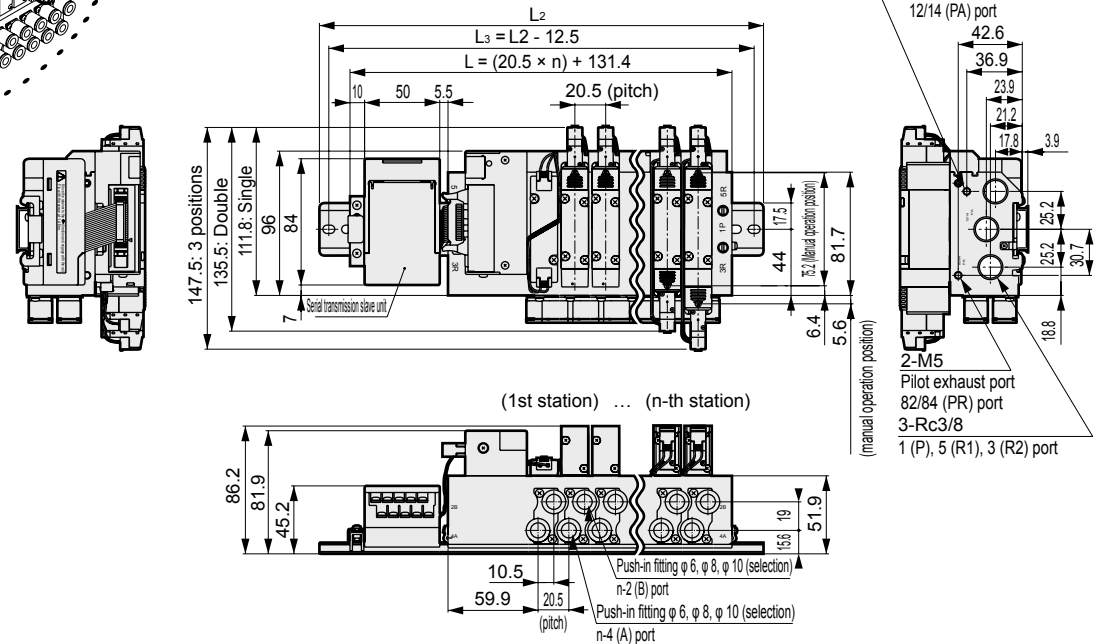
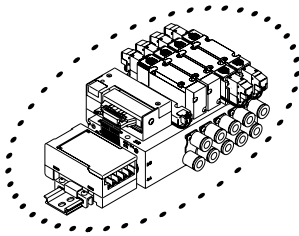
M4GB3

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



Note: Refer to page 145 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

Reduced wiring manifold; base piping; serial transmission

● Discrete serial transmission slave unit model no.

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

Ⓐ Wiring method

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

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

M4GA1 to 3/M4GB1 to 3 Series

Related products

Related products

● In stop valve spacer

Specifications

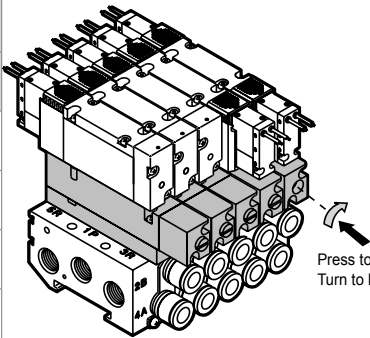
Model no.	P → A/B		A/B → R		Weight g
	C [dm ³ / (s·bar)]	b	C [dm ³ / (s·bar)]	b	
4G*2	1.5	0.17	1.6	0.20	63
4G*3	1.9	0.09	2.8	0.16	80

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 cross-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



Press to shut off air.
Turn to lock.

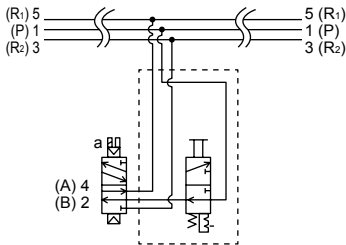
How to order discrete part

4G2 - IS

4G3 - IS

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).

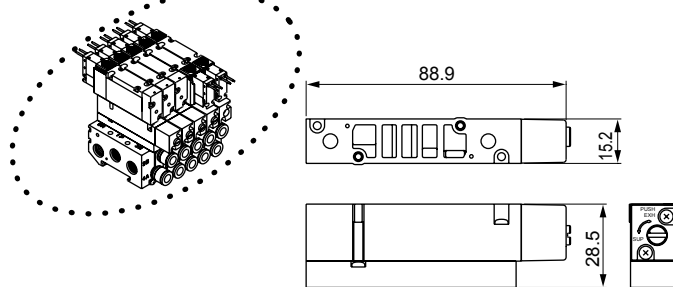
Note 3: If the elbow type (upward) A/B port fitting is used for the reduced wiring manifold, the in stop valve spacer cannot be selected.

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

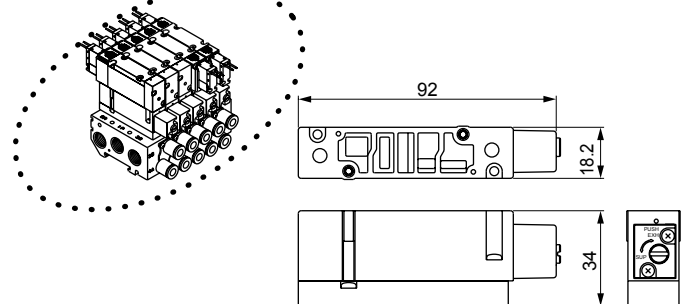
Note 5: When adding to the reduced wiring manifold, the existing electric wire may be too short. Contact CKD for details.

Dimensions

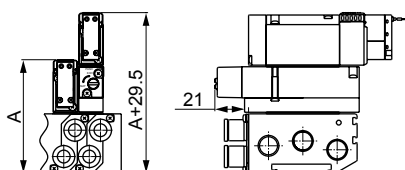
● 4G2



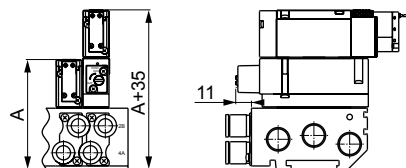
● 4G3



Dimensions when mounted



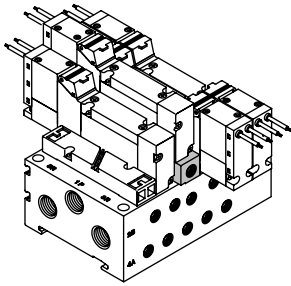
Dimensions when mounted



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 cross-sectional area S and sonic conductance C are converted as $S \doteq 5.0 \times C$.

How to order discrete part

● Air supply spacer

Air supply spacer model no.

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

A Air supply spacer model no.

B Port size
Note 1

C Set screw

		Valve model no.					
		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	φ 4 fitting	●					
GWS6	φ 6 fitting	●		●			
GWS8	φ 8 fitting			●		●	
GWS10	φ 10 fitting						●
C Set screw							
Blank		●		●			●
A	4GA3 A/B port: Rc1/4 thread					● ^{Note 2}	

■ is not available.

Attached product: Set screw 2 (Note 2), PR check valve 2, body gasket 1

⚠ 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**-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.

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

M4GA1 to 3/M4GB1 to 3 Series

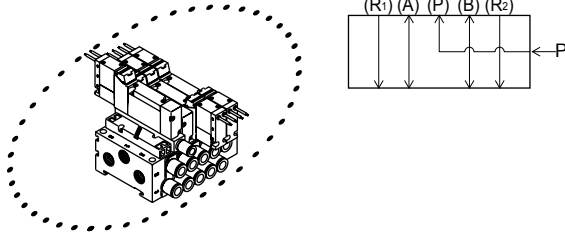
Related products

Related products

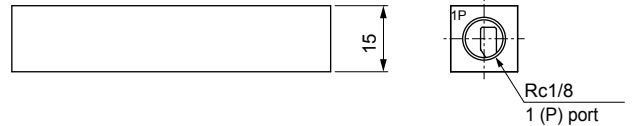
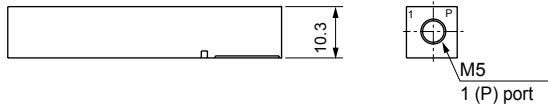
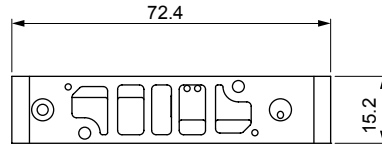
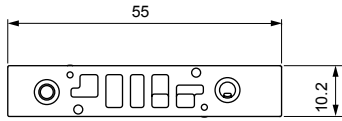
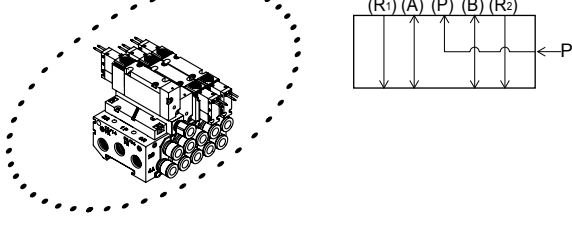
● Air supply spacer

Dimensions

● 4G1

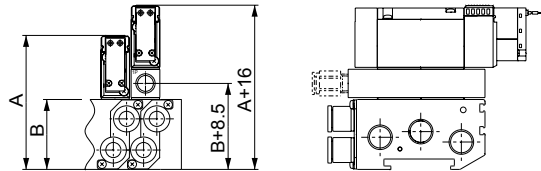
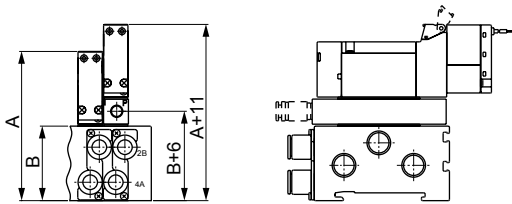


● 4G2

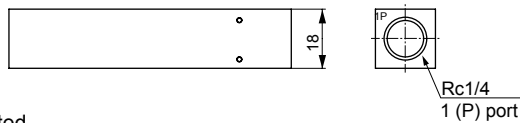
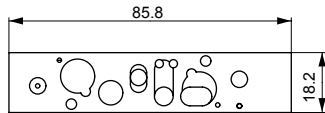
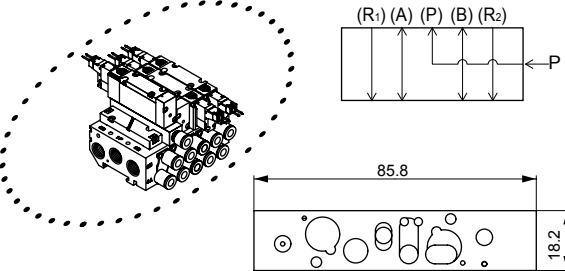


Dimensions when mounted

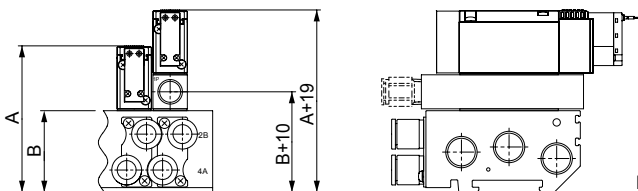
Dimensions when mounted



● 4G3



Dimensions when mounted



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

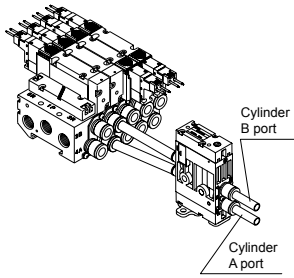
Discontinue

M4GA1 to 3/M4GB1 to 3 Series

Related products

Related products

● Pilot check valve



How to order

● Discrete model no.

4G2 - PCS - C4 - ○

● Manifold model no.

M4G2 - PCS - C4 - ○ - ○ - **5**

Model no.

○ Port size
Note 1

Pilot check valve

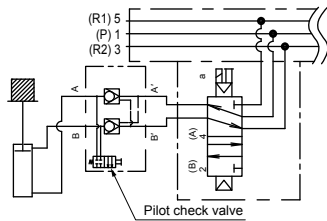
Specifications

Descriptions	4G2-PCS-*.**
Effective cross-sectional area	mm ² 12
Weight	g 200

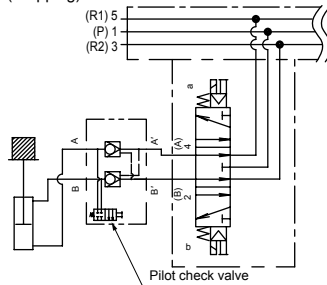
Symbol	Descriptions	
A Port size		
	Valve side port	Cylinder side port
C4	φ 4 push-in fitting	φ 4 push-in fitting
C6	φ 6 push-in fitting	φ 6 push-in fitting
C8	φ 8 push-in fitting	φ 8 push-in fitting
CL6	φ 6 push-in fitting	φ 6 L type push-in fitting for fiber tube (upward)
CL8	φ 8 push-in fitting	φ 8 L type push-in fitting for fiber tube (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 (4G2-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.

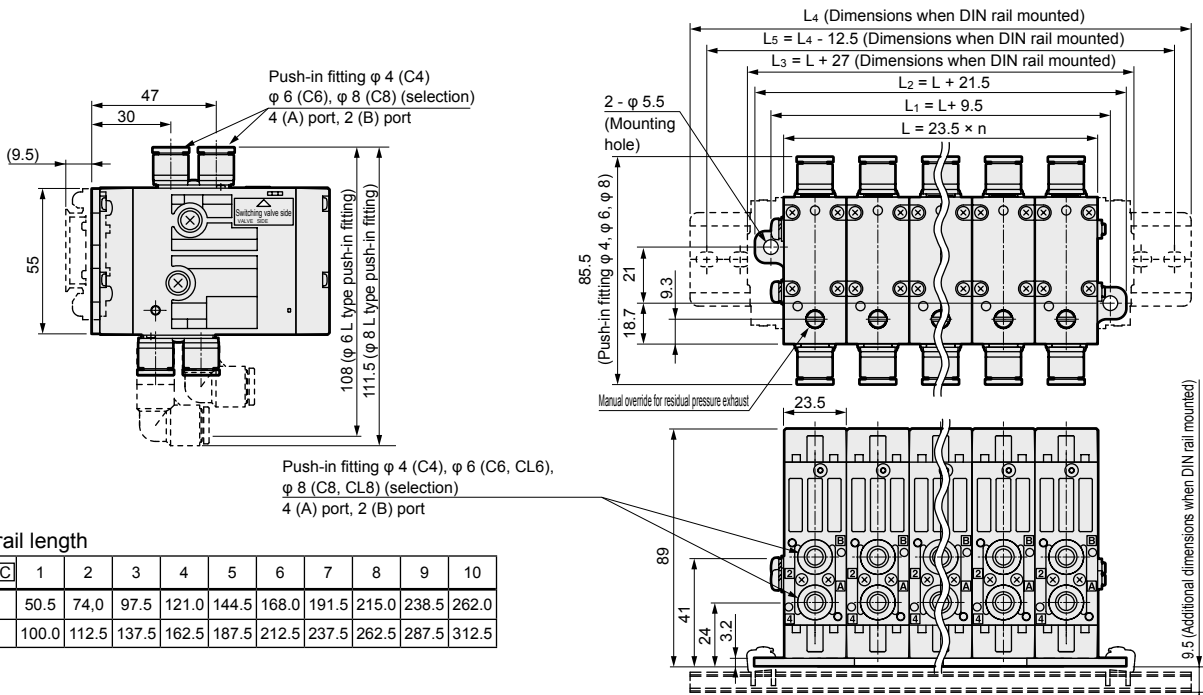
⚠ Note on model no. selection

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

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G GMF
- PV5 GMF
- PV5S-0
- 3QR
- 3QB
- 3MA/B0
- 3PA/B
- P/MB
- NP/NAP
- NVP
- 4F*0E
- HMV
- HSV
- 2QV
- 3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

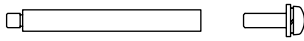
M4GA1 to 3/M4GB1 to 3 Series

Related products

Related products

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

4G2 - PCS - TR - V1



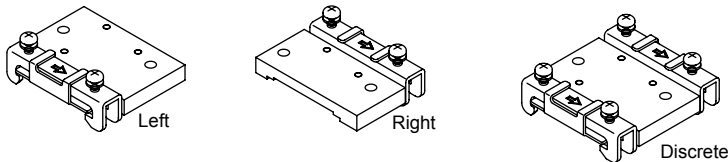
A Type
Note 1

A Type	
V1	For 1 station
V2	For 2 stations
V3	For 3 stations
V4	For 4 stations
V5	For 5 stations

⚠ Note on model no. selection

Note 1: Select the V1 to V5 combination when using six and over stations.

- DIN rail adaptor kit (for pilot check valve)
(The DIN rail adaptor kit is required for the following reassembly)



4G2 - PCS - D1

A Type

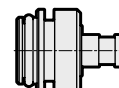
A Type	DIN rail adaptor kit selection list based on changes in specifications				Descriptions
	Change from mounting plate to DIN rail		Increase/decrease stations with DIN rail mount		
Descriptions	1 station	2 stations and over	2 stations and over → 1 station	1 station → 2 stations and over	
Symbol					
D1 Right				● (Note 4)	DIN rail adaptor (right) 1, thread 2
D2 Right + left		●			DIN rail adaptor (right) 1, thread 4 DIN rail adaptor (left) 1, thread 4
D3 Discrete	●		●		DIN rail adaptor (discrete) 1, thread 2

Note 4: When changing from 1 station to 2 and over stations, purchase the DIN rail adaptor for right (D1), and remove the retainer on one side from the current DIN rail adaptor kit (D3).

- push-in cartridge fitting

φ 1.8 straight type
4G1-JOINT-**CL18**

φ 1.8 barbed type
4G1-JOINT-**CF**



φ 1.8L/φ 4L/φ 6L/φ 8L/φ 10L type (short elbow type)

4G1-JOINT-**CL18** / **CL4** / **CL6**

4G2-JOINT-**CL6** / **CL8**

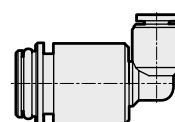
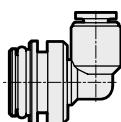
4G3-JOINT-**CL8** / **CL10**

φ 1.8L/φ 4L/φ 6L/φ 8L/φ 10L type (long elbow type)

4G1-JOINT-**CLL18** / **CLL4** / **CLL6**

4G2-JOINT-**CLL6** / **CLL8**

4G3-JOINT-**CLL8** / **CLL10**



Discontinue

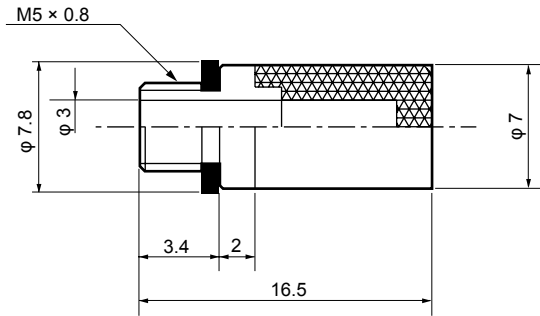
M4GA1 to 3/M4GB1 to 3 Series

Related products

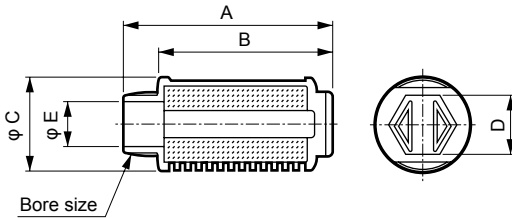
Related products

● Silencer

● SLM-M5



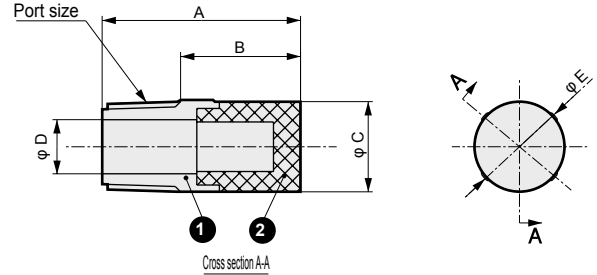
● SLW-6A, 8A, 10A, 10L



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.	Noise reduction effect dB(A)	Effective cross-sectional area mm ²	A	B	C	D	E	Port size
SLW-6A	30 and over	10	34.5	28	16.5	10	7	R1/8
SLW-8A	30 and over	20	44.5	36	20	13	8.5	R1/4
SLW-10A	30 and over	30	58.5	48.5	25.5	17	12	R3/8
SLW-10L	30 and over	60	68.2	58.4	28	19	12	R3/8

● SLW-6S, 8S



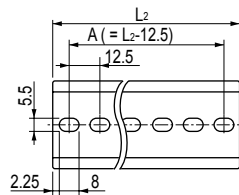
Model no.	Port size	A	B	C	D	E
SLW-6S	R1/8	22	13.3	10.5	6	10.5
SLW-8S	R1/4	28	19	14.8	9	15.4

● Plug type

Parts name	Model no.	Applicable port size	Appearance
Blanking plug	PG-P2-B	φ 1.8	
	GWP4-B	φ 4	
	GWP6-B	φ 6	
	GWP8-B	φ 8	
	GWP10-B	φ 12	
Thread plug	4G1-M5P	M5	
	4G2-06P	Rc1/8	
	4G3-08P	Rc1/4	
	4G4-10P	Rc3/8	

● DIN rail

N4G - BAA L2
 Rail length



Note 1: Rail lengths not included in the list are custom order product.

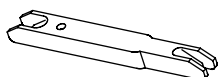
L ₁ : Manifold length	L ₂ : Rail length	A: Mounting pitch
35	47.5 or less	87.5
Over 47.5 to 60		100
60	72.5	112.5
72.5	85	125
85	97.5	137.5
97.5	110	150
110	122.5	162.5
122.5	135	175
135	147.5	187.5
147.5	160	200
160	172.5	212.5
172.5	185	225
185	197.5	237.5
197.5	210	250
210	222.5	262.5
222.5	235	275
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

If the manifold length exceeds 510, calculate the rail length using a multiple of 12.5.

● Push-in fitting tube remover

For φ 1.8/φ 4 push-in fitting
 N4EO-EOT18-4

For φ 4/φ 6 push-in fitting
 N4SO-EOT4-6



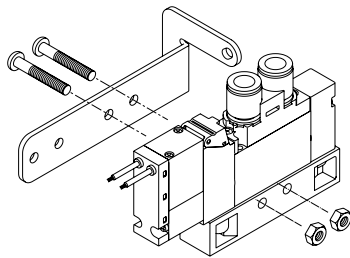
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G GMF
PV5 GMF
PV5S-0
3QR 3QB
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4F*0E
HMV HSV
2QV 3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA1 to 3/M4GB1 to 3 Series

Related parts

Related parts

(1) Mounting plate (P) kit

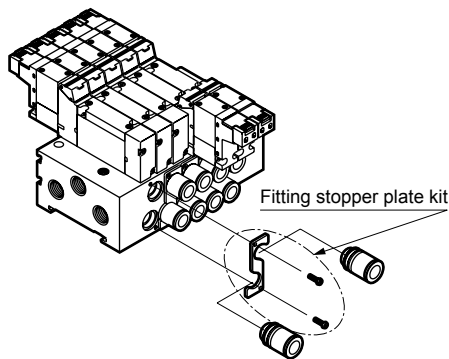


Mounting (P) kit

Model no.	Kit model no.	Set part
3GA1/4GA1	4G1-MOUNT-PLATE-KIT	Mounting plate, set screw 2, nut 2
3GA2/4GA2	4G2-MOUNT-PLATE-KIT	Mounting plate, set screw 2
3GA3/4GA3	4G3-MOUNT-PLATE-KIT	Mounting plate, set screw 2

Note The mounting plate cannot be used when using the double solenoid with DIN terminal or 100 VAC.

(2) Discrete cartridge type push-in fitting related part



Fitting stopper plate kit

Model no.	Kit model no.
M4G1	4G1-JNT-STP-PLATE-KIT
M4G2	4G2-JNT-STP-PLATE-KIT
M4G3	4G3-JNT-STP-PLATE-KIT

(3) Adaptor related kit

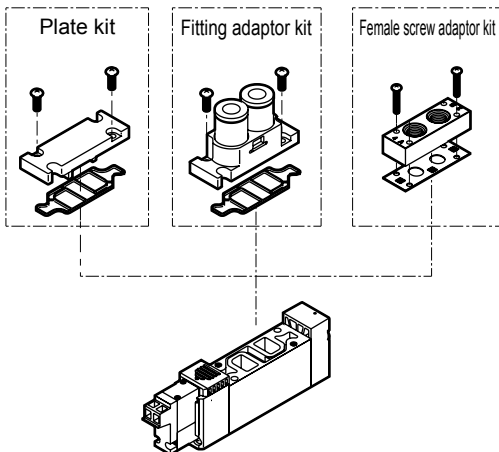


Plate kit

Model no.	Kit model no.	Set part
3GB1/4GB1	4G1-PLATE-KIT	Plate, gasket, set screw 2
3GB2/4GB2	4G2-PLATE-KIT	Plate, gasket, set screw 2
4GB3	4G3-PLATE-KIT	Plate, gasket, set screw 2

Fitting adaptor kit

Model no.	Parts name	Kit model no.	Set part
3GA1 4GA1	φ 4 fitting adaptor kit	For N.C. 4G1-JNT-ADAPTOR-KIT-C4NC- Option	Fitting adaptor
		For N.O. 4G1-JNT-ADAPTOR-KIT-C4NO- Option	Push-in fitting 2 (N.C., N.O.: 1)
	4G1-JNT-ADAPTOR-KIT-C4- Option	(N.C., N.O.: plug cartridge 1)	
3GA2 4GA2	φ 6 fitting adaptor kit	For N.C. 4G2-JNT-ADAPTOR-KIT-C6NC- Option	Gasket
		For N.O. 4G2-JNT-ADAPTOR-KIT-C6NO- Option	Stopper pin
	4G2-JNT-ADAPTOR-KIT-C6- Option	Set screw 2	
3GA3 4GA3	φ 8 fitting adaptor kit	For N.C. 4G3-JNT-ADAPTOR-KIT-C8NC- Option	Fitting adaptor
		For N.O. 4G3-JNT-ADAPTOR-KIT-C8NO- Option	Push-in fitting 2 (N.C., N.O.: 1)
	4G3-JNT-ADAPTOR-KIT-C8- Option	(N.C., N.O.: plug cartridge 1)	
3GA1/4GA1	φ 6 fitting adaptor kit	For N.C. 4G1-JNT-ADAPTOR-KIT-C6NC- Option	Fitting adaptor
		For N.O. 4G1-JNT-ADAPTOR-KIT-C6NO- Option	Push-in fitting 2 (N.C., N.O.: 1)
	4G1-JNT-ADAPTOR-KIT-C6- Option	(N.C., N.O.: plug cartridge 1)	
3GA2/4GA2	φ 8 fitting adaptor kit	For N.C. 4G2-JNT-ADAPTOR-KIT-C8NC- Option	Gasket
		For N.O. 4G2-JNT-ADAPTOR-KIT-C8NO- Option	Stopper pin
	4G2-JNT-ADAPTOR-KIT-C8- Option	Set screw 2	
3GA3/4GA3	φ 10 fitting adaptor kit	For N.C. 4G3-JNT-ADAPTOR-KIT-C10NC- Option	Fitting adaptor
		For N.O. 4G3-JNT-ADAPTOR-KIT-C10NO- Option	Push-in fitting 2 (N.C., N.O.: 1)
	4G3-JNT-ADAPTOR-KIT-C10- Option	(N.C., N.O.: plug cartridge 1)	
3GA1/4GA1	φ 8 fitting adaptor kit	For N.C. 4G1-JNT-ADAPTOR-KIT-C8NC- Option	Gasket
		For N.O. 4G1-JNT-ADAPTOR-KIT-C8NO- Option	Stopper pin
	4G1-JNT-ADAPTOR-KIT-C8- Option	Set screw 2	

Specify the [Option](#) "F" when using the A/B port filter integrated type.

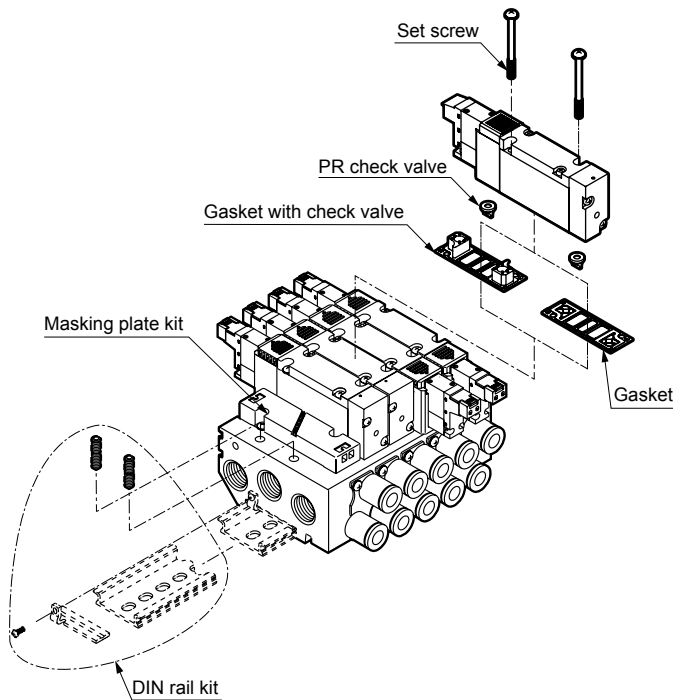
Female screw adaptor kit

Model no.	Kit model no.	Set part
3GA1/4GA1	4G1-FML-ADAPTOR-KIT - Port size - Option	Female screw adaptor, gasket, set screw 2
3GA2/4GA2	4G2-FML-ADAPTOR-KIT - Port size - Option	Female screw adaptor, gasket, set screw 2
3GA3/4GA3	4G3-FML-ADAPTOR-KIT - Port size - Option	Female screw adaptor, gasket, set screw 2, body set screw 2

Specify the [Option](#) "F" when using the A/B port filter integrated type.

Related parts

(4) Manifold related parts



Masking plate kit

Model no.	Model no.	Descriptions	Remarks
M3G1/M4G1	4G1-MP	Masking plate Gasket Set screw 2	* 3G3/4G3 has two PR check valves.
M3G2/M4G2	4G2-MP		
M3G3/M4G3	4G3-MP		

Gasket

Model no.	Part model no.
3G1/4G1	4G1-GASKET
3G1/4G1 (For masking plate)	4G1-MP-GASKET
3G2/4G2	4G2-GASKET
3G2/4G2 (For masking plate)	4G2-MP-GASKET
3G3/4G3	4G3-GASKET

Gasket with check valve

Model no.	Part model no.
3G1/4G1	4G1-CHECK-VALVE
3G2/4G2	4G2-CHECK-VALVE
3G3/4G3	4G3-CHECK-VALVE

PR check valve kit (2 per set)

Model no.	Kit model no.
3G1/4G1	4G1-PR
3G2/4G2	4G2-PR
3G3/4G3	4G3-PR

Set screw (10 per set)

Model no.	Part model no.
3G1/4G1	4G1-SET-SCREW
3G2/4G2	4G2-SET-SCREW
3G3/4G3	4G3-SET-SCREW
3GA3/4GA3 (for 08 port size)	4G3-SET-SCREW-L

DIN rail kit

Model no.	Model no.	Descriptions
M4G1	4GA1-BAA [Length]-[Option]D	DIN rail, set screw 2, Lock nut 2
	4GB1-BAA [Length]-[Option]D	
M4G2	4GA2-BAA [Length]-[Option]D	DIN rail/holder 2 Tapping screw 2, Set screw 4
	4GB2-BAA [Length]-[Option]D	
M4G3	4GA3-BAA [Length]-[Option]D	
	4GB3-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 373).

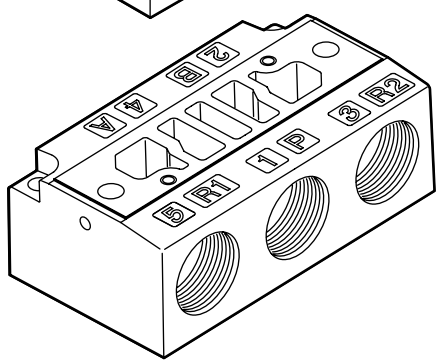
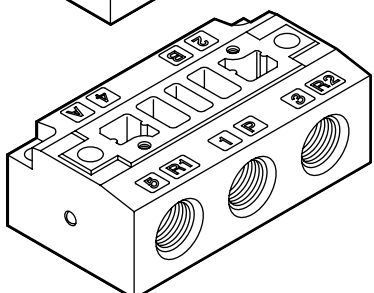
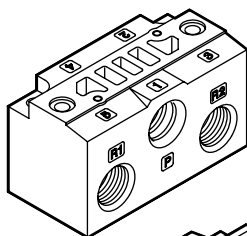
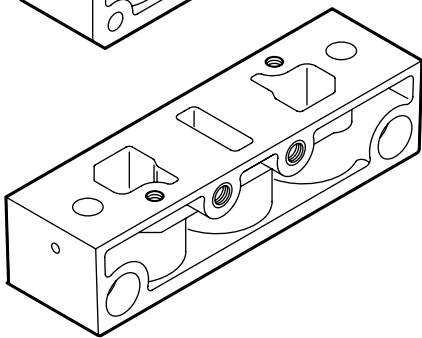
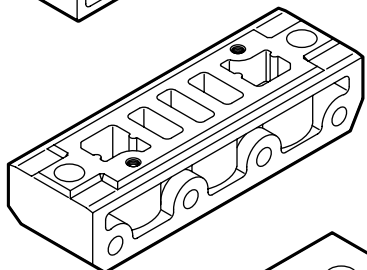
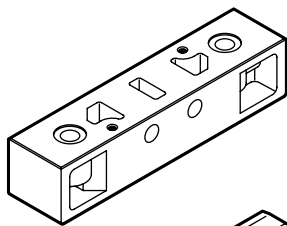
4GA/B
M4GA/B
4GA4/B4
MN4GA/B
4GA/B (Master)
MN3E
MN4E
W4GA/B2
W4GB4
4TB
4L2-4/LMF0
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (Master)
4F
4F (Master)
PV5G
GMF
PV5
GMF
PV5S-0
3QR
3QB
3MA/B0
3PA/B
P/MB
NP/NAP
NVP
4F*0E
HNV
HSV
2QV
3QV
SKH
PCD
Silencer
Total air system
Total air system (Gamma)
Ending

M4GA1 to 3/M4GB1 to 3 Series

Related parts

Related parts

(5) Sub-plate



4GA piping adaptor

Model no.	Part model no.
3GA1/4GA1	4G1-ADAPTOR-M5- Option
3GA2/4GA2	4G2-ADAPTOR-06- Option
3GA3/4GA3	4G3-ADAPTOR-08- Option

Specify the option "F" when using the P port filter integrated type.

4GB discrete sub-plate

Model no.	Part model no.
3GB1/GB1	4G1-SUB-BASE - Port size - Option
3GB2/4GB2	4G2-SUB-BASE - Port size - Option
4GB3	4G3-SUB-BASE - Port size - Option

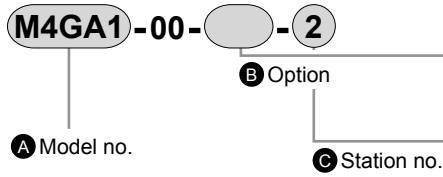
Specify the option "K" when using the external pilot and specify the option "F" when using the P/A/B port filter integrated type.

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

Related parts

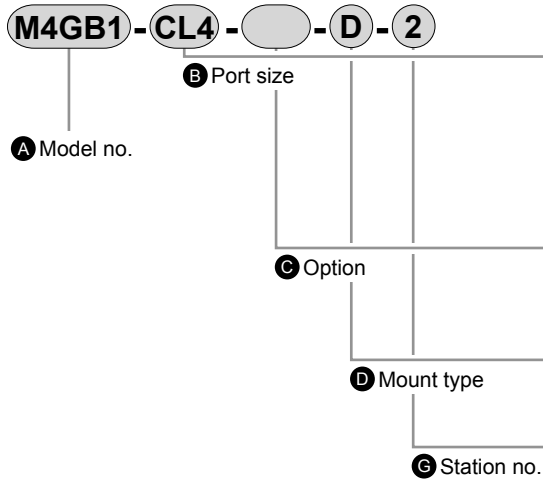
(6) Manifold sub-plate kit individual wiring type

● M4GA sub-plate



Symbol	Descriptions
B Option	
Blank	
K	External pilot
C Station no.	
2	2 stations
to	to
20	Refer to the specifications page for the max. station no.

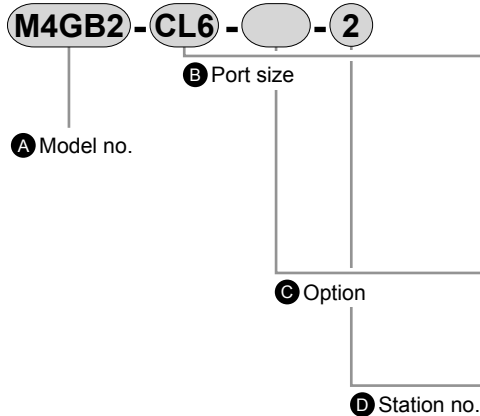
● M4GB1 sub-plate



Symbol	Descriptions
B Port size	
C4	φ 4 push-in fitting
C6	φ 6 push-in fitting
CL4	φ 4 L type push-in fitting for fiber tube (top)
CL6	φ 6 L type push-in fitting for fiber tube (top)
CD4	φ 4 L type push-in fitting for fiber tube (bottom)
CD6	φ 6 L type push-in fitting for fiber tube (bottom)
C Option	
Blank	
K	External pilot
F	A/B port filter integrated
D Mount type	
Blank	Direct mount type
D	DIN rail mount type Note 1
E Station no.	
2	2 stations
to	to
20	Refer to the specifications page for the max. station no.

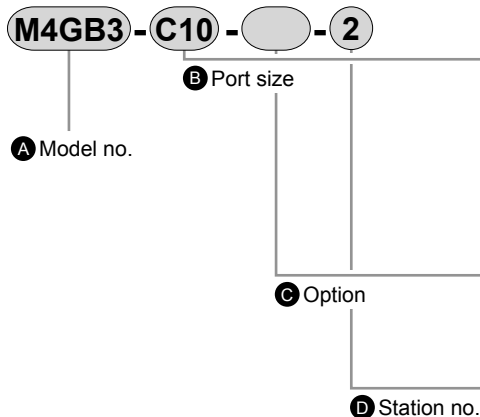
Note 1 The DIN rail kit needs to be prepared separately.

● M4GB2 sub-plate



Symbol	Descriptions
B Port size	
C4	φ 4 push-in fitting
C6	φ 6 push-in fitting
C8	φ 8 push-in fitting
CL6	φ 4 L type push-in fitting for fiber tube (top)
CL8	φ 6 L type push-in fitting for fiber tube (top)
CD6	φ 4 L type push-in fitting for fiber tube (bottom)
CD8	φ 6 L type push-in fitting for fiber tube (bottom)
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.

● M4GB3 sub-plate



Symbol	Descriptions
B Port size	
C6	φ 6 push-in fitting
C8	φ 8 push-in fitting
C10	φ 10 push-in fitting
CL8	φ 4 L type push-in fitting for fiber tube (top)
CL10	φ 6 L type push-in fitting for fiber tube (top)
CD8	φ 4 L type push-in fitting for fiber tube (bottom)
CD10	φ 6 L type push-in fitting for fiber tube (bottom)
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.

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMF0
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3QR
- 3QB
- 3MA/B0
- 3PA/B
- PMB
- NP/NAP
- NVP
- 4F*0E
- HMV
- HSV
- 2QV
- 3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

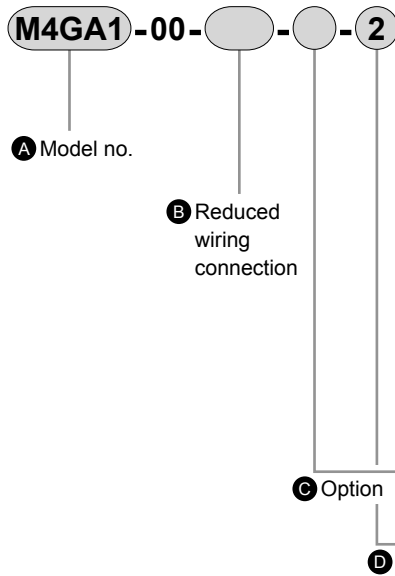
M4GA1 to 3/M4GB1 to 3 Series

Related parts

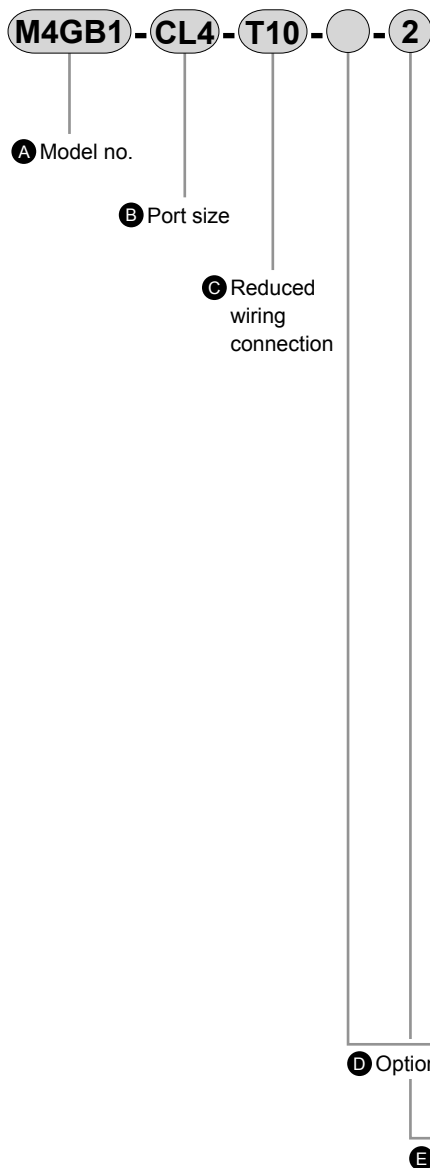
Related parts

(7) Manifold sub-plate kit reduced wiring type

● M4GA Sub-plate



● M4GB Sub-plate

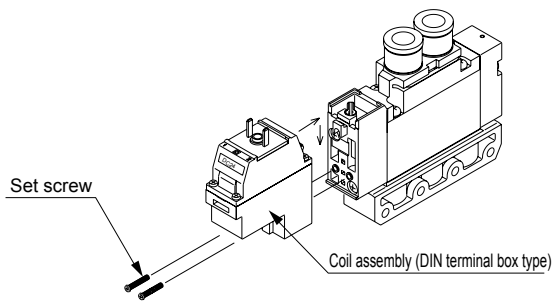
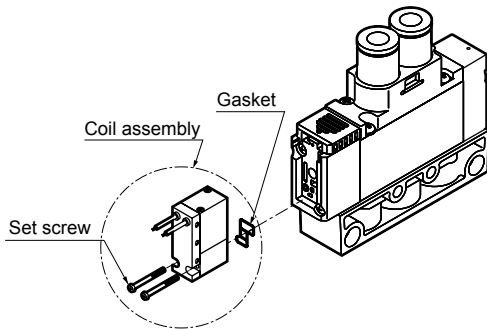


Symbol	Descriptions
A Model no.	
M4GA1	Metal base, 4G1 size, body piping
M4GA2	Metal base, 4G2 size, body piping
M4GA3	Metal base, 4G3 size, body piping
B Reduced wiring connection	
T10	Common terminal block/M3 thread (left)
T10R	Common terminal block/M3 thread (right)
T11	Common terminal block/push tightening (left)
T11R	Common terminal block/push tightening (right)
T30	D sub-connector (left)
T30R	D sub-connector (right)
T50	20 pin flat cable connector (with power supply terminal) (left)
T50R	20 pin flat cable connector (with power supply terminal) (right)
T51	20 pin flat cable connector (without power supply terminal) (left)
T51R	20 pin flat cable connector (without power supply terminal) (right)
T52	10 pin flat cable connector (without power supply terminal) (left)
T52R	10 pin flat cable connector (without power supply terminal) (right)
T53	26 pin flat cable connector (without power supply terminal) (left)
T53R	26 pin flat cable connector (without power supply terminal) (right)
T56	20 pin flat cable connector (without power supply terminal) (left) For serial transmission slave unit OPP3 connection
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.

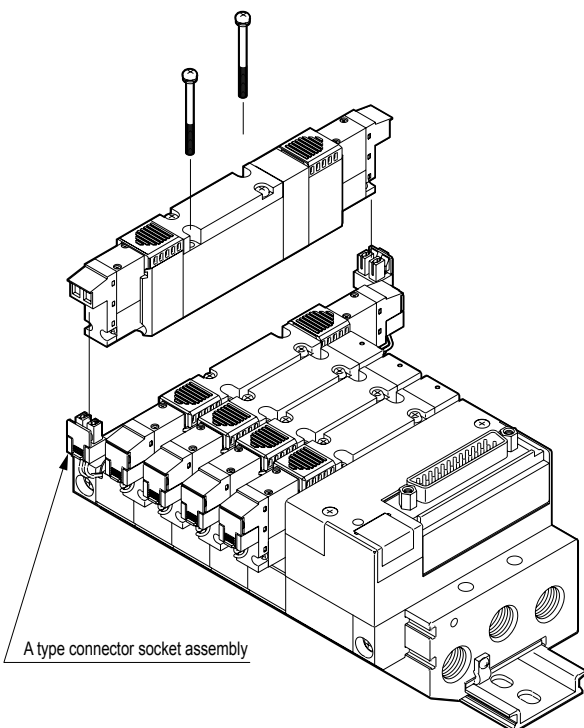
Symbol	Descriptions				
A Model no.					
M4GB1	Metal base 4G1 size base piping				
M4GB2	Metal base 4G2 size base piping				
M4GB3	Metal base 4G3 size base piping				
B Port size					
Port	A/B port	P/R1/R2 port (2)=Rc1/8 (3)=Rc1/4 (4)=Rc3/8			
C18	φ 1.8 push-in fitting for fiber tube (applicable tube UP-9402-**)	(2)	(2)		
C4	φ 4 push-in fitting	(2)	(3)	(2)	(3)
C6	φ 6 push-in fitting	(2)	(3)	(2)	(3)
C8	φ 8 push-in fitting		(3)		(4)
C10	φ 10 push-in fitting				(4)
CL18	φ 1.8 L type push-in fitting for fiber tube (upward) (applicable tube UP-9402-**)			(2)	
CL4	φ 4 L type push-in fitting for fiber tube (upward)			(2)	
CL6	φ 6 L type push-in fitting for fiber tube (upward)	Note 3, 4		(2)	(3)
CL8	φ 8 L type push-in fitting for fiber tube (upward)	Note 3, 4			(3)
CL10	φ 10 L type push-in fitting for fiber tube (upward)	Note 3, 4			(4)
CD18	φ 1.8 L type push-in fitting for fiber tube (downward) (applicable tube UP-9402-**)	(2)	(2)		
CD4	φ 4 L type push-in fitting for fiber tube (downward)	(2)	(2)		
CD6	φ 6 L type push-in fitting for fiber tube (downward)	(2)	(3)	(2)	(3)
CD8	φ 8 L type push-in fitting for fiber tube (downward)		(3)		(4)
CD10	φ 10 L type push-in fitting for fiber tube (downward)				(4)
CF	φ 1.8 barbed fitting for fiber tube (applicable tube UP-9102-**)	(2)	(2)		
M5	M5	(2)	(2)		
06	Rc1/8		(3)		(3)
08	Rc1/4				(4)
C Reduced wiring connection					
T10	Common terminal block/M3 thread (left)				
T10R	Common terminal block/M3 thread (right)				
T11	Common terminal block/push tightening (left)				
T11R	Common terminal block/push tightening (right)				
T30	D sub-connector (left)				
T30R	D sub-connector (right)				
T50	20 pin flat cable connector (with power supply terminal) (left)				
T50R	20 pin flat cable connector (with power supply terminal) (right)				
T51	20 pin flat cable connector (without power supply terminal) (left)				
T51R	20 pin flat cable connector (without power supply terminal) (right)				
T52	10 pin flat cable connector (without power supply terminal) (left)				
T52R	10 pin flat cable connector (without power supply terminal) (right)				
T53	26 pin flat cable connector (without power supply terminal) (left)				
T53R	26 pin flat cable connector (without power supply terminal) (right)				
T56	20 pin flat cable connector (without power supply terminal) (left) For serial transmission slave unit OPP3 connection				
D Option					
Blank					
K	External pilot				
F	A/B port filter integrated				
E Station no.					
2	2 stations				
to	to				
20	Refer to the specifications page for the max. station no.				

Related parts

(8) Coil assembly



(9) Lead wire related parts



Coil assembly

No.	Parts name	Model no.
1	Coil assembly	4G - 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
Blank: Grommet lead wire
B includes the DIN terminal box

Coil parts

Part model no.
4G-COIL-GASKET
4G-COIL-SET-SCREW

Note) There is no compatibility between the DIN terminal box type and other coil assemblies.

Socket assembly

No.	Parts name	Model no.
2	E type connector socket assembly	4G-SOCKET-ASSY-E** - Voltage
3	Socket assembly with cover	4G-SOCKET-ASSY-E**J
4	DIN terminal box assembly	4G-TERMINAL-BOX - Voltage

Socket set

Part model no.
4G-SOCKET-SET

A type connector socket assembly

Part model no.
4G[*1]-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.

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

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 0 - CX - T30 - 9 - 3

Type of solenoid valve Solenoid position Port size Electrical connections Terminal and connector pin wiring 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	C18,CF,C4,C6, × (plug)
4G2	C4,C6,C8, × (plug)
4G3	C6,C8,C10, × (plug)

*A/B port fitting mix with the body piping type is not supported.

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
NC (normally closed)	B
NO (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.

Solenoid valve model no.	FittingCX		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 19-CX	C6	X	○	○																								2
4G ^B ₁ 19-C6					○	○																						2
4G ^B ₁ 29-C6							○	○																				2
4G ^B ₁ 59-CX	C6	C4							○	○																		2
4G ^B ₁ 9-																												
3G ^A ₁ 9-																												
Masking plate 4G1-MP (S)																												
Masking plate 4G1-MP (D)																												1
Mounting rail	L ₂ =	Attached Part	Blanking plug			Thread plug			Silencer																			
			PG-P2-B	GWP4-B	GWP6-B	4G1-M5P	SLW-6S	SLW-6A																				
			Cable with D sub-connector			N4T-CABLE-D0□□			Push-in fitting tube remover (standard)			No./required (check)																

Indicate X for a plug

Indicate "CX" when changing the fitting combination

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

Check if the tube remover (standard attached product) is not required.

There are manifold specifications for each model. Fill out the applicable specifications.

- Individual wiring...M4G^A_B1 (page 168), M4G^A_B2 (page 169), M4G^A_B3 (page 170)
- Reduced wiring
 - Common terminal block (T1*): M4G^A_B1 (page 171), M4G^A_B2 (page 172), M4G^A_B3 (page 173)
 - Flat cable connector (T5*): M4G^A_B1 (page 174), M4G^A_B2 (page 175), M4G^A_B3 (page 176)
 - Serial transmission (T6*): M4G^A_B1 (page 177), M4G^A_B2 (page 178), M4G^A_B3 (page 179)

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.

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

M4GA1 to 3/M4GB1 to 3 Series

How to prepare wiring specifications sheet

This is not required for standard wiring and double wiring.

● Wiring specifications (example)

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

Connector pin no.		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						a											
18	10							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																	
23	20																	
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 400)

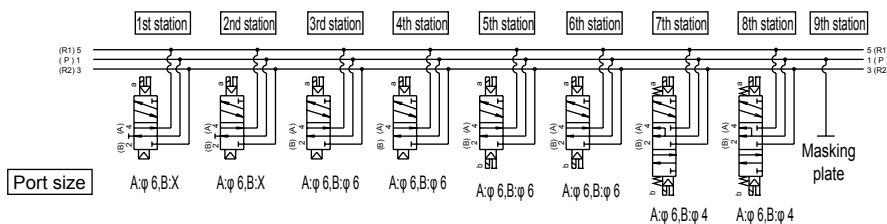
The number of reserved wires can be specified by selecting the masking plate in specifications.

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

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

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

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



* The manifold station no. is set in order from left with the piping port facing forward.

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

M4G1 reduced wiring

M4G^A_B1-T1/3 manifold specifications

Date of issue / /

Your company name

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

Slip no.	Order no. .
----------	-------------

Contact

Order no.

● Manifold model no.

M **G^A_B1** **0-** - - - - - -

Type of solenoid valve Solenoid position Port size Reduced wiring connection Terminal and connector pin wiring Option Mount type Station no. Voltage

Solenoid valve model no.	FittingCX		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 9																												
4G 1 9																												
4G 1 9																												
4G 1 9																												
3G 1 9																												
3G 1 9																												
Masking plate 4G1-MP (S) -																												
Masking plate 4G1-MP (D) -																												
Air supply spacer 4G1-P-																												
Air supply spacer 4G1-P-																												
Mounting rail L ₂ = 	Accessories	Blanking plug						Thread plug						Silencer														
		PG-P2-B		GWP4-B		GWP6-B		4G1-M5P		SLW-6S		SLW-6A																
		Cable with D sub-connector						N4T-CABLE-D0*~*						Push-in fitting tube remover (standard) Not required (check)														

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

Connector pin no.			Installation position																								
T10/T10R	T11/T11R	T30/T30R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	1	1																									
2	2	14																									
3	3	2																									
4	4	15																									
5	5	3																									
6	6	16																									
7	7	4																									
8	8	17																									
9	9	5																									
10	10	18																									
11	11	6																									
12	12	19																									
13	13	7																									
14	14	20																									
COM	15	8																									
COM	16	21																									
	17	9																									
	18	22																									
	19	10																									
	20	23																									
	21	11																									
	22	24																									
	23	12																									
	24	25																									
	COM	13 (COM)																									
	COM																										

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

M4G3 reduced wiring

M4G^A_B3-T1/3 manifold specifications

Date of issue / /

Your company name

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

Slip no.	Order no. .
----------	-------------

Contact

Order no.

● Manifold model no.

M **G^A_B3** **0-** - - - - - - -

Type of solenoid valve Solenoid position Port size Reduced wiring connection Terminal and connector pin wiring Option Mount type Station no. Voltage

Solenoid valve model no.	FittingCX		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 ^A _B 3	3	9																											
4G ^A _B 3	3	9																											
4G ^A _B 3	3	9																											
4G ^A _B 3	3	9																											
3GA3		9																											
3GA3		9																											
Masking plate 4G3-MP (S) -																													
Masking plate 4G3-MP (D) -																													
Air supply spacer 4G3-P-																													
Air supply spacer 4G3-P-																													
In stop valve spacer 4G3-IS																													
Mounting rail	L ₂ = 	Accessories	Blanking plug						Thread plug						Silencer														
			GWP6-B		GWP8-B		GWP10-B		4G3-08P		SLW-10A		SLW-10L																
			Cable with D sub-connector						N4T-CABLE-D0*-*																				

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

Connector pin no.			Installation position																								
T10/T10R	T11/T11R	T30/T30R	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
1	1	1																									
2	2	14																									
3	3	2																									
4	4	15																									
5	5	3																									
6	6	16																									
7	7	4																									
8	8	17																									
9	9	5																									
10	10	18																									
11	11	6																									
12	12	19																									
13	13	7																									
14	14	20																									
COM	15	8																									
COM	16	21																									
	17	9																									
	18	22																									
	19	10																									
	20	23																									
	21	11																									
	22	24																									
	23	12																									
	24	25																									
	COM	13 (COM)																									
	COM																										

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
GMF
- PV5
GMF
- PV5S-0
- 3QR
3QB
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
NVP
- 4F*0E
- HMV
HSV
- 2QV
3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4G2 reduced wiring

M4G^A_B2-T5 manifold specifications

Date of issue / /

Your company name _____

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

Slip no. _____	Order no. . _____
----------------	-------------------

Contact _____

Order no. _____

● Manifold model no.

M **G^A_B2** **0-** - - -

Type of solenoid valve Solenoid position Port size Reduced wiring connection Terminal and connector pin wiring Option Mount type Station no. Voltage

Solenoid valve model no.	FittingCX		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 9-																													
4G 2 9-																													
4G 2 9-																													
4G 2 9-																													
3G 2 9-																													
3G 2 9-																													
Masking plate 4G2-MP (S) -																													
Masking plate 4G2-MP (D) -																													
Air supply spacer 4G2-P-																													
Air supply spacer 4G2-P-																													
In stop valve spacer 4G2-IS																													
Mounting rail	L ₂ = 	Accessories	Blanking plug				Thread plug				Silencer																		
			GWP4-B		GWP6-B		GWP8-B		4G2-06P		SLW-8S		SLW-8A																

● Wiring specifications (Not required for standard wiring and double wiring. Complete these specifications when specifying the wiring order and additional 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	9	COM	9																								
10 + (COM) power supply	10	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 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.

- 4GA/B
- M4GA/B
- 4GA4/B4
- MN4GA/B
- 4GA/B (Master)
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- 4TB
- 4L2-4/LMFO
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (Master)
- 4F
- 4F (Master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3QR
- 3QB
- 3MA/B0
- 3PA/B
- P/MB
- NP/NAP
- NVP
- 4F*0E
- HMV
- HSV
- 2QV
- 3QV
- SKH
- PCD
- Silencer
- Total air system
- Total air system (Gamma)
- Ending

M4G2 serial transmission type

M4G^A_B2-T6D manifold specifications

Date of issue / /

Your company name

Contact

Order no.

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

Slip no. Order no. .

● Manifold model no.

M **G^A_B2** **0-** **-** **D-** **-** **3**

Type of solenoid valve Solenoid position Port size Serial transmission Terminal and connector pin wiring Option Station no. Voltage

Solenoid valve model no.	FittingCX		Valve installation position																Quantity			
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16				
4G 2 9																						
4G 2 9																						
4G 2 9																						
4G 2 9																						
3G 2 9																						
3G 2 9																						
Masking plate 4G2-MP (S)																						
Masking plate 4G2-MP (D)																						
Air supply spacer 4G2-P-																						
Air supply spacer 4G2-P-																						
In stop valve spacer 4G2-IS																						
Mounting rail L ₂ = Accessories	Blanking plug								Thread plug				Silencer									
	GWP4-B	GWP6-B	GWP8-B	4G2-06P	SLW-8S	SLW-8A																

● Wiring specifications (Not required for standard wiring and double wiring. Complete these specifications when specifying the wiring order and additional 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: UNIWIRE SYSTEM 8 points																					
5																						
6	T6A1: UNIWIRE SYSTEM 16 points																					
7																						
8	T6C0: CompoBus/S 8 points																					
9																						
10	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																						

M4G3 serial transmission type

M4G^A_B3-T6D manifold specifications

Date of issue / /

Your company name

Contact

Order no.

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

Slip no. Order no. .

● Manifold model no.

M **G^A_B3** **0-** **-** **D** **-** **-** **3**

Type of solenoid valve Solenoid position Port size Serial transmission Terminal and connector pin wiring Option Station no. Voltage

Solenoid valve model no.	FittingCX		Valve installation position																Quantity	
	A	B	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16		
4G: 3 9																				
4G: 3 9																				
4G: 3 9																				
4G: 3 9																				
4G: 3 9																				
3GA3 9																				
3GA3 9																				
Masking plate 4G3-MP (S) -																				
Masking plate 4G3-MP (D) -																				
Air supply spacer 4G3-P-																				
Air supply spacer 4G3-P-																				
In stop valve spacer 4G3-IS																				
Mounting rail Lz= <input type="text"/>	Accessories	Blanking plug				Thread plug				Silencer										
		GWP6-B	GWP8-B	GWP10-B	4G3-08P	SLW-10A	SLW-10L													

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

Connector pin no.		Installation position															
T6*		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
T6A0: UNIWIRESYSTEM 8 points	1																
	2																
	3																
	4																
	5																
T6A1: UNIWIRESYSTEM 16 points	6																
	7																
T6C0: CompoBus/S 8 points	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																
T6J0: UNIWIRESYSTEM H 8 points	13																
T6J1: UNIWIRESYSTEM H 16 points	14																
	15																
	16																
	17																
	18																
19																	
20	COM																

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

Discontinue