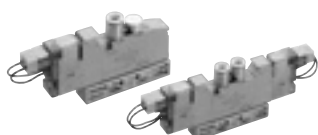
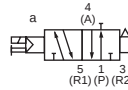
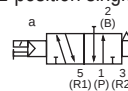
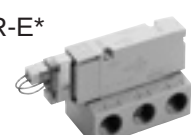
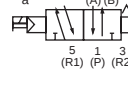
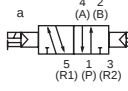
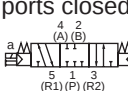
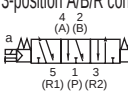
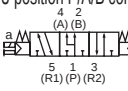
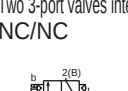
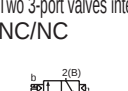
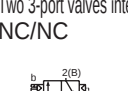


Series variation

4GD1 to 3/4GE1 to 3 Series

* Refer to page 609 for block manifold.

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA/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 external appearance			Model No.	Position Number of solenoids JIS symbol	Valve performance		Voltage (V)	
					Flow characteristic C [dm ³ /(s·bar)]	Applicable cylinder bore size (ø)		
					*1			
Single unit	3GD110R-E* 4GD120R-E* 	Body piping	3-port	3GD1 3GD2 3GD3	● 3-port valve 2-position single NC 	0.66 to 0.70 2.2 to 2.7 3.9	20 to 40 40 to 80 63 to 100	100 AC 200 AC 24 DC 12 DC (*2)
			5-port	4GD1 4GD2 4GD3		0.66 to 0.70 2.4 to 2.7 3.2 to 4.0	20 to 40 40 to 80 63 to 100	
		Base piping	3-port	3GE1 3GE2	2-position single NO 	1.0 2.1	20 to 40 40 to 80	
			5-port	4GE1 4GE2 4GE3		1.1 to 1.3 2.2 to 2.5 3.2 to 4.2	20 to 40 40 to 80 63 to 100	
	4GE310R-E* 	Body piping	3-port	3GD1 3GD2 3GD3	● 5-port valve 2-position single 	0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
			5-port	4GD1 4GD2 4GD3		0.67 to 1.0 1.6 to 2.4 2.6 to 3.3	20 to 40 40 to 80 63 to 100	
		Base piping	3-port	3GE1 3GE2 3GE3	2-position double 	0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
			5-port	4GE1 4GE2 4GE3		0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
Individual wiring manifold	M4GD280R-E*D M4GE110R-E*D M4GE280R-B	Body piping	Direct mount	M4GD1 M4GD2 M4GD3	3-position all ports closed 	0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	100 AC 200 AC 24 DC 12 DC (*2)
			DIN rail mount (-D)	M4GD1 M4GD2 M4GD3		0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
		Base piping	Direct mount	M4GE1 M4GE2 M4GE3	3-position A/B/R connection 	0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
			DIN rail mount (-D)	M4GE1 M4GE2 M4GE3		0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
Reduced wiring manifold	M4GD280R-T10 	Body piping	Terminal (-T1□) Connector (-T30, T5□)	M4GD1 M4GD2 M4GD3	3-position P/A/B connection 	0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
			Serial transmission (-T8□)	M4GD1 M4GD2 M4GD3		0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
		Mount DIN rail	Terminal (-T1□) Connector (-T30D, T5□)	M4GD1 M4GD2 M4GD3	Two 3-port valves integrated NC/NC 	0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
			Serial transmission (-T6G1) (-T8□)	M4GD1 M4GD2 M4GD3		0.66 to 1.0 1.7 to 2.5 2.5 to 3.3	20 to 40 40 to 80 63 to 100	
	M4GD180R-T8* 	Body piping	Terminal (-T1□) Connector (-T30, T5□)	M4GE1 M4GE2 M4GE3	Two 3-port valves integrated NC/NC 	0.67 to 1.0 1.6 to 2.4 2.6 to 3.3	20 to 40 40 to 80 63 to 100	
			Serial transmission (-T8□)	M4GE1 M4GE2 M4GE3		0.67 to 1.0 1.6 to 2.4 2.6 to 3.3	20 to 40 40 to 80 63 to 100	
		Mount DIN rail	Terminal block (-T1□) Connector (-T30D, T5□)	M4GE1 M4GE2 M4GE3	Two 3-port valves integrated NC/NC 	0.67 to 1.0 1.6 to 2.4 2.6 to 3.3	20 to 40 40 to 80 63 to 100	
			Serial transmission (-T6G1) (-T8□)	M4GE1 M4GE2 M4GE3		0.67 to 1.0 1.6 to 2.4 2.6 to 3.3	20 to 40 40 to 80 63 to 100	

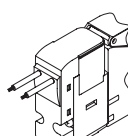
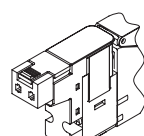
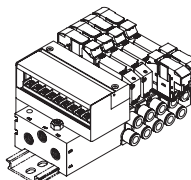
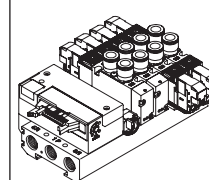
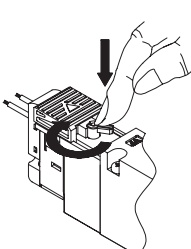
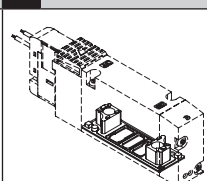
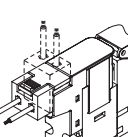
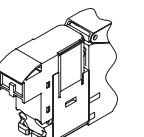
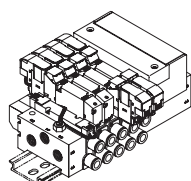
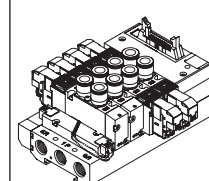
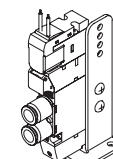
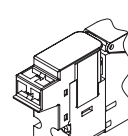
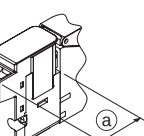
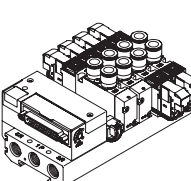
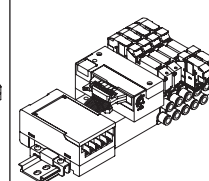
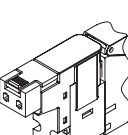
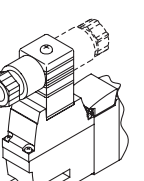
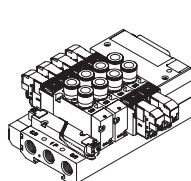
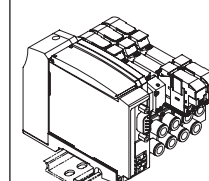
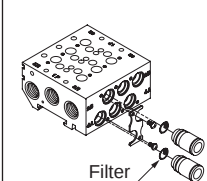
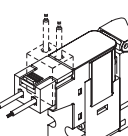
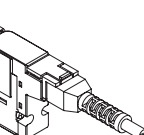
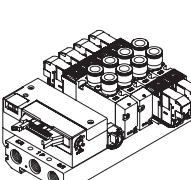
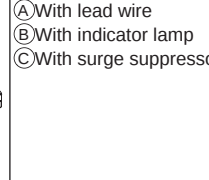
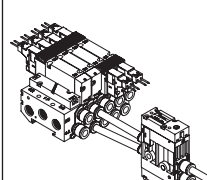
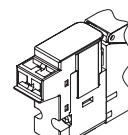
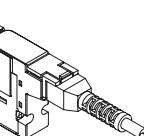
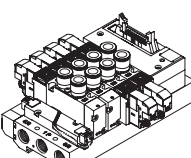
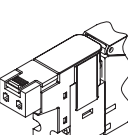
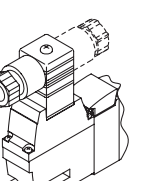
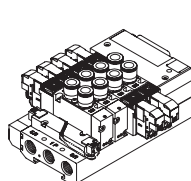
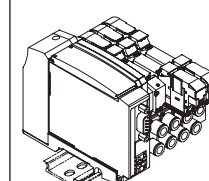
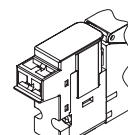
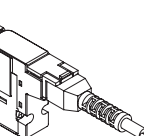
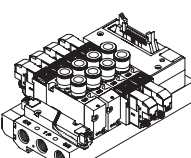
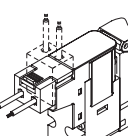
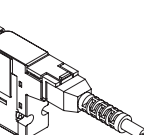
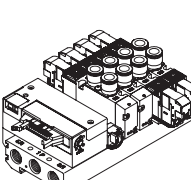
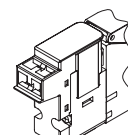
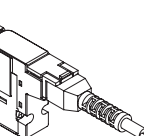
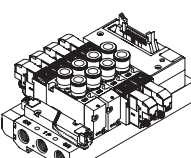
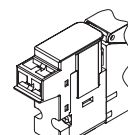
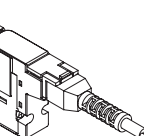
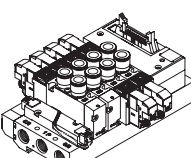
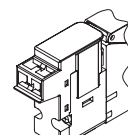
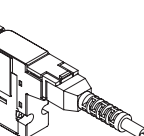
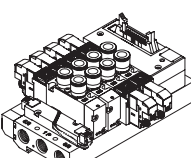
4GD1 to 3/4GE1 to 3 Series

Series variation

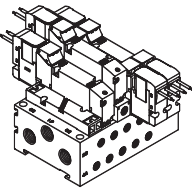
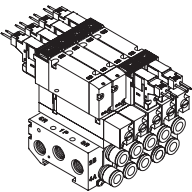
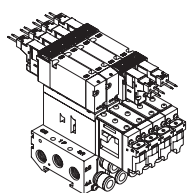
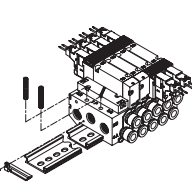
- *1: Effective cross-sectional area S and sonic conductance C are converted as $S = 5.0 \times C$.
 *2: The grommet lead wire specifications are for DC voltages only.
 *3: The two 3-port valves integrated is compatible with 3GD1/2 and 3GE1/2.
 *4: P/R piping port is either M5 or Rc thread.
 *5: Only compatible with the base piping 2-position single model.
 *6: Specifications for reduced wiring equipped manifolds. Only 12/24 VDC is supported.

	Switching position							A/B Piping port (*4)														Electrical connections														Selection page		
	2-position			3-position		Two 3-port valves integrated (*3)	Mix	Push-in fitting				Push-in L-fitting (upward) (*5)				Push-in L-fitting (downward)				Female thread				Single unit, individual wiring				Reduced wiring										
	Normally closed	Normally open	Single	Double	All ports closed			ABR connection	PAB connection	ø4	ø6	ø8	ø10	ø4	ø6	ø8	ø10	ø4	ø6	ø8	ø10	M5	Rc1/8	Rc1/4	Rc3/8	Grommet lead (*2)	E-conductor	EJ-conductor	DIN terminal box	A-conductor (*6)	Common terminal block	D-sub-conductor	Flat cable, power supply	Flat cable, no power supply	Serial transmission		Serial transmission	
																																						C4
	●	●					●	●	●												●				●	●	●											442
	●	●					●	●	●	●												●		●		●	●	●										
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4GD1 to 3/4GE1 to 3 Series

	Electrical connections				Manual override	Other options
	Discrete valve/individual wiring manifold		Reduced wiring manifold			
4GA/B	Blank Grommet lead wire(A) ● Lead wire length 300 mm 	E3 E-connector with socket/terminal(B)(C) 	T10 T11 Common terminal block (left side) M3 thread specifications/ push tightening specifications 	T51 T52 T53 Flat cable without power supply terminal (left side) 	Blank Non-locking/locking common (Standard equipment) 	H With exhaust check valve  Standard for pilot exhaust
M4GA/B						
MN4GA/B						
4GA/B (master)						
4GB With sensor	● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm 	E0 E-connector (A) 	T10R T11R Common terminal block (right side) M3 thread specifications/ push tightening specifications 	T51R T52R T53R Flat cable without power supply terminal (right side) 	(1) For non-locking, push to turn ON, release to turn OFF (2) For locking, push and turn 90° clockwise to hold the ON state. Turn counterclockwise to release OFF	P Mounting plate  Single unit (only body piping)
4GD/E						
M4GD/E						
MN4GD/E						
4GA/B4	E0N E-connector without socket 	● For 100 VAC, (a) dimension is 3.5 mm longer than 12/24 VDC. 	T30 D-sub-connector (left) 	T6G1 Serial transmission 		A Ozone/coolant proof product Select for coolant inflow and ozone measures.
MN3E						
MN4E						
W4GA/B2						
W4GB4	E1 E-connector with socket/terminal 	B BN DIN terminal box (BN: without terminal box) 	T30R D-sub-connector (right) 	T8*2 Serial transmission (thin) 		F A/B port filter integrated  Filter
MN3S0						
MN4S0						
4SA/B0						
4KA/B	E2 E-connector (A)(B)(C) ● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm 	E0*J EJ-connector (A) 	T50 Flat cable with power supply terminal (left side) 	T50R Flat cable with power supply terminal (right side) 	(A) With lead wire (B) With indicator lamp (C) With surge suppressor	Pilot check valve (separate) 
4KA/B (master)						
4F						
4F (master)						
PV5G	E2N E-connector without socket(B)(C) 	E2*J EJ-connector (A)(B)(C) 				
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						

Electric connection circuit diagram

Other options	
Z1	Air supply spacer/
Z3	exhaust spacer
	
Z2	In-stop valve spacer
	
Z6	Spacer pilot check valve
	
D	DIN rail mount
	

Electrical connections		Without lead wire	With lead wire	With indicator lamp	With surge suppressor	Without socket	Circuit diagram
Blank	Grommet lead wire		●				(±) ○ DC (⌚) ○
E0	E-connector		●				(±) ○ DC (⌚) ○ (⌚) ○ 100 VAC (⌚) ○
E0*J	EJ-connector		●				
E0N	E-connector					●	
E1	E-connector	●					(±) ○ DC (⌚) ○ (⌚) ○ 100 VAC (⌚) ○
E2	E-connector		●	●	●		
E2*J	EJ-connector		●	●	●		
E2N	E-connector			●	●	●	(±) ○ DC (⌚) ○ (⌚) ○ 100 VAC (⌚) ○
E3	E-connector	●		●	●		
A2N	A-connector			●	●	●	(±) ○ DC (⌚) ○
B	DIN terminal box	●		●	●		(±) ○ DC (⌚) ○ (⌚) ○ 100 VAC (⌚) ○ 200 VAC (⌚) ○
BN	DIN terminal box (without terminal box)	●			●		

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