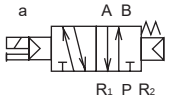
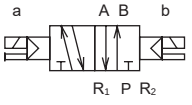
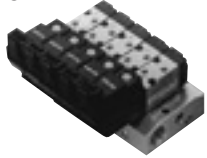
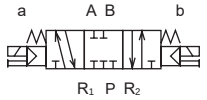
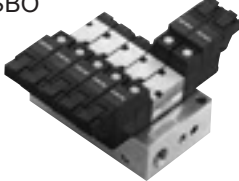


Series variation

4SA0/4SB0 Series

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

Series name/piping method			No. of ports	Position Number of solenoids JIS symbol	Valve performance			Voltage (V)	
					Effective cross-sectional area S [mm ²]	Flow characteristics C [dm ³ /(s·bar)] *1	Applicable cylinder bore size		
Single unit	Direct	4SAO 	5-port	● 2-position single 	0.9	-	ø6 to ø25	24 DC 12 DC	
	Sub-plate	4SBO 		● 2-position double 	-	0.29 to 0.33		Option 6 DC 5 DC	
Individual wiring manifold	Direct	M4SAO 		● 3-position all ports closed 	0.9	-		24 DC 12 DC	
	Sub-plate	M4SBO 		● 3-position ABR connection 	-	0.29 to 0.32		Option 6 DC 5 DC	
	Sub-plate	M4SBO 		● 3-position PAB connection 	-	0.29 to 0.32		24 DC 12 DC Option 6 DC 5 DC	
Reduced wiring manifold									

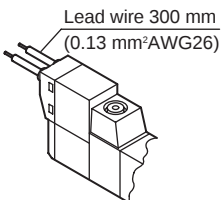
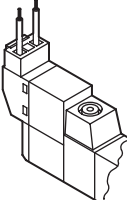
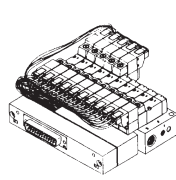
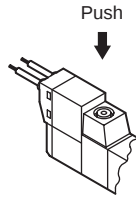
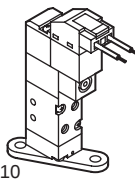
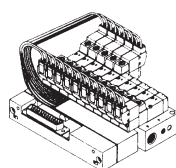
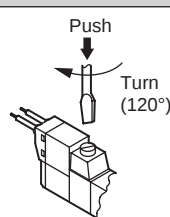
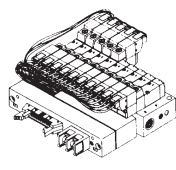
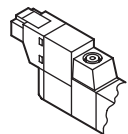
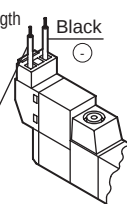
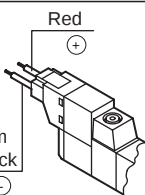
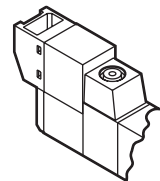
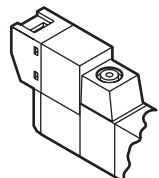
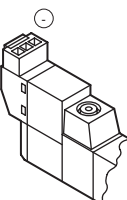
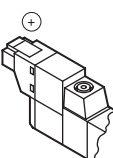
*1: Effective cross-sectional area S and sonic conductance C are converted as $S \approx 5.0 \times C$.

	Switching position						Port size of A/B port					Electrical connections					Page
	2-position single	2-position double	3-position all ports closed	3-position A/B/R connection	3-position P/A/B connection	Mix manifold	Barbed fitting		Female thread		Ø4 push-in fitting	Grommet lead wire	C-connector	D-connector	D sub-connector	Flat cable connector	
							Ø4 barbed fitting	Ø6 barbed fitting	M3	M5							
	●	●	●	●	●		●		●			●	●	●			1236
	●	●	●	●	●					●		●	●	●			1236
	●	●	●	●	●	●	●		●			●	●	●			1244
	●	●	●	●	●	●	●	●		●	●	●	●	●			1244
	●	●	●	●	●	●	●	●		●	●				●	●	1248

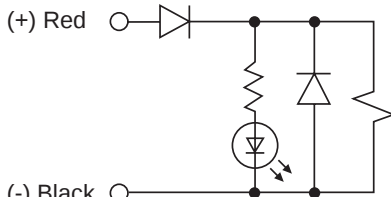
Note: Refer to the following page for details on electrical connections/other options.

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G GMF
PV5 GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4G*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

4SA0/4SB0 Series

4GA/B	Electrical connections				Manual override	Other options				
M4GA/B	Discrete valve/individual wiring manifold		Reduced wiring manifold							
MN4GA/B	Blank	Grommet lead wire	D	D-connector lead wire	C4 T31	D sub-connector lateral with surge suppressor and indicator lamp	Blank	Non-locking	P	Mounting plate
4GA/B (master)										
4GB With sensor		Lead wire 300 mm (0.13 mm²AWG26)		● Lead wire length D : 300 mm D00 : 500 mm D01 :1000 mm D02 :2000 mm						Only the 4SA010 can be attached
4GD/E										
M4GD/E										
MN4GD/E										
4GA/B4										
MN3E	C	C-connector lead wire	D1	D-connector with socket	D4 T30	D sub-connector upward with surge suppressor/lamp	M1	Locking		
MN4E										
W4GA/B2		● Lead wire length C : 300 mm C00 : 500 mm C01 :1000 mm C02 :2000 mm		Socket/crimping terminal attached						
W4GB4										
MN3S0										
MN4S0										
4SA/B0										
4KA/B	C1	C-connector with socket	D2	D-connector/with lead wire with surge suppressor/lamp	C4 T50	Flat cable connector with surge suppressor/lamp				
4KA/B (master)		Socket/crimping terminal attached		● Lead wire length D2 : 300 mm D20 : 500 mm D21 :1000 mm D22 :2000 mm						
4F										
4F (master)										
PV5G										
GMF										
PV5										
GMF										
PV5S-0	C2	C-connector with lead wire with surge suppressor/lamp	D2N	D-connector with surge suppressor/lamp						
3Q		● Lead wire length C2 : 300 mm C20 : 500 mm C21 :1000 mm C22 :2000 mm								
MV3QR										
3MA/B0										
3PA/B										
P/M/B	C2N	C-connector with surge suppressor/lamp	D3	D-connector with socket with surge suppressor/lamp						
NP/NAP										
NVP										
4G*0EJ				Socket · Crimping terminal attached						
4F*0EX										
4F*0E										
HMV										
HSV										
2QV	C3	C-connector, with socket, with surge suppressor/lamp								
3QV										
SKH		Socket · Crimping terminal attached								
Silencer										
TotAirSys (Total Air)										
TotAirSys (Gamma)										
Ending										

Internal circuit diagram with surge suppressor/lamp

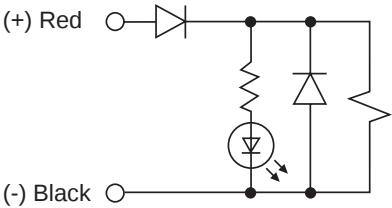


(+) Red

(-) Black

* Note that models with surge suppressor and lamp have polarity.
* Diode is used as a surge suppressor.

Internal circuit diagram with surge suppressor/lamp



* Note that models with surge suppressor and lamp have polarity.
* Diode is used as a surge suppressor.