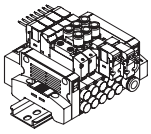
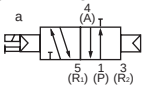
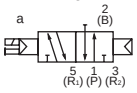
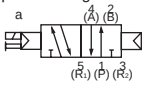
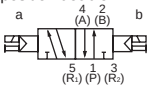
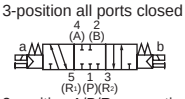
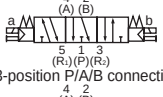
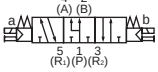
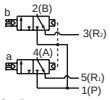
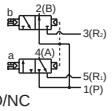
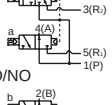
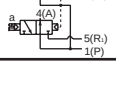
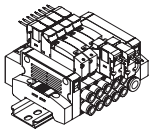
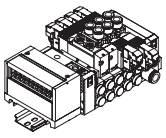
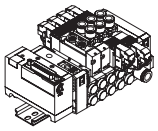
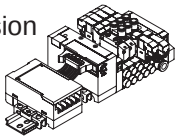
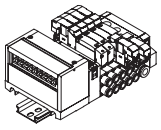
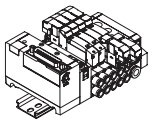
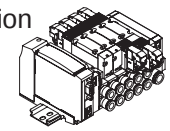
Series variation

MN4GA/4GB Series

* Refer to page 7 for metal base (integrated).
* Refer to page 321 for the master valve.

Series appearance			Model No.	Electrical connections	Position Number of solenoids JIS symbol	Valve performance: Flow characteristics C [dm³/(s·bar)] *1	Valve performance: Applicable cylinder bore size	Voltage (V)
Individual wiring manifold	Body piping	MN4GA180R 	MN4GA1	Blank -E □	● 3-port valve 2-position single NC  2-position single NO  ● 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  ● Two 3-port valves integrated NC/NC  NC/NO  NO/NC  NO/NO 	1.0 to 1.2	ø20 to ø40	100 AC 200 AC 24 DC 12 DC 3 DC 5 DC (*2)
			MN4GA2	Blank -E □ -B		2.2 to 2.5	ø40 to ø80	
	Base piping	MN4GB180R 	MN4GB1	Blank -E □		1.0 to 1.2	ø20 to ø40	
			MN4GB2	Blank -E □ -B		2.2 to 2.5	ø40 to ø80	
Reduced wiring manifold	Body piping	Terminal MN4GA280R 	MN4GA1 (N3GA1) (N4GA1)	-T10 -T11 (-A2N)		1.0 to 1.2	ø20 to ø40	24 DC 12 DC
			MN4GA2 (N3GA2) (N4GA2)			2.2 to 2.5	ø40 to ø80	
		Connector MN4GA280R 	MN4GA1 (N3GA1) (N4GA1)	-T30 -T5 □ (-A2N)		1.0 to 1.2	ø20 to ø40	24 DC 12 DC
			MN4GA2 (N3GA2) (N4GA2)			2.2 to 2.5	ø40 to ø80	
		Serial transmission MN4GA180R 	MN4GA1 (N3GA1) (N4GA1)	-T6G1 -T7 □ -T8 □ (-A2N)		1.0 to 1.2	ø20 to ø40	24 DC
			MN4GA2 (N3GA2) (N4GA2)			2.2 to 2.5	ø40 to ø80	
	Base piping	Terminal MN4GB180R 	MN4GB1 (N4GB1)	-T10 -T11 (-A2N)		1.0 to 1.2	ø20 to ø40	24 DC 12 DC
			MN4GB2 (N4GB2)			2.2 to 2.5	ø40 to ø80	
		Connector MN4GB180R 	MN4GB1 (N4GB1)	-T30 -T5 □ (-A2N)		1.0 to 1.2	ø20 to ø40	24 DC 12 DC
			MN4GB2 (N4GB2)			2.2 to 2.5	ø40 to ø80	
		Serial transmission MN4GB280R 	MN4GB1 (N4GB1)	-T6G1 -T7 □ -T8 □ (-A2N)		1.0 to 1.2	ø20 to ø40	24 DC
			MN4GB2 (N4GB2)			2.2 to 2.5	ø40 to ø80	

*1: Effective cross-sectional area S and sonic conductance C are converted as S ≈ 5.0 × C.
*2: The grommet lead wire specifications are compatible with DC voltage only.
*3: Only compatible with the base piping models.
*4: Specifications for reduced wiring equipped manifolds. Only 12/24 VDC is supported.

Switching position									A/B Piping port																		A/B Piping port						Electrical connections															Page
2-position				3-position				Two 3-port valves integrated	Barbed fitting	Push-in fitting				Push-in L-fitting (upward) (*3)				Push-in L-fitting (downward)				Female thread		Push-in fitting				Female thread		Single, indiv wiring				Reduced wiring												
Normally closed	Normally open	Single	Double	All ports closed	ABR connection	PAB connection	Mix	ø1.8	ø1.8	ø4	ø6	ø8	ø1.8	ø4	ø6	ø8	ø1.8	ø4	ø6	ø8	M5	Rc1/8	ø1/8"	ø5/32"	ø1/4"	ø5/16"	NPT1/8	G1/8	Grommet lead (*2)	E-connector	EJ-connector	DIN terminal box	A-connector (*4)	Common terminal block	D-sub-connector	Flat cable with power supply terminal	Flat cable without power supply terminal	Serial transmission							
CF	C18	C4	C6	C8	CL18	CL4	CL6	CL8	CD18	CD4	CD6	CD8	M5	06	C3N	C4N	C6N	C8N	06N	06G	Blank	E□	EJ	B□	A2N	T1□	T30	T50	T5□	T6G1	T7□	T8□													
●	●	●	●	●	●	●	●	●	●	●	●	●									●				●																				230
●	●	●	●	●	●	●	●	●			●	●	●									●				●	●	●	●																	
		●	●	●	●	●	●	●	●	●	●	●		●	●	●		●	●	●				●	●					●	●	●															238
		●	●	●	●	●	●	●			●	●	●			●	●		●	●				●	●	●	●			●	●	●														
●	●	●	●	●	●	●	●	●	●	●	●	●									●				●								●	●													246
●	●	●	●	●	●	●	●	●			●	●	●									●				●	●	●	●																	
●	●	●	●	●	●	●	●	●	●	●	●	●									●				●								●		●	●	●									
●	●	●	●	●	●	●	●	●			●	●	●									●				●	●	●	●																	
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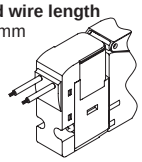
		●	●	●	●	●	●	●			●	●	●			●	●		●	●				●	●	●	●			●	●	●														262
		●	●	●	●	●	●	●	●	●	●	●		●	●	●		●	●	●				●	●					●	●	●														
		●	●	●	●	●	●	●			●	●	●									●				●								●		●	●	●								
		●	●	●	●	●	●	●	●	●	●	●									●				●	●	●	●																	
		●	●	●	●	●	●	●			●	●	●			●	●		●	●				●	●	●	●			●	●	●														

Electrical connections

Discrete valve/individual wiring manifold

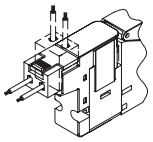
Blank Grommet lead wire Ⓐ

● **Lead wire length**
300mm

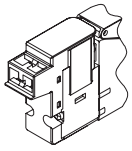


EO E-connector Ⓐ

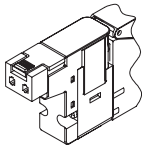
● **Lead wire length**
300mm
500mm
1m
2m
3 m



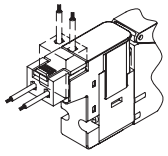
E0N E-connector without socket



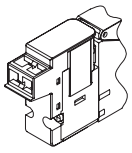
E1 E-connector with socket/terminal



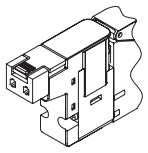
E2 E-connector ⒶⒷⒸ



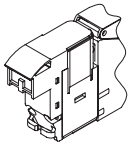
E2N E-connector without socket ⒷⒸ



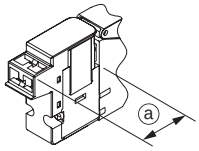
E3 E-connector with socket/terminal ⒷⒸ



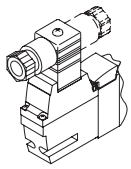
A2N A-connector downward without socket



● For AC voltages, the ⓐ dimension is 3.5mm longer than for DC voltages.

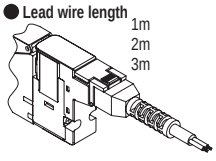


B BN DIN terminal box (BN):without terminal box)

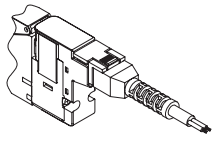


E0*J EJ-connector Ⓐ

● **Lead wire length**
1m
2m
3m

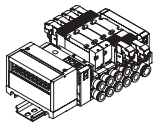


E2*J EJ-connector ⒶⒷⒸ

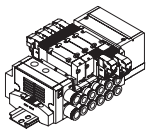


Reduced wiring manifolds

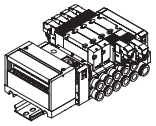
T10 Common terminal block M3 thread specifications (left)



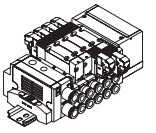
T10R Common terminal block M3 thread specifications (right side)



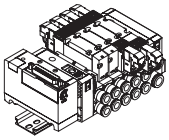
T11 Common terminal block clamping specifications (left side)



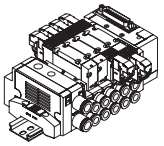
T11R Common terminal block clamping specifications (left side)



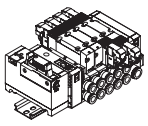
T30 D-sub-connector (Left)



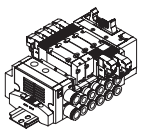
T30R D-sub-connector (Right)



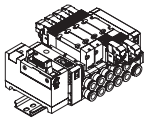
T50 Flat cable with power supply terminal (left side)



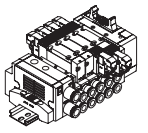
T50R Flat cable with power supply terminal (right side)



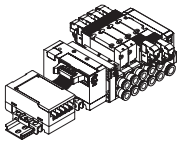
T5 1 2 3 Flat cable/power supply terminaland(Left)



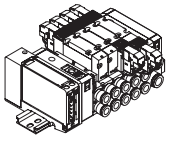
T5 1 2 3 R Flat cable without power supply terminal (right side)



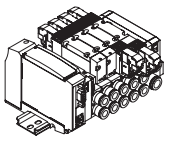
T6G1 Serial transmission



T7*0 T7*1 Serial transmission thin slot type



T8*1 T8*2 Serial transmission thin slot type

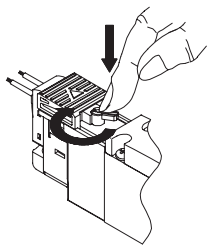


ⒶWith lead wire
ⒷWith indicator lamp
ⒸWith surge suppressor

Manual override

Blank Non-locking/locking common

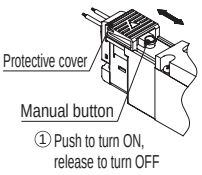
(Standard equipment)



①For non-locking, push to turn ON and release to turn OFF

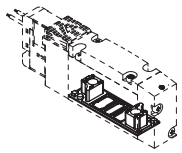
②For locking, push and turn 90° clockwise to hold the ON state. Turn counterclockwise to release OFF

M Non-locking



Other options

H With exhaust check valve



Standard for pilot exhaust

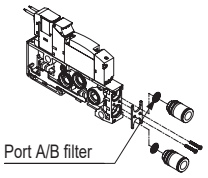
K External pilot

Main pressure and pilot pressure individual circuit specifications.

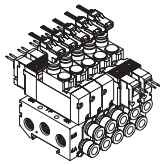
A Ozone/cutting fluid proof product

Ozone-proofing can be selected to prevent coolant from entering.

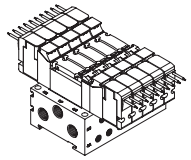
F Port A/B filter integrated



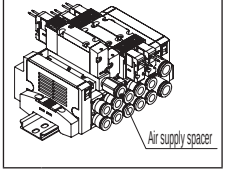
G1 G2 Pressure sensor



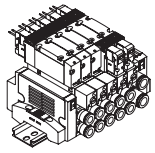
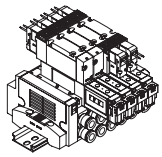
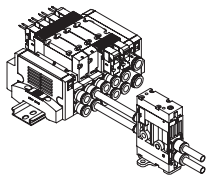
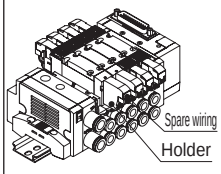
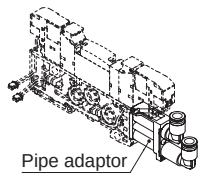
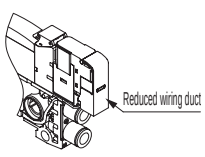
X X1 Residual pressure exhaust structure

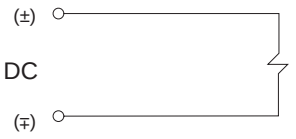
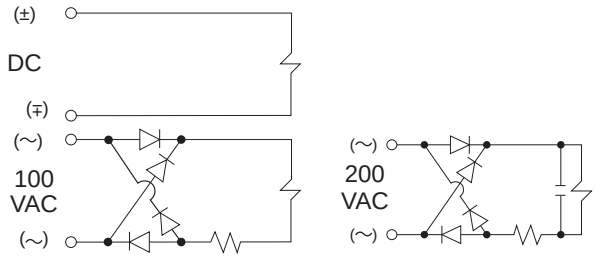
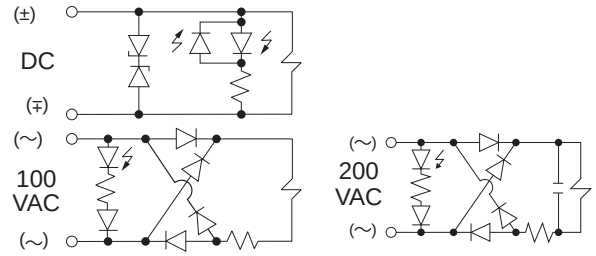
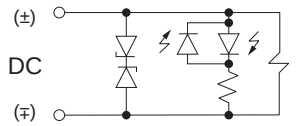
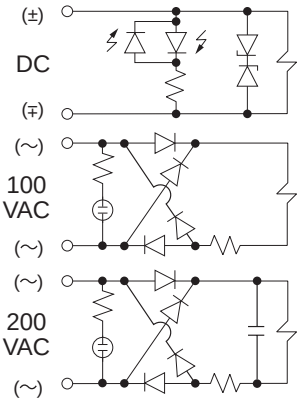
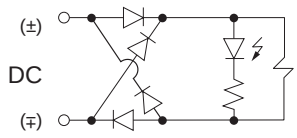
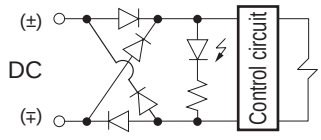


Z1 Z3 Air supply spacer Exhaust spacer



Electric connection circuit diagram

Other options
Z2 In-stop valve spacer

Z6 Spacer pilot check valve

Pilot check valve (separate) * Refer to page 194

W1 Single spare wiring

L With pipe adaptor

Q Reduced wiring duct


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