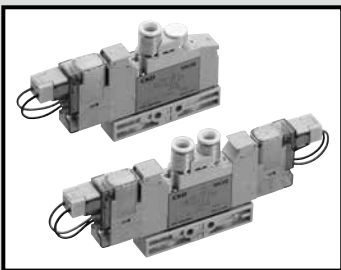


4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys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



Discrete valve
Body piping

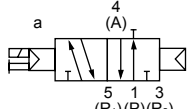
3GA1/2/3 / 4GA1/2/3 Series

● Cylinder bore size: $\varnothing 20$ to $\varnothing 100$

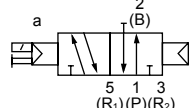


JIS symbol

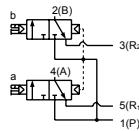
- 3-port valve
2-position single NC



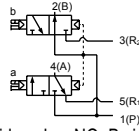
- Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



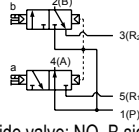
- Two 3-port valves integrated
(A side valve: NC, B side valve: NO)



- Two 3-port valves integrated
(A side valve: NO, B side valve: NC)

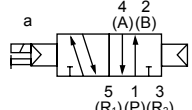


- Two 3-port valves integrated
(A side valve: NO, B side valve: NO)

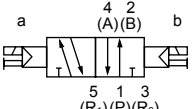


- 5-port valve

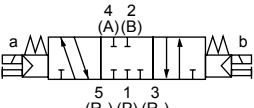
- 2-position single



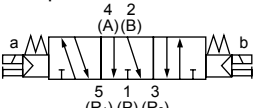
- 2-position double



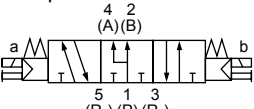
- 3-position all ports closed



- 3-position A/B/R connection



- 3-position P/A/B connection



Common specifications

Item	Description
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7 (≈100 psi, 7 bar)
Min. working pressure MPa	0.2 (≈29 psi, 2 bar)
Proof pressure MPa	1.05 (≈150 psi, 10.5 bar)
Ambient temperature °C	-5 (23°F) to 55 (131°F) (no freezing)
Fluid temperature °C	5 (41°F) to 55 (131°F)
Manual override	Lock/no lock common (standard)
Pilot exhaust method	Main valve/pilot valve common exhaust
Lubrication *1	Not required
Degree of protection *2	Dust-proof
Vibration resistance m/s ²	50 or less
Shock resistance m/s ²	300 or less
Atmosphere	Corrosive gas environment prohibited

- *1: Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.
- *2: Avoid water drops or oil, etc., during use. IP65 (jet-proof) applies for DIN terminal box specifications. However, the specified outer diameter of the applicable cord and tightening torque must be used for fixing in place.

Electrical specifications

Item	Description	Rated voltage V					
		DC24	DC12	DC5	DC3	AC100	AC200
Rated voltage V		DC24	DC12	DC5	DC3	AC100	AC200
Voltage fluctuation range		±10%					
Holding current A (*3)	Standard	0.015 (0.017)	0.030 (0.034)	0.072 (0.082)	0.120 (0.136)	0.009 (0.009)	0.006 (0.006)
	Low exoergic/energy circuit	0.005	0.010	-	-	-	-
Power consumption W (*3)	Standard	0.35(0.40)	0.35(0.40)	-	-	-	-
	Low exoergic/energy circuit	0.1	-	-	-	-	-
Apparent power VA (*3, 4)	Standard	-	-	-	-	0.93 (0.98)	1.40
	Low exoergic/energy circuit	-	-	-	-	-	-
Thermal class		B					
Surge suppressor		Option					
Indicator		Lamp (option)					

- *3: Values in () apply when lamp is included. In addition, the type with low exoergic/energy-saving circuit is only available with lamp.
- *4: 200 VAC is the value of DIN terminal box (with lamp).

Individual specifications

Port size		3GA1, 4GA1		3GA2, 4GA2		3GA3, 4GA3	
		A/B port	P/R1/R2 port	A/B port	P/R1/R2 port	A/B port	P/R1/R2 port
Rc thread, M5	A/B port	Barbed fitting $\varnothing 1.8$ push-in fitting $\varnothing 1.8, \varnothing 4, \varnothing 6$ M5		Push-in fitting $\varnothing 4, \varnothing 6, \varnothing 8$ Rc1/8		Push-in fitting $\varnothing 6, \varnothing 8, \varnothing 10$ Rc1/4	
NPT thread, M5	A/B port	Push-in fitting $\varnothing 1/8"$, $\varnothing 5/32"$		Push-in fitting $\varnothing 1/4"$, $\varnothing 5/16"$ NPT1/8		Push-in fitting $\varnothing 5/16"$, $\varnothing 3/8"$ NPT1/4 (*5)	
	P/R1/R2 port	M5		NPT1/8		NPT1/4 (*5)	
G thread	A/B port	-		Push-in fitting $\varnothing 4, \varnothing 6, \varnothing 8$ G1/8		Push-in fitting $\varnothing 8, \varnothing 10$ G1/4	
	P/R1/R2 port	-		G1/8		G1/4	

- *5: Available as custom-order.

Performance/characteristics by model

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

Values with lamp/surge suppressor are shown. The response times are the values with supply pressure of 0.5 MPa at 20°C without lubrication. They depend on the pressure and the lubricant quality.

Weight

Item			3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
Weight g	2-position	Single						
		Grommet lead wire	48(41)	104(74)	142(100)	48(41)	109(79)	151(109)
		E type connector	50(43)	106(76)	144(102)	50(43)	111(81)	153(111)
	2-position	DIN terminal box	-	141(111)	177(135)	-	146(116)	186(144)
		Double						
		Grommet lead wire	-	-	-	65(58)	127(97)	174(128)
	2-position	E type connector	-	-	-	69(62)	131(101)	178(132)
		DIN terminal box	-	-	-	-	169(139)	214(168)
		3-position						
3-position	All ports closed							
	Grommet lead wire	-	-	-	67(60)	139(109)	183(141)	
	E type connector	-	-	-	71(64)	143(113)	187(145)	
3-position	DIN terminal box	-	-	-	-	181(151)	223(181)	

- Values in () do not include the piping adapter. Values for the E type connector include the socket assembly (with 300 mm lead wire). For the EJ type connector, add 16 g/connector to the E type connector weight.
- The weight of the two 3-port valves integrated 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 4GA1	Two 3-port valves integrated		0.98	0.45	0.71	0.34
	2-position		1.2	0.47	0.72	0.37
	3-position	All ports closed	1.1	0.39	0.70	0.34
		ABR connection	1.1	0.33	0.72	0.34
		PAB connection	1.3	0.61	0.72	0.36
3GA2 4GA2	Two 3-port valves integrated		1.8	0.29	2.3	0.32
	2-position		2.4	0.33	2.8	0.30
	3-position	All ports closed	2.2	0.28	2.5	0.28
		ABR connection	2.3	0.26	2.8	0.27
		PAB connection	2.5	0.38	2.4	0.30
3GA3 4GA3	2-position		3.4	0.29	4.0	0.24
	3-position	All ports closed	3.1	0.27	3.4	0.28
		ABR connection	3.1	0.33	4.1	0.20
		PAB connection	3.5	0.43	3.4	0.32

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

Ozone-proof specifications

Coolant proof specifications

Can be selected with “How to order” Item (E) option “A” on page 14.

Clean-room specifications

- Anti-dust generation structure for use in cleanrooms

** - Voltage - **P7***

Specifications for rechargeable battery (Catalog No. CC-1226A)

- For use in the rechargeable battery manufacturing process, materials used for air path and sliding section are limited

** - Voltage - **P4**

CE marking specifications

** - Voltage - **ST**

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

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

Discrete valve; body piping

How to order

4GA1 1 0 R - C6 - E2 - 1

3GA1 1 0 R - C6 - E2 - 1

Discrete valve for mounting base

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

Discrete 3 port valve for mounting base

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

B Solenoid position

A Model No.

C Port size

D Electrical connections

Refer to page 11 for the circuit diagram with surge suppressor/lamp.

⚠ Precautions for model No. selection

E Option

*1 : For the 3GA normally closed, the piping connection 2 (B) and 3 (R2) ports are plugged.
For 3GA normally open type, avoid plugging the 5 (R1) port. Otherwise, malfunctions may result.

*2 : Dimensions are the same as the respective 2-position double solenoid.

*3 : 4G3 is a custom order product.

*4 : 3-position all ports closed and PAB connection are not provided with the exhaust check valve. Refer to page 851 for details on the exhaust check valve.

5 : E2 type and E2*J type connectors support 12/24 VDC only. In addition, surgeless "S" and low exoergic/energy-saving circuit "E" cannot be selected together.

*6 : Surgeless specifications.

*7 : A filter is built into the P-port as standard.

*8 : Only the DIN terminal box is supported.

F Voltage

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

Code	Description	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 (*1)	●	●	●			
11	2-position single normally open (*1)	●	●	●			
66	Two 3-port valves integrated (*2)	●	●				
67	Two 3-port valves integrated (*2)	A side valve: Normally closed					
		B side valve: Normally open		●	●		
76	Two 3-port valves integrated (*2)	A side valve: Normally open		●	●		
		B side valve: Normally closed					
77	Two 3-port valves integrated (*2)	A side valve: Normally open		●	●		
		B side valve: Normally open					

C Port size							
Port	4(A)/2(B) port	P/R1/R2 port (1) = M5, (2) = Rc1/8, (3) = Rc1/4					
CF	ø1.8 barbed fitting (compatible tube UP-9102-**) (1)			(1)			
C18	ø1.8 push-in fitting (compatible tube UP-9402-**) (1)			(1)			
C4	ø4 push-in fitting (1) (2)			(1) (2)			
C6	ø6 push-in fitting (1) (2) (3)			(1) (2) (3)			
C8	ø8 push-in fitting (2) (3)			(2) (3)			
C10	ø10 push-in fitting (3)			(3)			
M5	M5 (1)			(1)			
06	Rc1/8 (2)			(2)			
08	Rc1/4 (3)			(3)			
Port	4(A)/2(B) port	P/R1/R2 port (1) = M5, (5) = 1/8NPT, (6) = 1/4NPT					
C3N	ø1/8" push-in fitting (1)			(1)			
C4N	ø5/32" push-in fitting (1)			(1)			
C6N	ø1/4" push-in fitting (5)			(5)			
C8N	ø5/16" push-in fitting (*3) (5) (6)			(5) (6)			
C10N	ø3/8" push-in fitting (*3) (6)			(6)			
06N	NPT1/8 (5)			(5)			
08N	NPT1/4 (*3) (6)			(6)			
Port	4(A)/2(B) port	P/R1/R2 port (8) = G1/8 (9) = G1/4					
C4G	ø4 push-in fitting (8)			(8)			
C6G	ø6 push-in fitting (8)			(8)			
C8G	ø8 push-in fitting (8) (9)			(8) (9)			
C10G	ø10 push-in fitting (9)			(9)			
06G	G1/8 (8)			(8)			
08G	G1/4 (9)			(9)			

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 exhaust check valve (*4)	●	●	●	●	●	●
P	With mounting plate	●	●	●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●	●
S	Surgeless (*5)	●	●	●	●	●	●
E	Low exoergic/energy saving circuit (*5), (*6)	●	●	●	●	●	●
F	A/B port filter integrated (*7)	●	●	●	●	●	●

F Voltage

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

is not available.

○ indicates a custom order.

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

Discrete valve; body piping

[Electrical connections list]

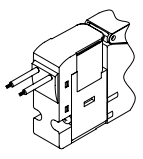
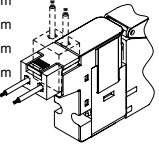
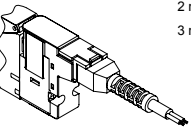
		A Model No.					
		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
D Electrical connections							
Blank	Grommet lead wire (300 mm) (*9)	●	●	●	●	●	●
B	DIN terminal box (Pg7) With surge suppressor/lamp (*10) (*12)		●	●		●	●
BN	DIN term. box (Pg7) (no terminal box) + surge suppressor (*10) (*12)		●	●		●	●
E type connector (upward/lateral common)							
E0	Lead wire (300 mm) (*11)	●	●	●	●	●	●
E00	Lead wire (500 mm) (*11)	●	●	●	●	●	●
E01	Lead wire (1000 mm) (*11)	●	●	●	●	●	●
E02	Lead wire (2000 mm) (*11)	●	●	●	●	●	●
E03	Lead wire (3000 mm) (*11)	●	●	●	●	●	●
E0N	Without lead wire (without socket)	●	●	●	●	●	●
E1	Without lead wire (socket/terminal attached) (*11)	●	●	●	●	●	●
E2	Lead wire (300 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E20	Lead wire (500 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E21	Lead wire (1000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E22	Lead wire (2000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E23	Lead wire (3000 mm), surge suppressor/indicator lamp	●	●	●	●	●	●
E2N	No lead wire (without socket), surge suppressor/indicator lamp	●	●	●	●	●	●
E3	No lead wire (with socket/terminal), surge suppressor/indicator lamp	●	●	●	●	●	●
EJ type connector (socket with cover, upward/lateral common)							
E01J	Lead wire (1000 mm) (*11)	●	●	●	●	●	●
E02J	Lead wire (2000 mm) (*11)	●	●	●	●	●	●
E03J	Lead wire (3000 mm) (*11)	●	●	●	●	●	●
E21J	Lead wire (1000 mm), surge suppressor, indicator lamp	●	●	●	●	●	●
E22J	Lead wire (2000 mm), surge suppressor, indicator lamp	●	●	●	●	●	●
E23J	Lead wire (3000 mm), surge suppressor, indicator lamp	●	●	●	●	●	●

*9 : Grommet lead wire specifications are compatible with DC voltage only.

*10: AC voltages and 12/24 VDC are supported. In addition, a lamp comes with the terminal box.

*11: AC voltage is with a rectifier circuit.

*12: The terminal box conforms to EN175301-803 Type C (former DIN 43650-C). Refer to pages 856 and 857 for details.

Electrical connections		4GA/B
Blank	Grommet lead wire	M4GA/B MN4GA/B
● Lead wire length 300 mm		4GA/B (master) 4GB With sensor 4GD/E M4GD/E
E1 E3	E type connector with socket/terminal	MN4GD/E
E0 E2	E type connector	4GA4/B4 MN3E MN4E W4GA/B2 W4GB4
● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm		MN3S0 MN4S0
E0N E2N	E type connector without socket	4SA/B0
BN	DIN terminal box without terminal box	4KA/B 4KA/B (master) 4F 4F (master) PV5G GMF PV5 GMF
E0*J E2*J	EJ type connector	PV5S-0
● Lead wire length 1 m 2 m 3 m		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

3GA1 Series

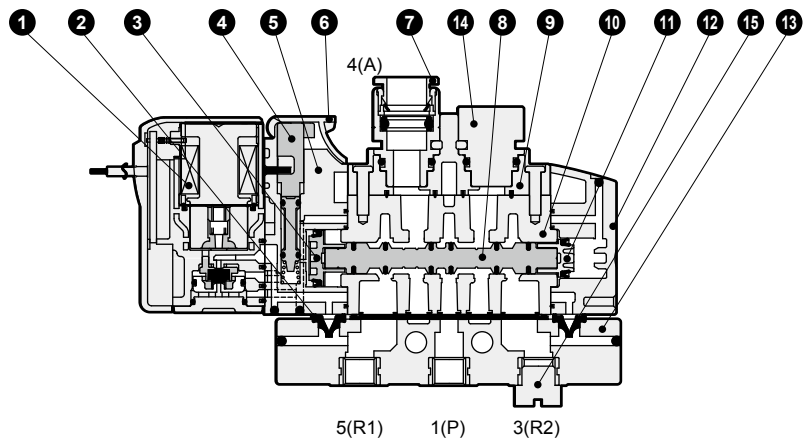
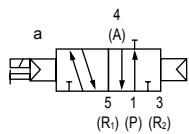
Discrete valve; body piping

Internal structure and parts list

- 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
- 3GA1 0R
- 66
- 67
- 76
- 77
- 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

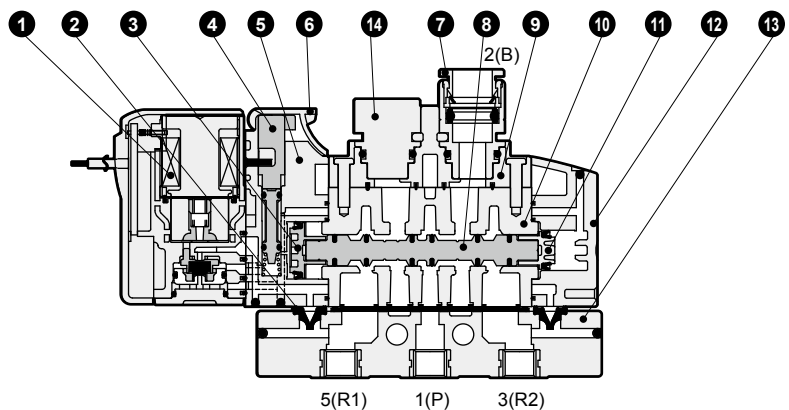
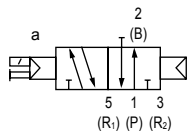
3GA110R

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



3GA1110R

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

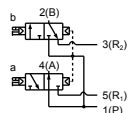
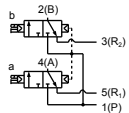


3GA1 0R

● Two 3-port valves integrated
Grommet lead wire (blank)

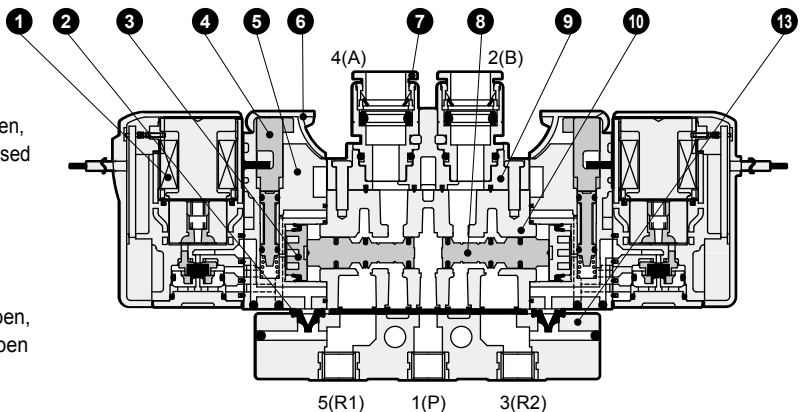
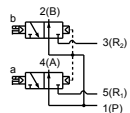
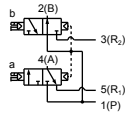
A side valve: Normally closed,
B side valve: Normally closed

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.	Part name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston D assembly	-
4	Manual override	Resin
5	Piston chamber	Resin
6	Manual protection cover	Resin
7	Cartridge 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 adapter	Resin
14	Plug cartridge	Aluminum
15	M5 plug	Copper alloy + nickel plating

Parts list

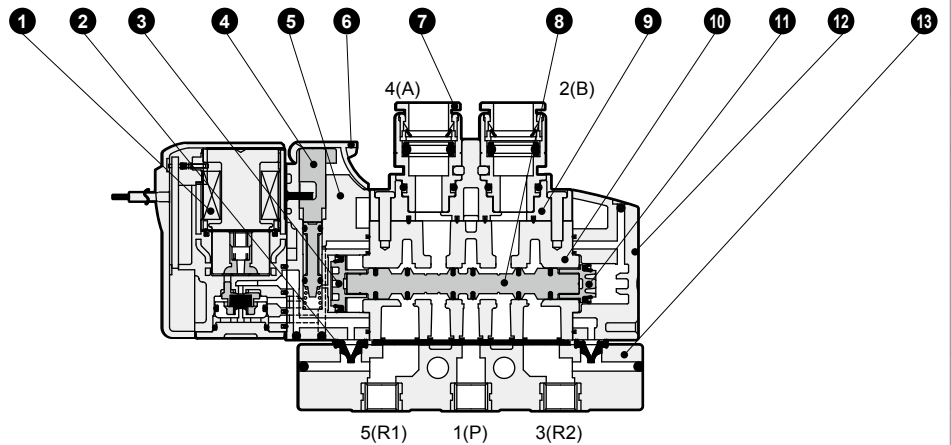
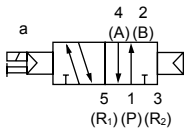
No.	Part name	Model No.
1	Coil assembly	4GR - [electrical connections] - [] - COIL - [voltage]
7	Cartridge push-in fitting and related parts	<ul style="list-style-type: none"> ø1.8 barbed 4G1R-JOINT-CF ø1.8 axial 4G1R-JOINT-C18 ø4 straight 4G1R-JOINT-C4 ø6 straight 4G1R-JOINT-C6 Plug cartridge 4G1R-JOINT-CPG ø1/8" straight 4G1R-JOINT-C3N ø5/32" straight 4G1R-JOINT-C4N

Blank: Standard
A: Ozone specifications
S: Surgeless
E: Low exothermic energy saving circuit
K: External pilot
Blank: Grommet lead wire

Internal structure and parts list

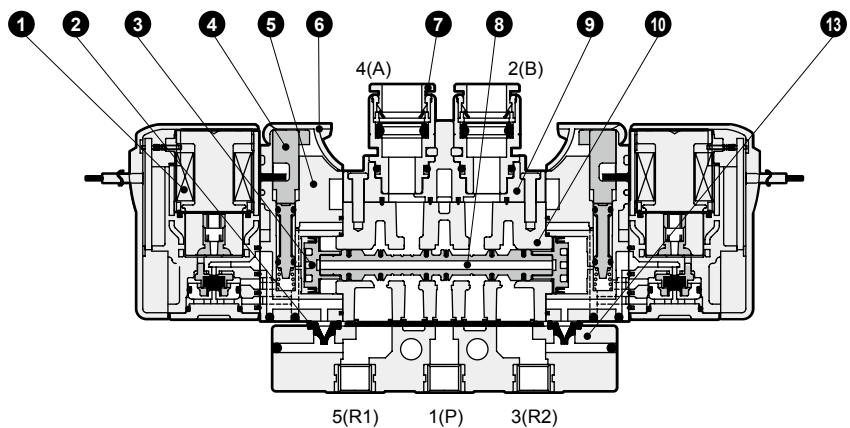
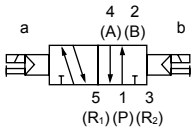
4GA110R

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



4GA120R

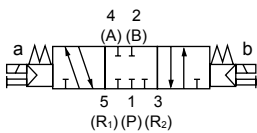
- 2-position double
- Grommet lead wire (blank)



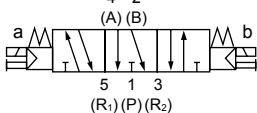
4GA1³/₅0R

- 3-position
- Grommet lead wire (blank)

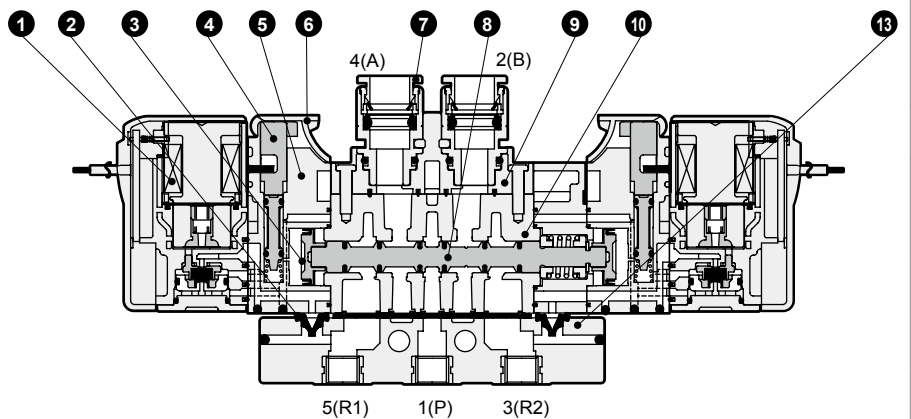
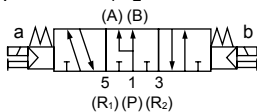
All ports closed



A/B/R connection



P/A/B connection



Main parts list

No.	Part name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston D assembly	-
4	Manual override	Resin
5	Piston chamber	Resin
6	Manual protection cover	Resin
7	Cartridge push-in fitting or barbed fitting	-
8	Spool assembly	-
9	Fitting adapter	Resin
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adapter	Resin

Parts list

No.	Part name	Model No.
1	Coil assembly	4GR -electrical connections- □ - COIL - [voltage]
		Blank: Standard A: Ozone specifications S: Surgeless E: Low exergic/energy saving circuit K: External pilot Blank: Grommet lead wire
7	Cartridge push-in fitting and related parts	ø1.8 barbed 4G1R-JOINT-CF
		ø1.8 axial 4G1R-JOINT-C18
		ø4 straight 4G1R-JOINT-C4
		ø6 straight 4G1R-JOINT-C6
		Plug cartridge 4G1R-JOINT-CPG
		ø1/8" straight 4G1R-JOINT-C3N
	ø5/32" straight 4G1R-JOINT-C4N	

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

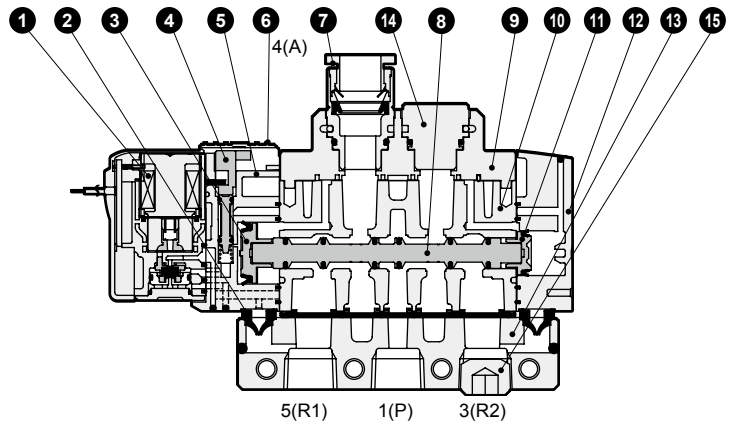
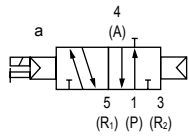
3GA2/3 Series

Discrete valve; body piping

4GA/B Internal structure and parts list

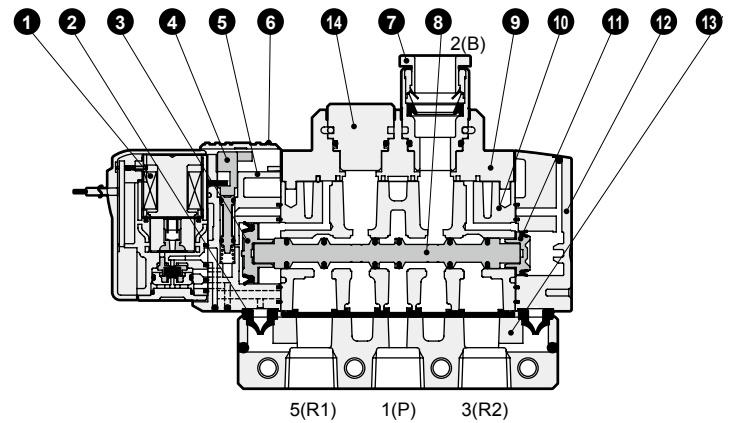
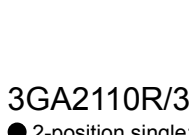
M4GA/B 3GA210R/3GA310R

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



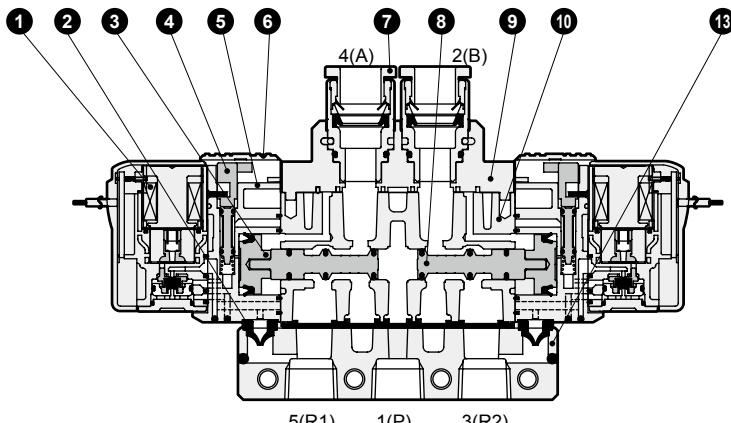
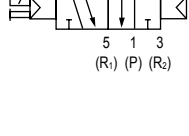
M4GD/E 3GA2110R/3GA3110R

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



MN3E/MN4E 3GA2110R/3GA3110R

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

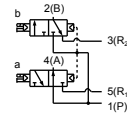
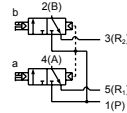


4F 3GA2 0R

- Two 3-port valves integrated
- Grommet lead wire (blank)

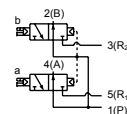
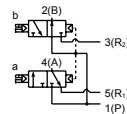
A side valve: Normally closed,
B side valve: Normally closed

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.	Part name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston D assembly	-
4	Manual override	Resin
5	Piston chamber	Resin
6	Manual protection cover	Resin
7	Cartridge push-in fitting	-
8	Spool assembly	-
9	Fitting adapter	Resin
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adapter	Aluminum alloy die-casting
14	Plug cartridge	Aluminum
15	Hexagon socket plug	Steel

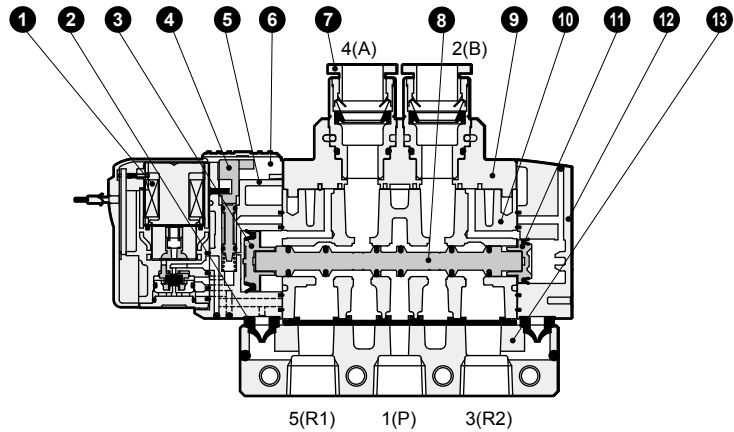
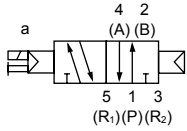
Parts list

No.	Part name	Model No.	
1	Coil assembly	4GR - [electrical connections] - [] - COIL - [voltage]	
7	Cartridge push-in fitting and related parts	Blank: Standard	
		A: Ozone specifications	
		S: Surgeless	
		E: Low exergical energy saving circuit	
		K: External pilot	
		Blank: Grommet lead wire	
		3G2	<ul style="list-style-type: none"> ø4 straight: 4G2R-JOINT-C4 ø6 straight: 4G2R-JOINT-C6 ø8 straight: 4G2R-JOINT-C8 Plug cartridge: 4G2R-JOINT-CPG ø1/4" straight: 4G2R-JOINT-C6N ø5/16" straight: 4G2R-JOINT-C8N
		3G3	<ul style="list-style-type: none"> ø6 straight: 4G3R-JOINT-C6 ø8 straight: 4G3R-JOINT-C8 ø10 straight: 4G3R-JOINT-C10 Plug cartridge: 4G3R-JOINT-CPG ø5/16" straight: 4G3R-JOINT-C8N ø3/8" straight: 4G3R-JOINT-C10N

Internal structure and parts list

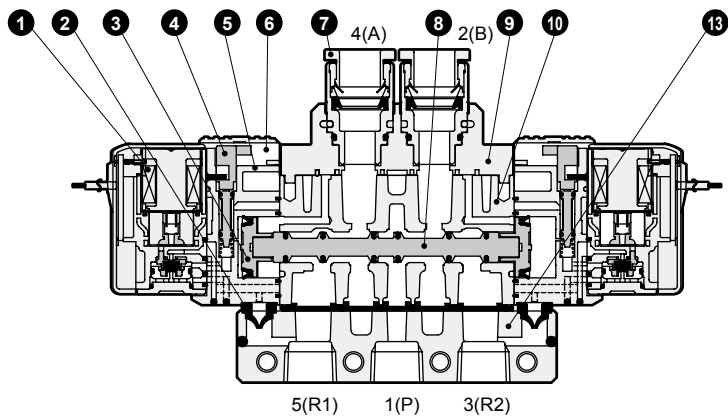
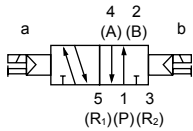
4GA210R/4GA310R

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



4GA220R/4GA320R

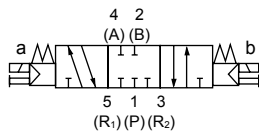
- 2-position double
- Grommet lead wire (blank)



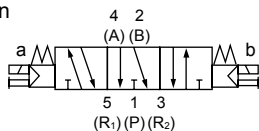
4GA2³/₅0R/4GA3³/₅0R

- 3-position
- Grommet lead wire (blank)

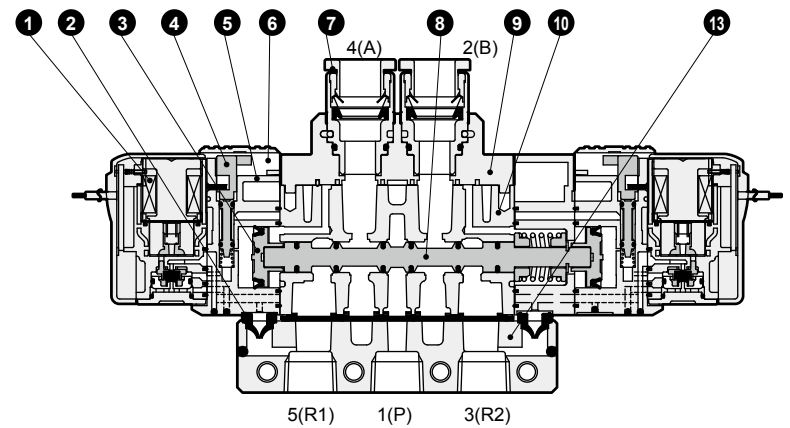
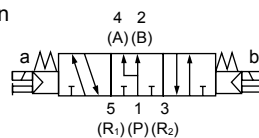
All ports closed



A/B/R connection



P/A/B connection



Main parts list

No.	Part name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston D assembly	-
4	Manual override	Resin
5	Piston chamber	Resin
6	Manual protection cover	Resin
7	Cartridge push-in fitting	-
8	Spool assembly	-
9	Fitting adapter	Resin
10	Body	Aluminum alloy die-casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adapter	Aluminum alloy die-casting

Parts list

No.	Part name	Model No.		
1	Coil assembly	4GR -electrical connections- □ - COIL -[voltage]		
		Blank: Standard A: Ozone specifications S: Surgeless E: Low exoenergy saving circuit K: External pilot Blank: Grommet lead wire		
7	Cartridge push-in fitting and related parts	4G2		
		ø4 straight	4G2R-JOINT-C4	
		ø6 straight	4G2R-JOINT-C6	
		ø8 straight	4G2R-JOINT-C8	
		Plug cartridge	4G2R-JOINT-CPG	
		ø1/4" straight	4G2R-JOINT-C6N	
		ø5/16" straight	4G2R-JOINT-C8N	
		4G3	ø6 straight	4G3R-JOINT-C6
		ø8 straight	4G3R-JOINT-C8	
		ø10 straight	4G3R-JOINT-C10	
Plug cartridge	4G3R-JOINT-CPG			
ø5/16" straight	4G3R-JOINT-C8N			
ø3/8" straight	4G3R-JOINT-C10N			

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

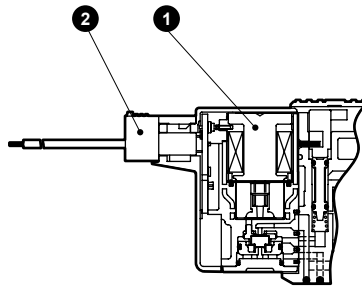
3GA1/2/3 / 4GA1/2/3 Series

Discrete valve; body piping

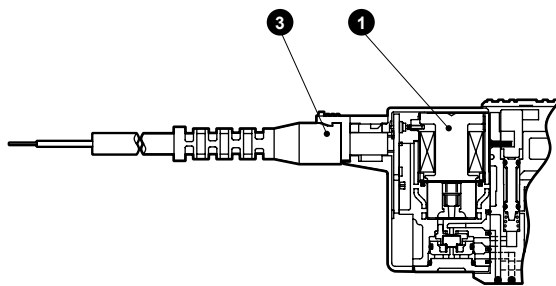
Internal structure and parts list (electrical connections section)

- 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

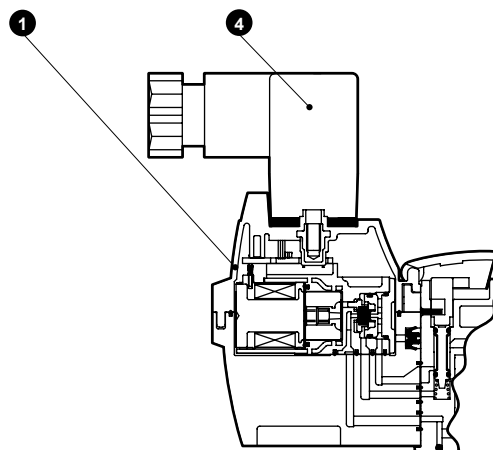
● E type connector E□□



● EJ type connector E□□J



● DIN terminal box B



Main parts list

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

Parts list

No.	Part name	Model No.
1	Coil assembly	4GR-[electrical connections]-[]-[COIL]-[voltage] []: Blank: Standard A: Ozone specifications S: Surgeless E: Low exergo/energy saving circuit K: External pilot E*: E type connector E*J: Socket with cover B*: DIN terminal box B includes the DIN terminal box BN does not include the DIN terminal box
2	E type connector socket assembly	4GR-SOCKET-ASSY-E**-[Voltage]
3	Socket assembly with cover	4GR-SOCKET-ASSY-E**J
4	DIN terminal box assembly	4GR-TERMINAL-BOX-[Voltage]

MEMO

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

3GA1 Series

Discrete valve; body piping

Dimensions

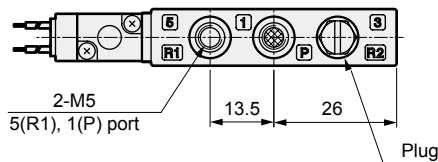
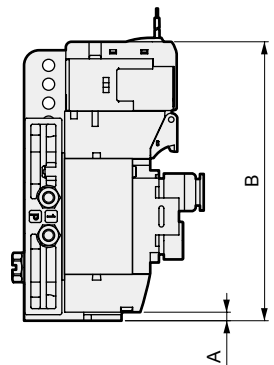
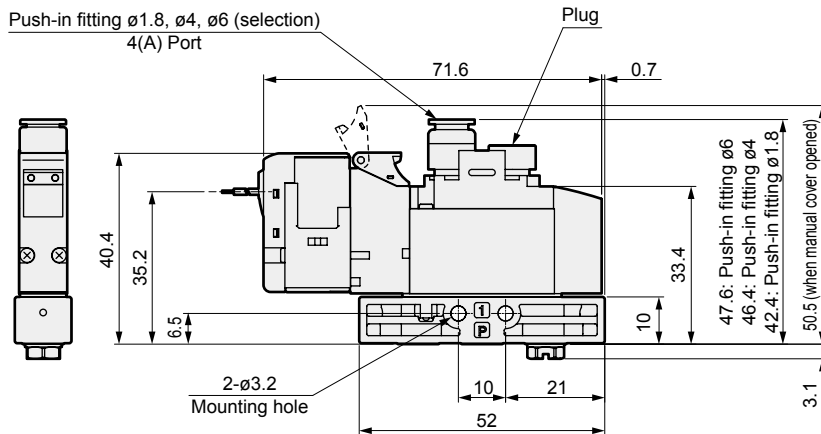
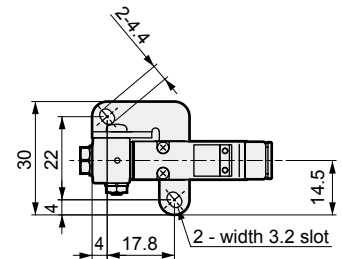
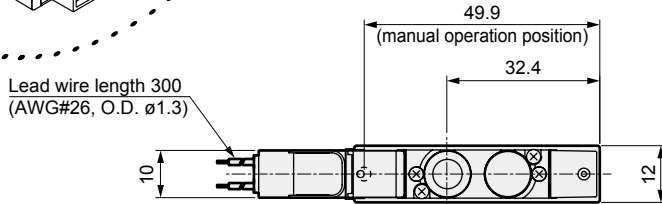
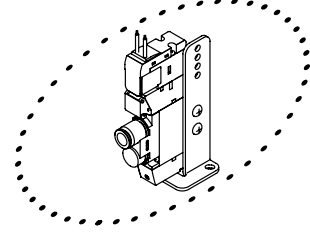
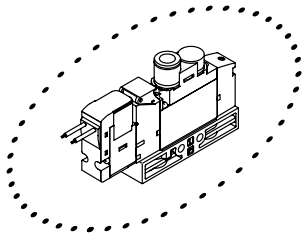


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

3GA110R * NPT thread and G thread specifications are listed on pages 52 to 59.

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

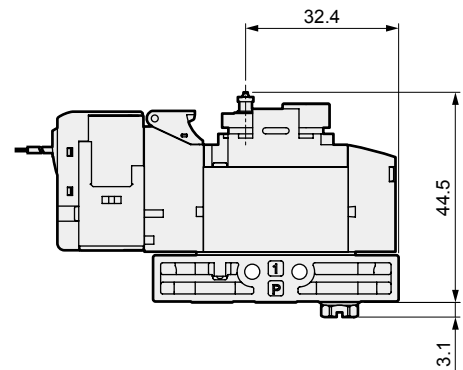
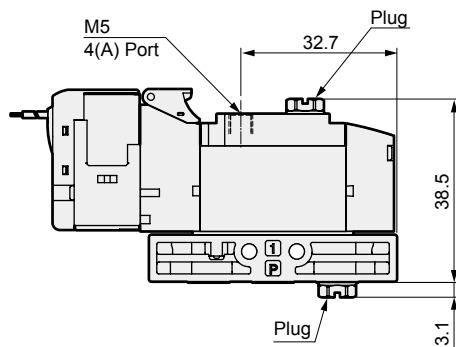
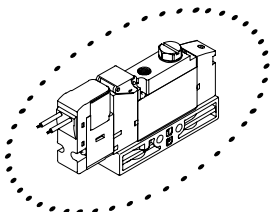
● Mounting plate (P)



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

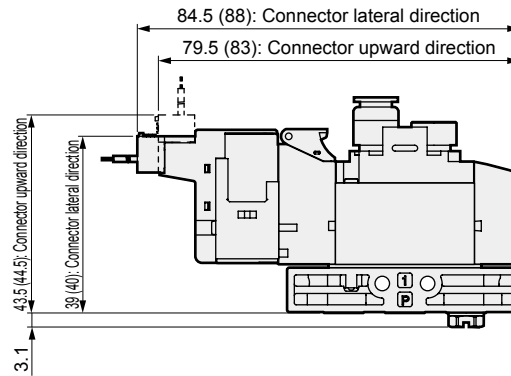
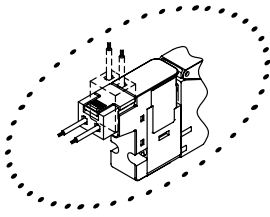
● M5 female thread (M5)

● ø1.8 barbed fitting (CF)



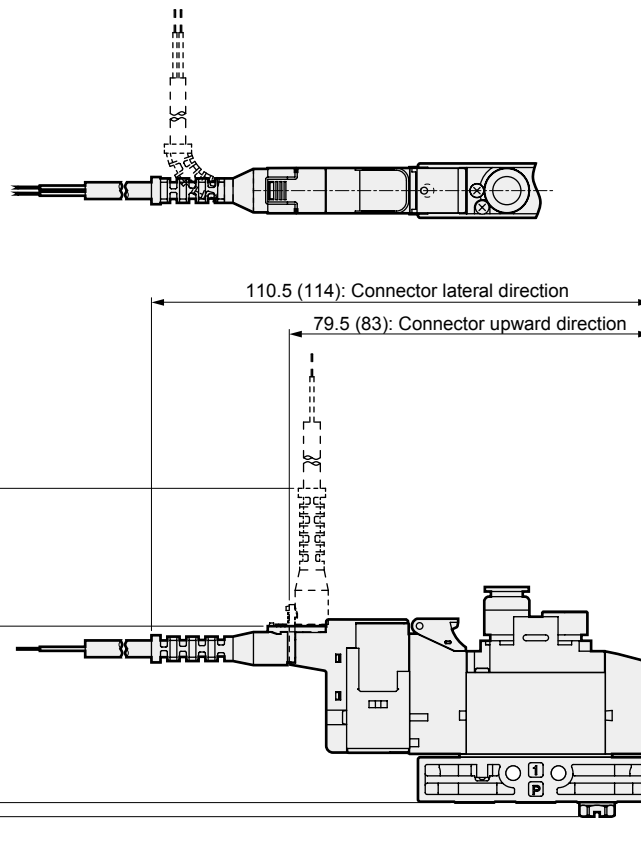
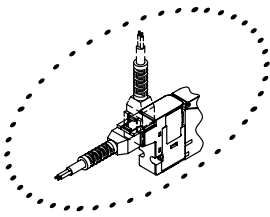
Dimensions

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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
4C*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

3GA1 Series

Discrete valve; body piping

Dimensions

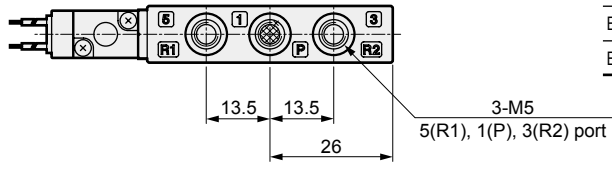
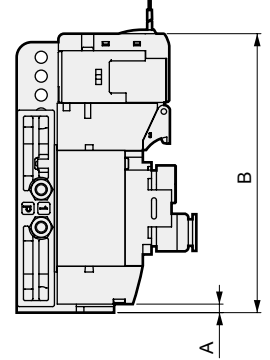
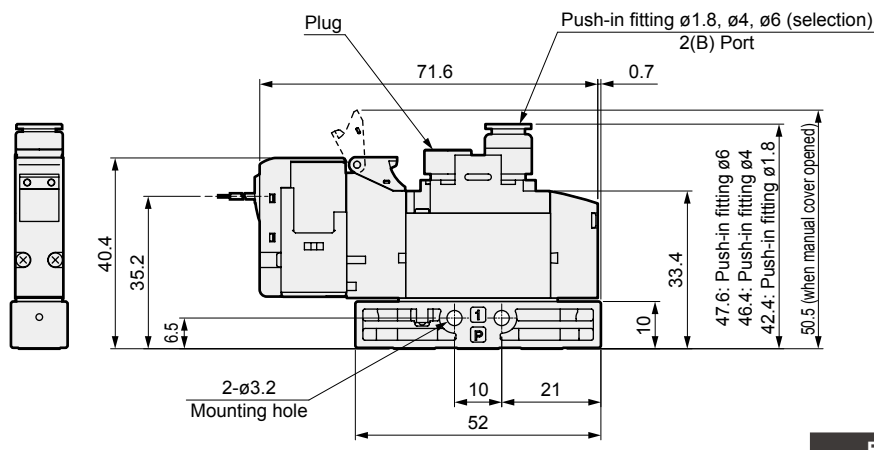
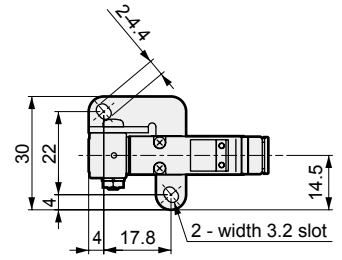
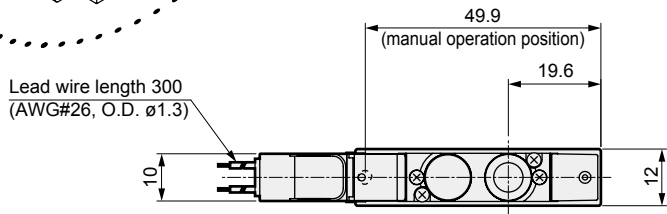
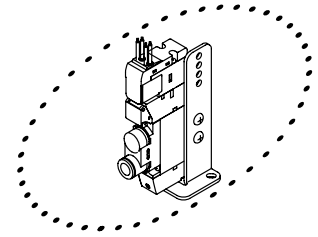
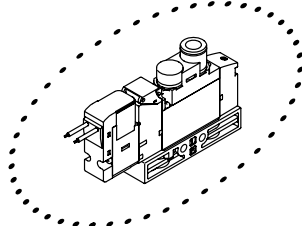


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

3GA1110R * NPT thread and G thread specifications are listed on pages 52 to 59.

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

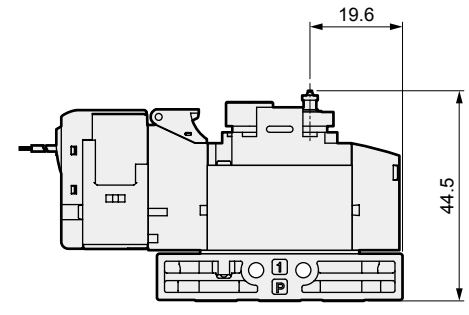
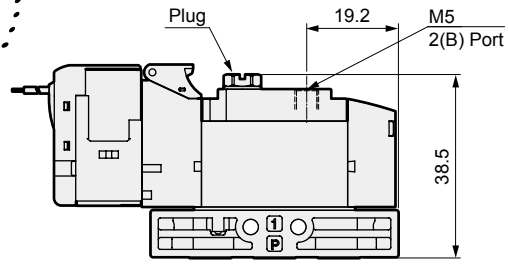
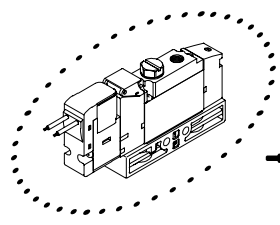
● Mounting plate (P)



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

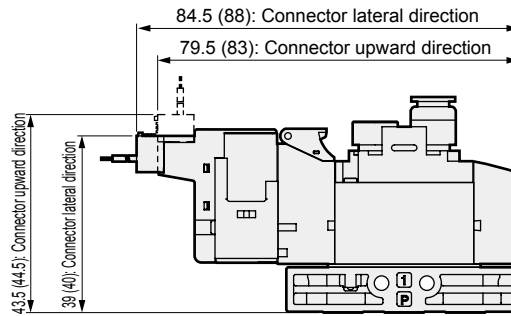
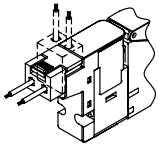
● M5 female thread (M5)

● ø1.8 barbed fitting (CF)



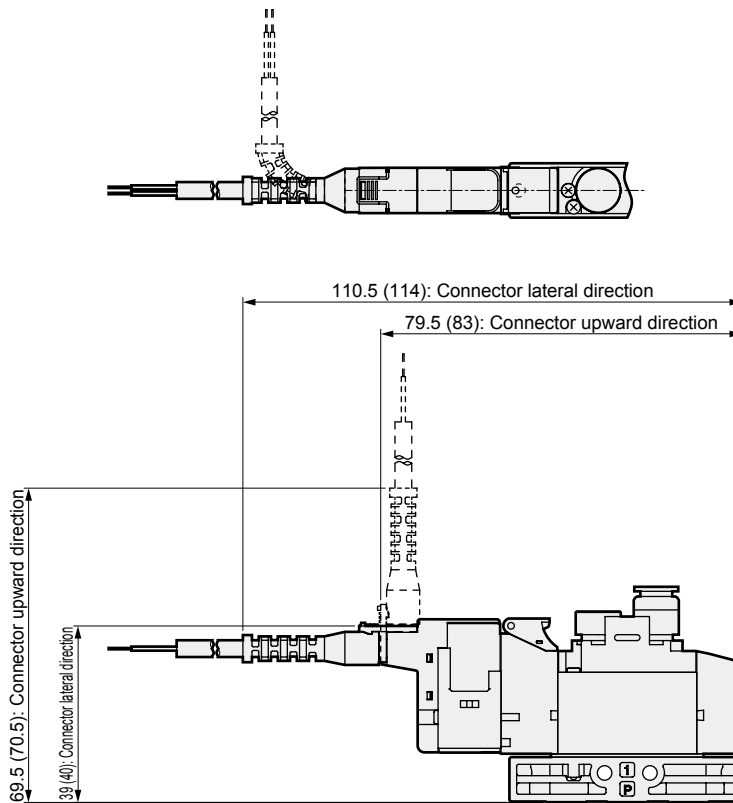
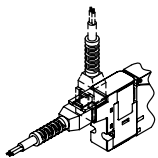
Dimensions

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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
4C*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

3GA2 Series

Discrete valve; body piping

Dimensions

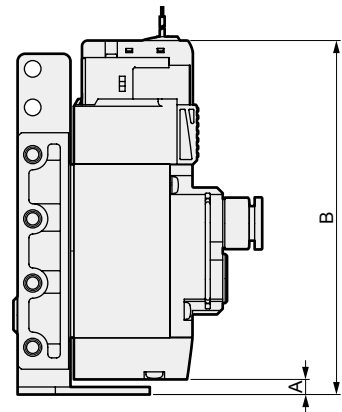
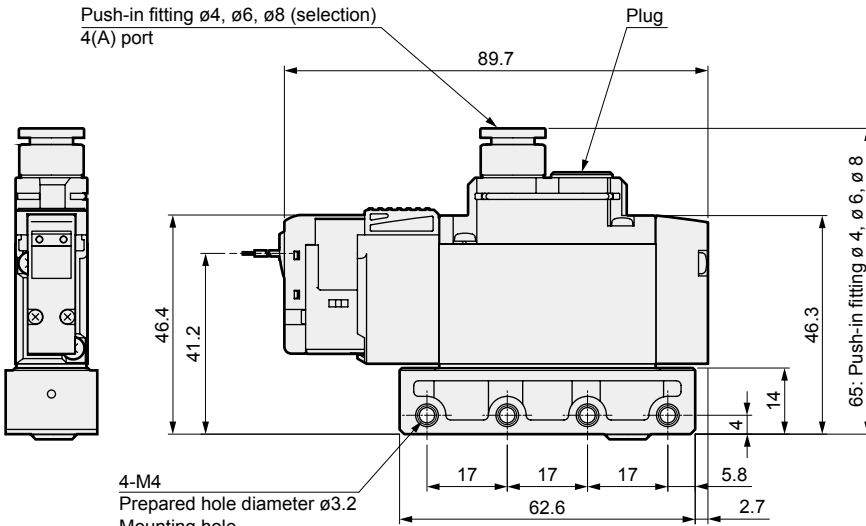
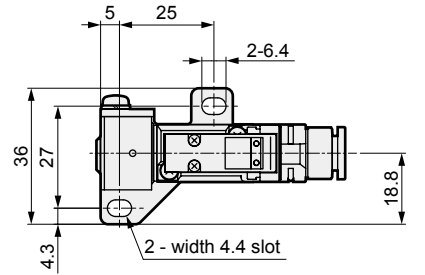
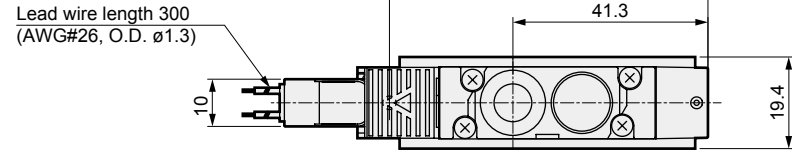
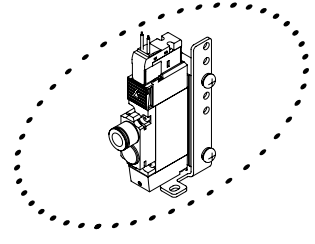
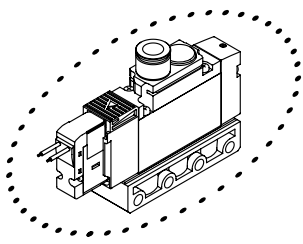


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

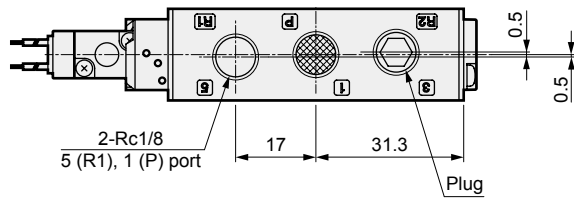
3GA210R * NPT thread and G thread specifications are listed on pages 52 to 59.

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

● Mounting plate (P)

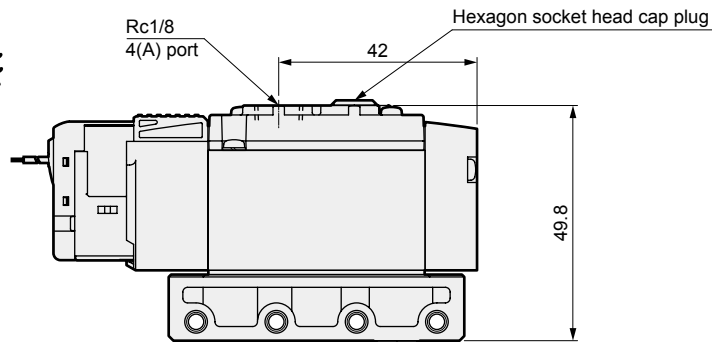
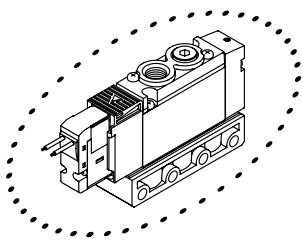


*Refer to page 853 for mounting hole details.



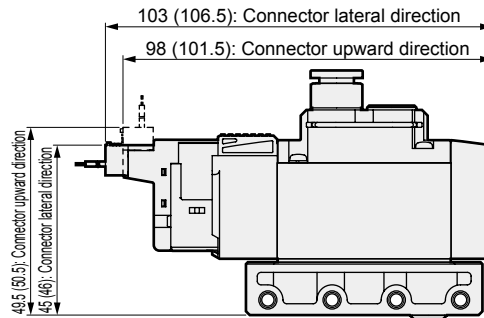
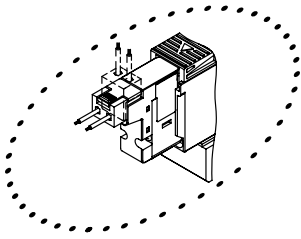
Electrical connections	A	B
Grommet lead wire	4	93.7
E, EJ type connector (upward direction), DC voltage		102
E, EJ type connector (upward direction), AC voltage		105.5
DIN terminal box (inner direction)		112.7

● Rc1/8 female thread (06)



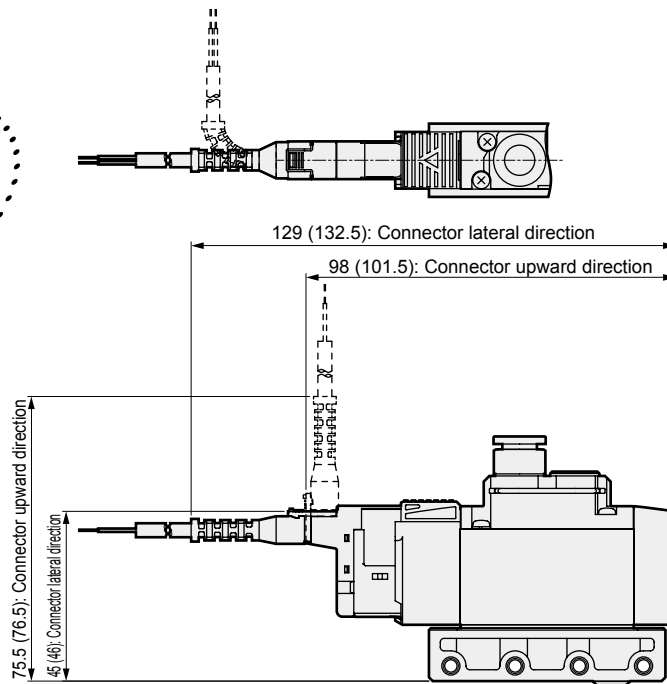
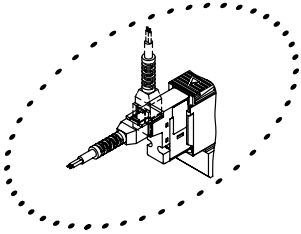
Dimensions

● E type connector (E)



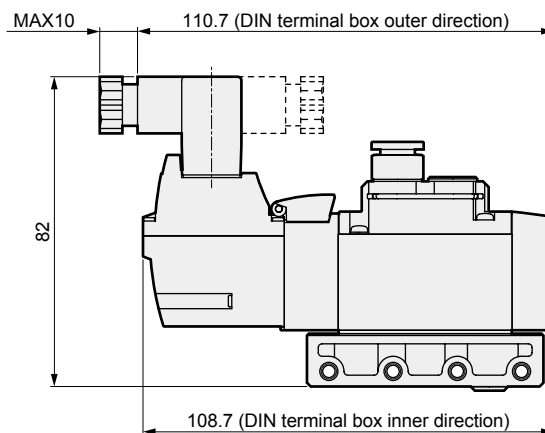
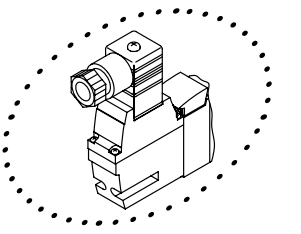
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

3GA2 Series

Discrete valve; body piping

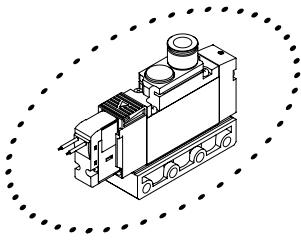
Dimensions



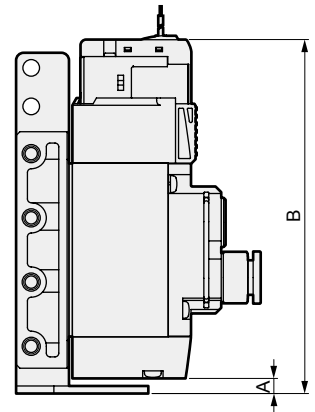
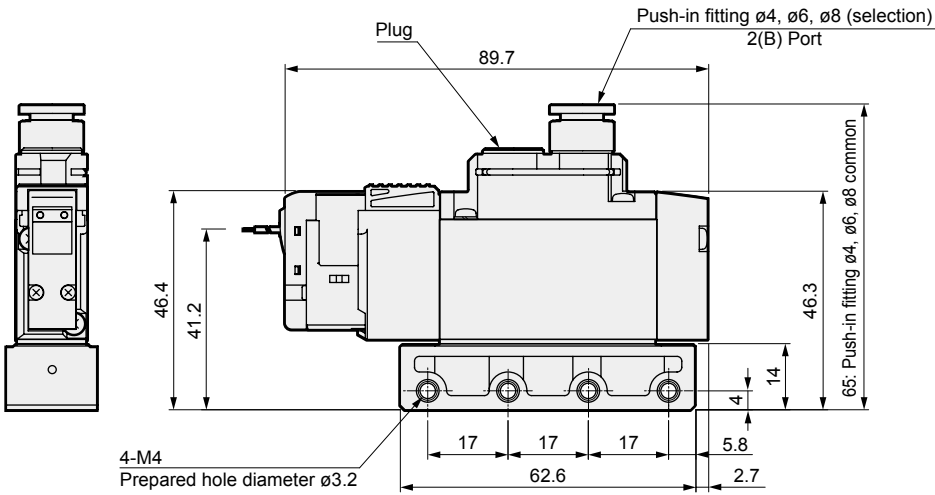
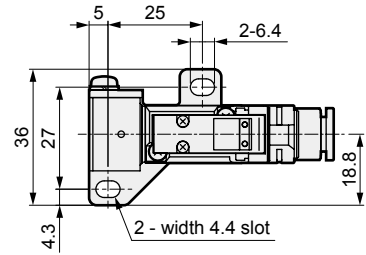
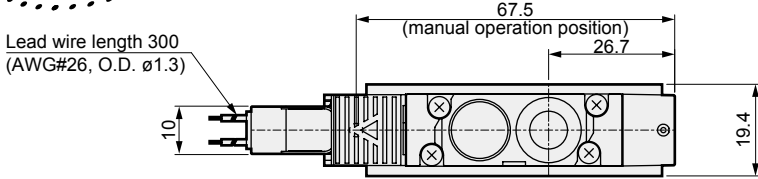
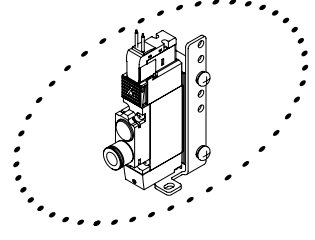
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

3GA2110R * NPT thread and G thread specifications are listed on pages 52 to 59.

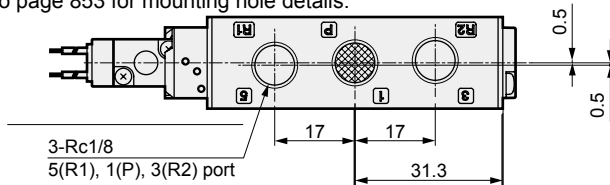
● 2-position single normally open grommet lead wire (blank)



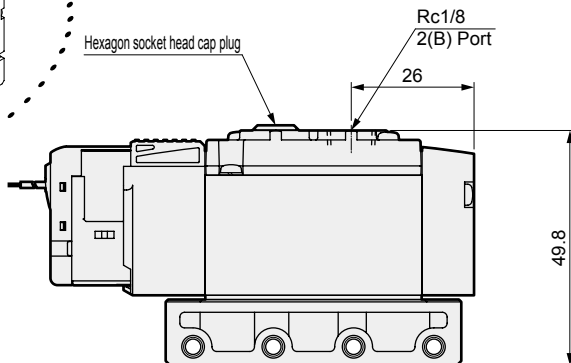
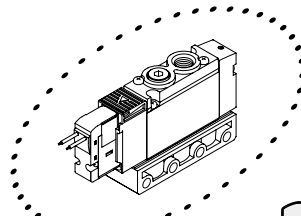
● Mounting plate (P)



*Refer to page 853 for mounting hole details.



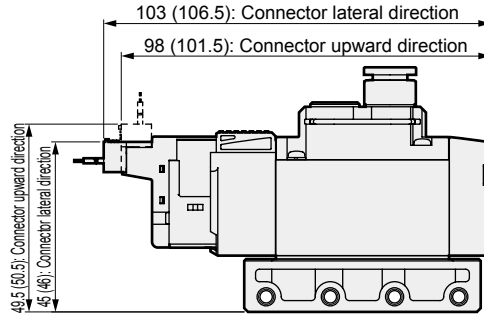
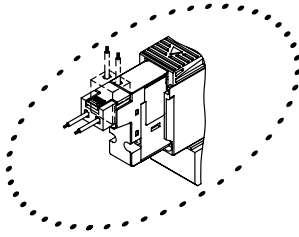
● Rc1/8 female thread (06)



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

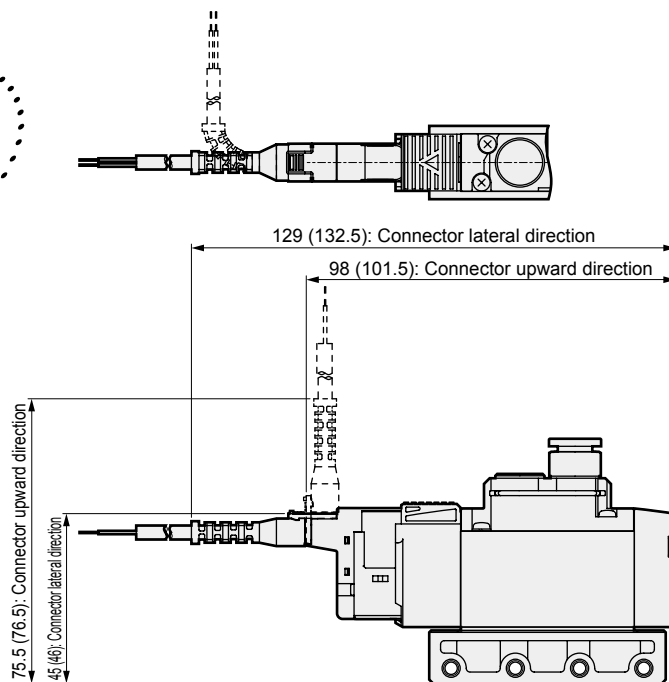
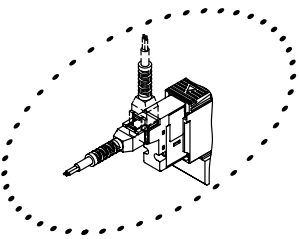
Dimensions

● E type connector (E)



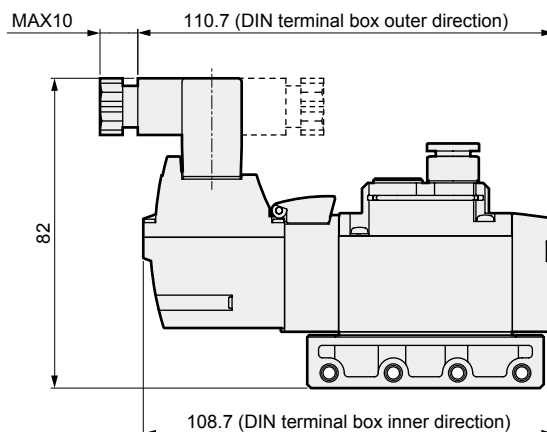
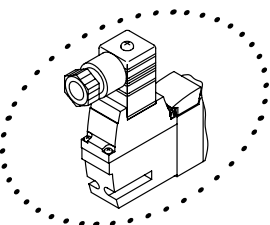
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

3GA3 Series

Discrete valve; body piping

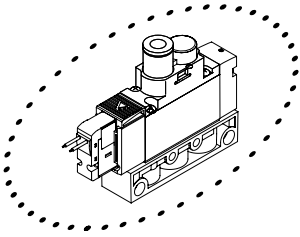
Dimensions



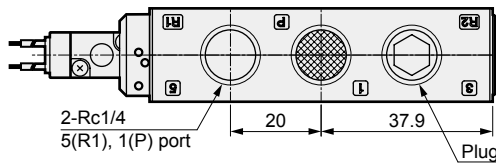
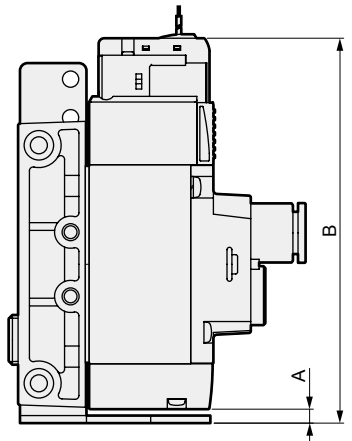
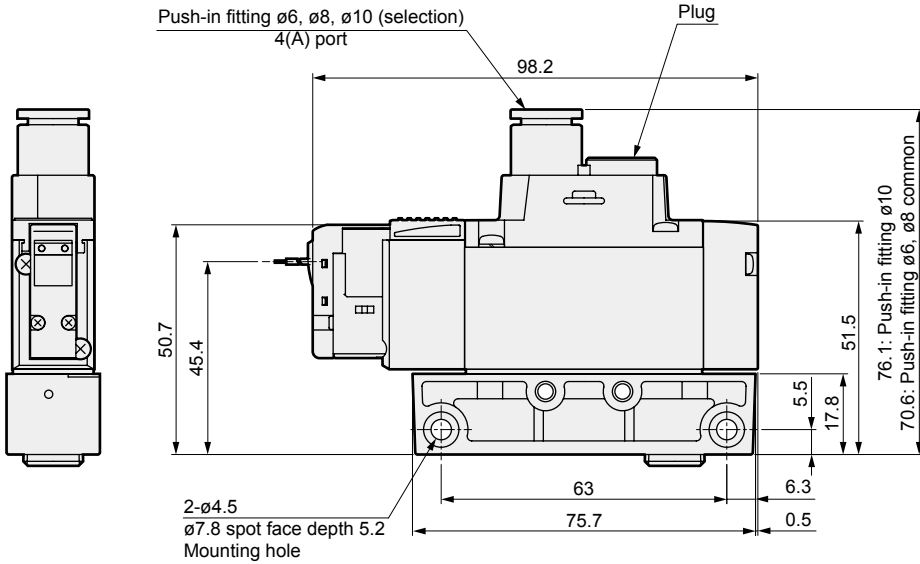
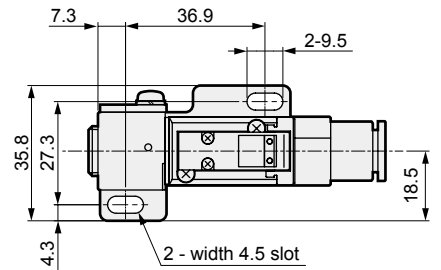
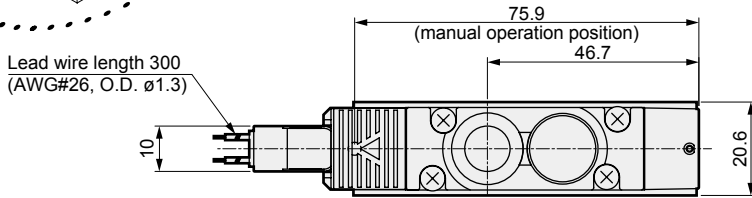
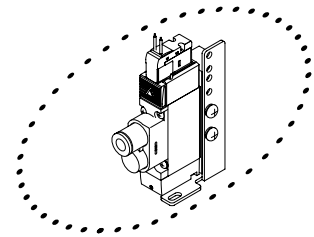
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

3GA310R * NPT thread and G thread specifications are listed on pages 52 to 59.

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

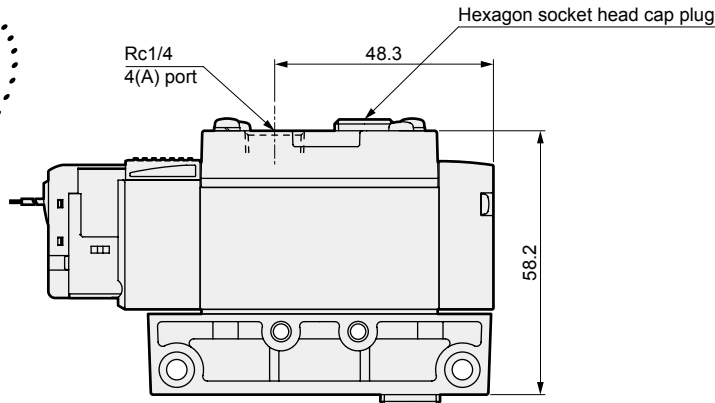
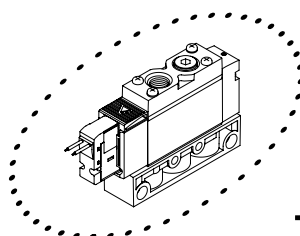


● Mounting plate (P)



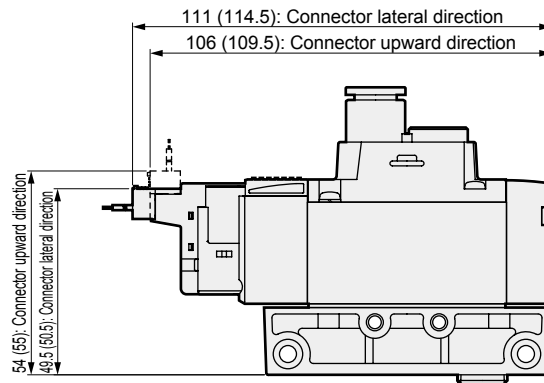
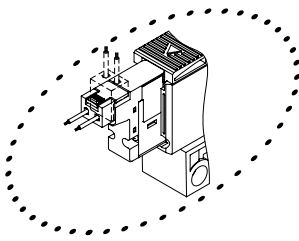
Electrical connections	A	B
Grommet lead wire		101.8
E, EJ type connector (upward direction), DC voltage	3.7	110
E, EJ type connector (upward direction), AC voltage		113.5
DIN terminal box (inner direction)		120.9

● Rc1/4 female thread (08)



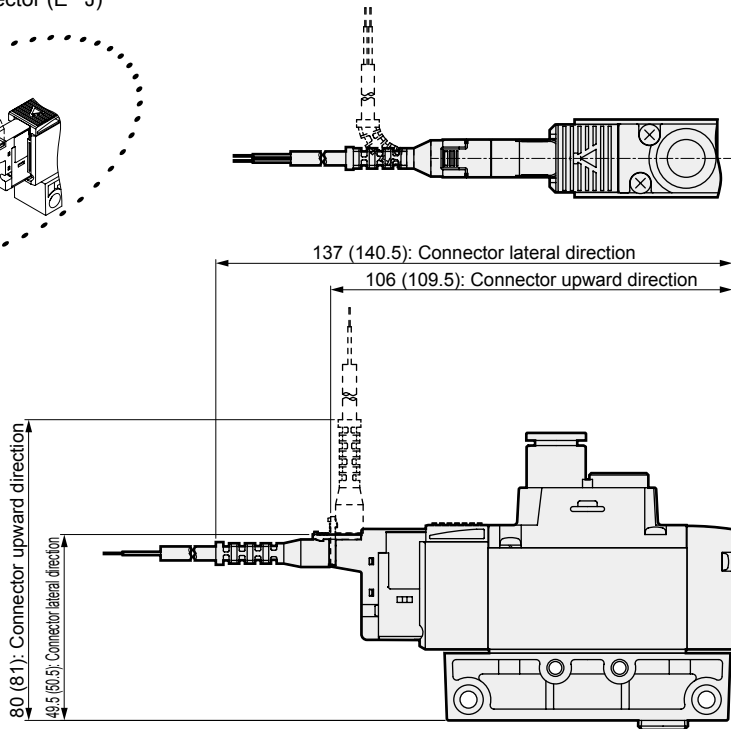
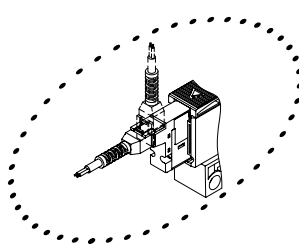
Dimensions

● E type connector (E)



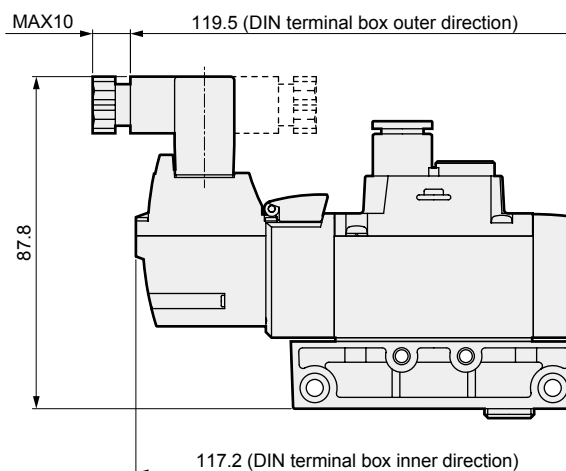
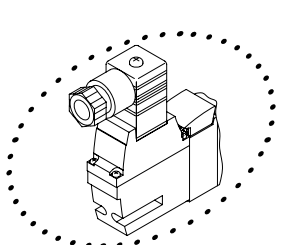
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

3GA3 Series

Discrete valve; body piping

Dimensions



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

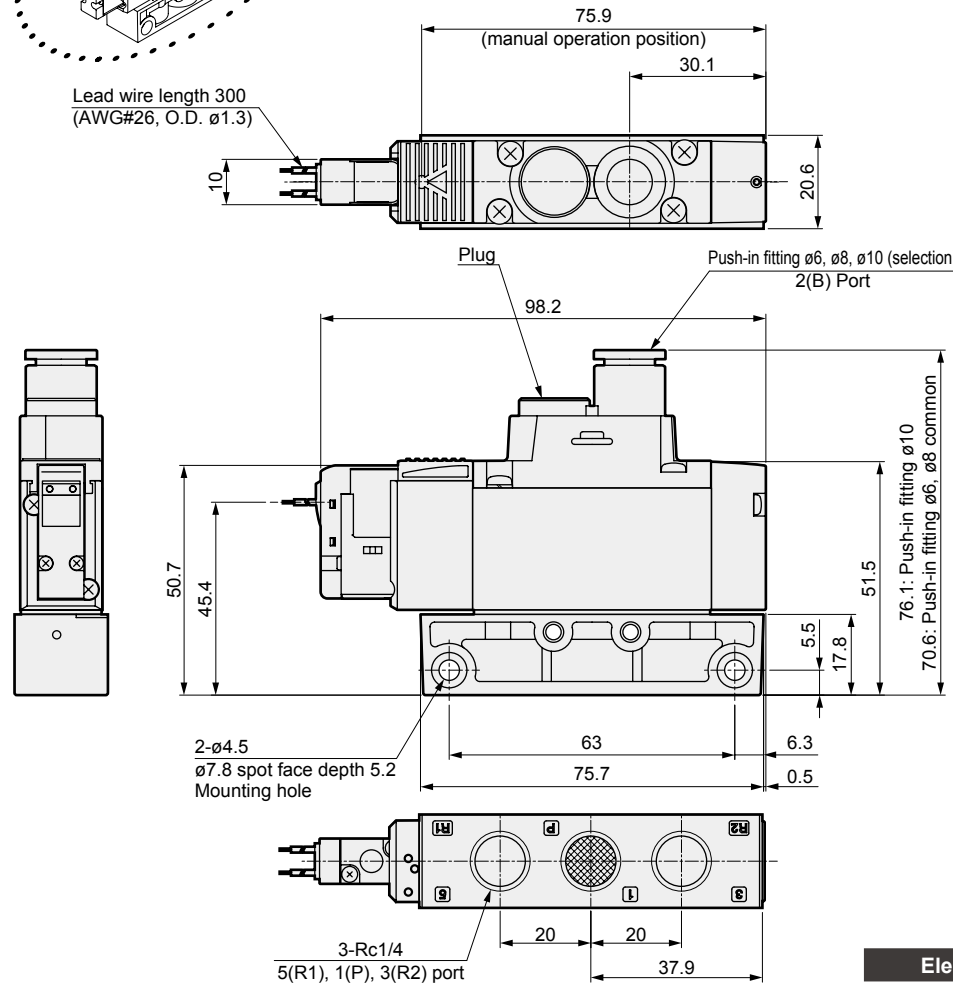
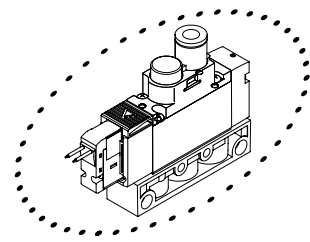
TotAirSys (Total Air)

TotAirSys (Gamma)

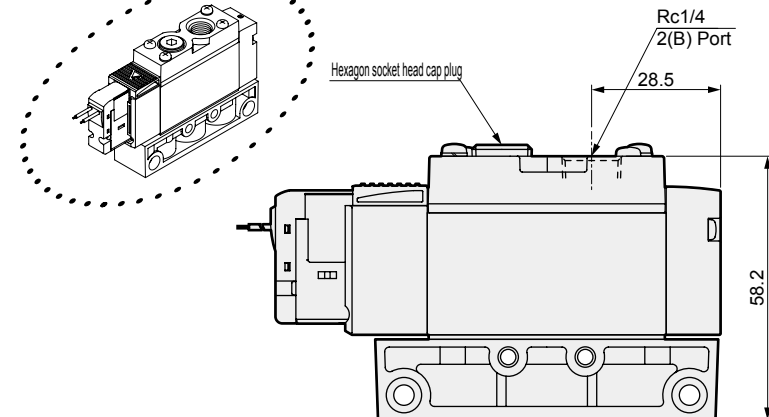
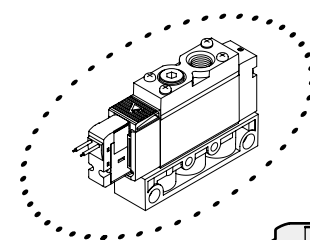
Ending

3GA3110R * NPT thread and G thread specifications are listed on pages 52 to 59.

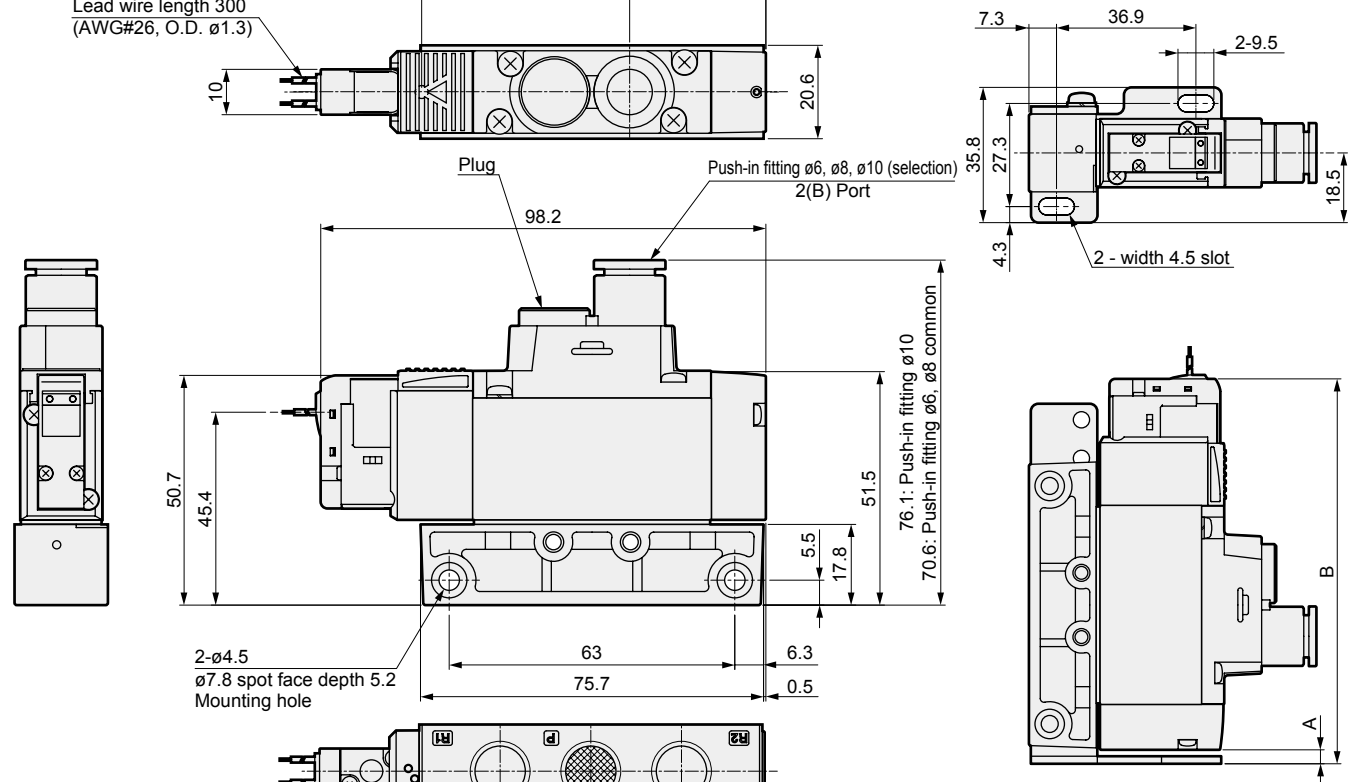
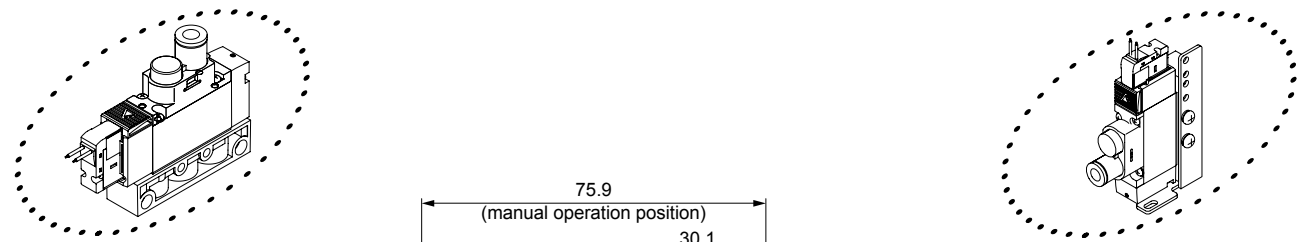
● 2-position single: Normally open grommet lead wire (blank)



● Rc1/4 female thread (08)



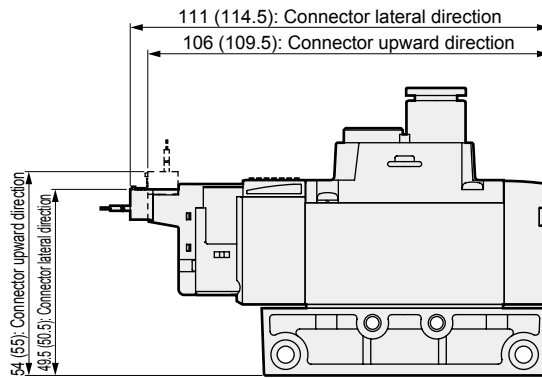
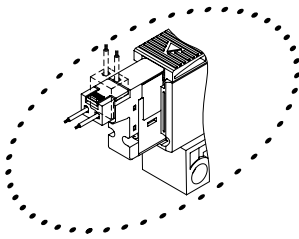
● Mounting plate (P)



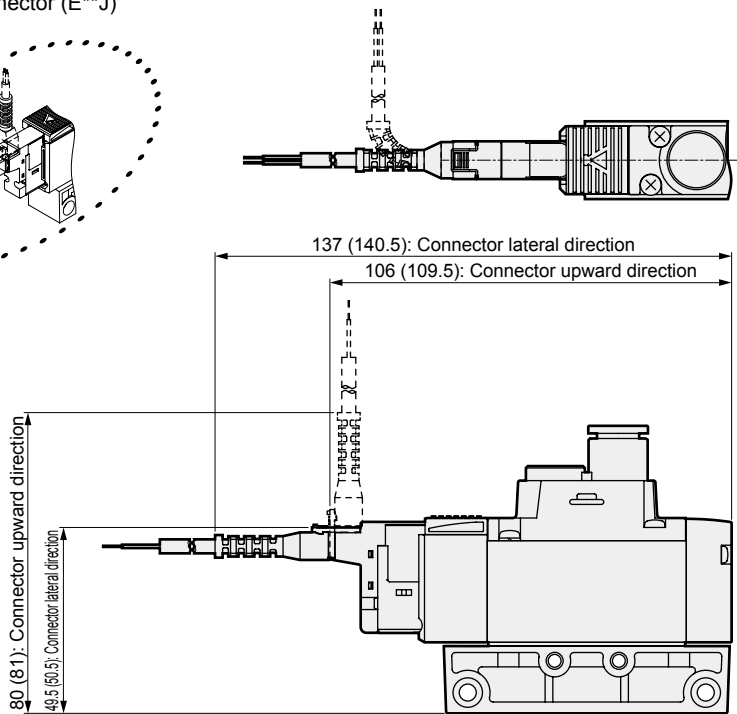
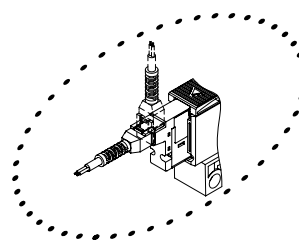
Electrical connections	A	B
Grommet lead wire		101.8
E, EJ type connector (upward direction), DC voltage	3.7	110
E, EJ type connector (upward direction), AC voltage		113.5
DIN terminal box (inner direction)		120.9

Dimensions

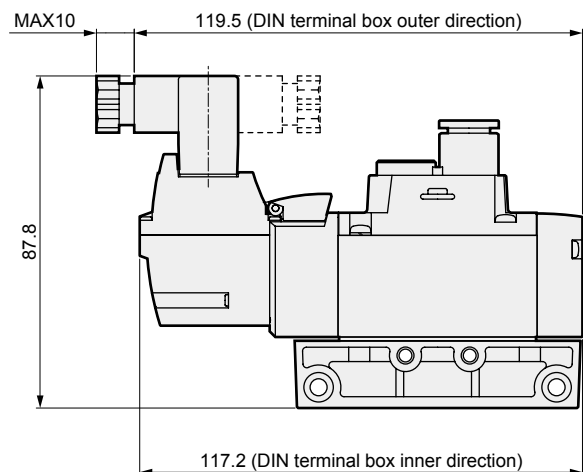
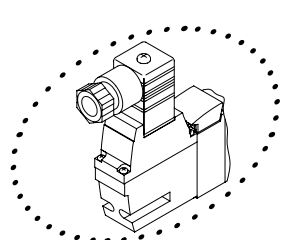
● E type connector (E)



● EJ type connector (E**J)



● DIN terminal box (B)



Note: Values in () are for AC voltage.

Note: Values in () are for AC voltage.

Note: DIN terminal box assembly is shipped facing inward.

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

4GA1 Series

Discrete valve; body piping

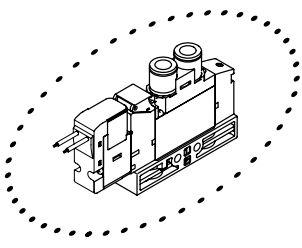
Dimension diagram



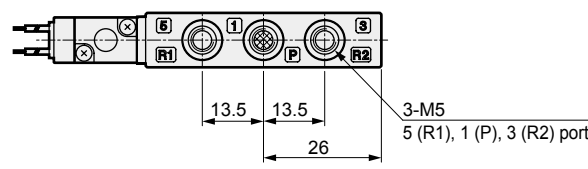
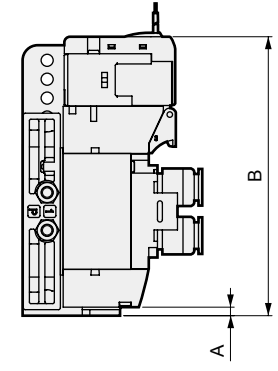
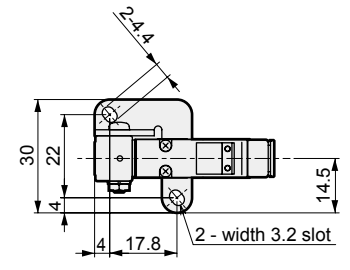
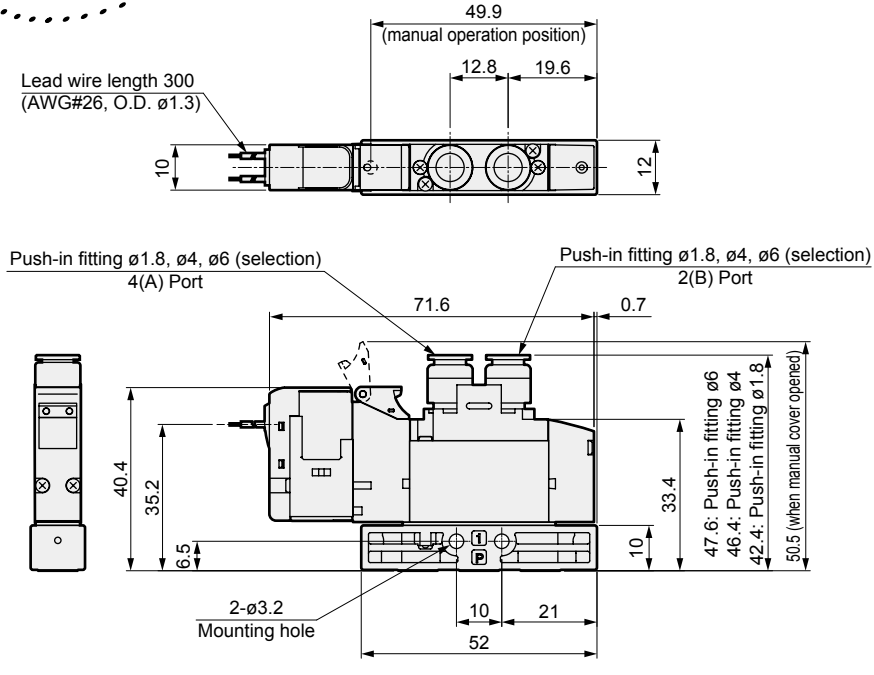
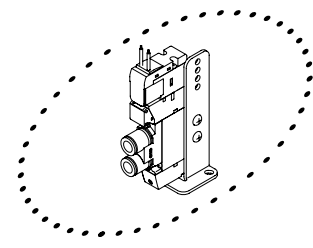
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

4GA110R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 2-position single grommet lead wire (blank)

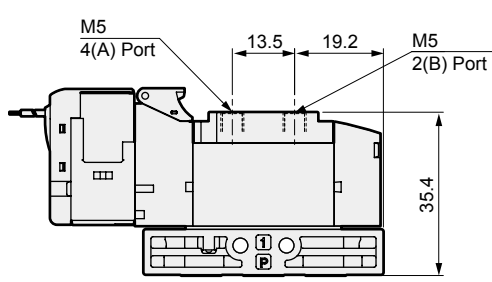
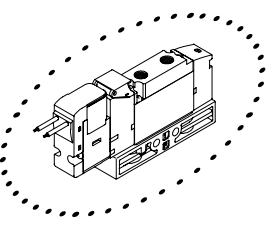


● Mounting plate (P)

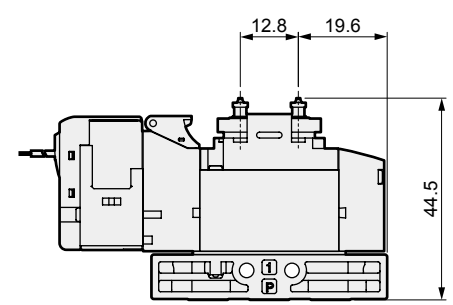


Electrical connections	A	B
Grommet lead wire		73.8
E, EJ type connector (upward direction), DC voltage	2.2	82
E, EJ type connector (upward direction), AC voltage		85.5

● M5 female thread (M5)

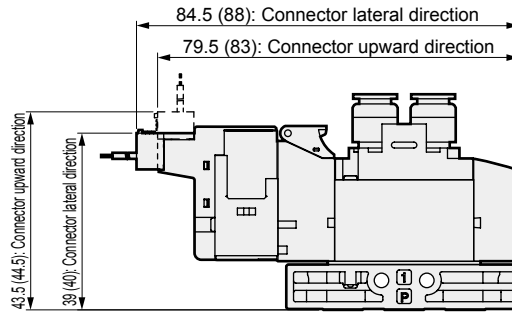
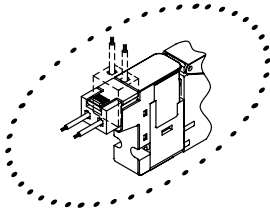


● $\phi 1.8$ barbed fitting (CF)



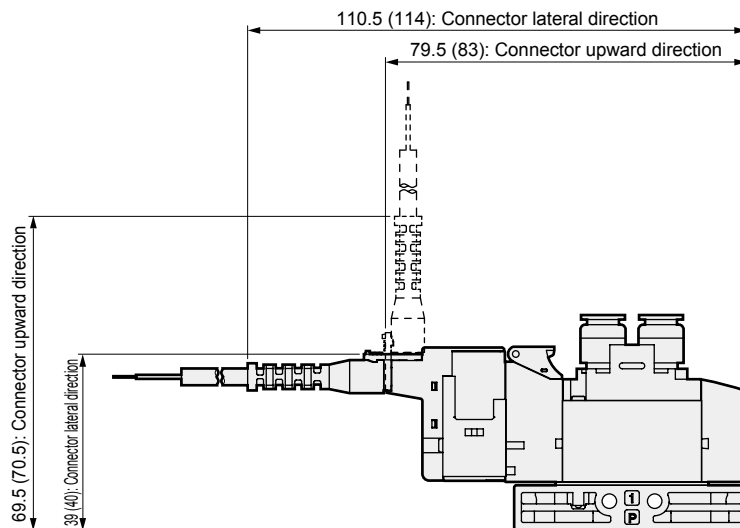
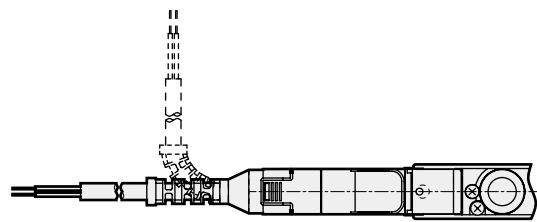
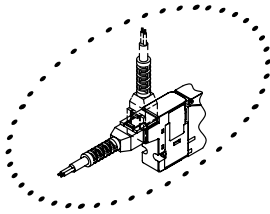
Dimensions

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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

4GA1 Series

Discrete valve; body piping

Dimensions



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

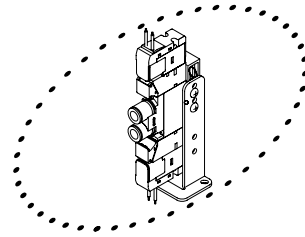
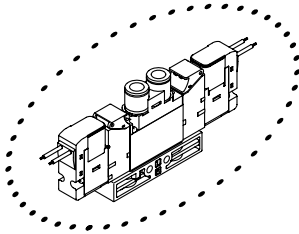
4GA120R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 2-position double grommet lead wire (blank)

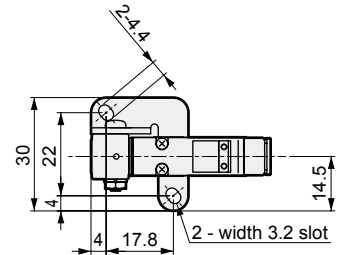
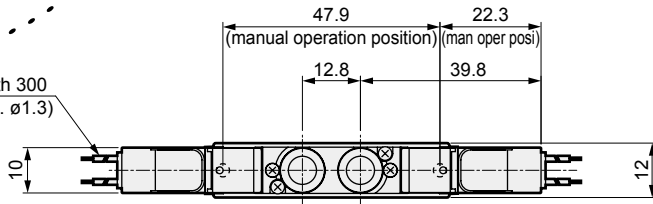
3GA1660R, 3GA1670R, 3GA1760R, 3GA1770R

● Two 3-port valves integrated grommet lead wire (blank)

● Mounting plate (P)

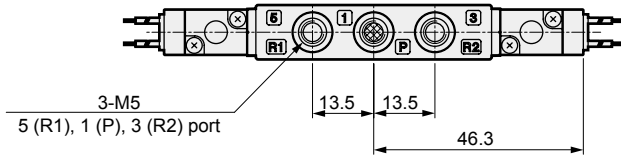
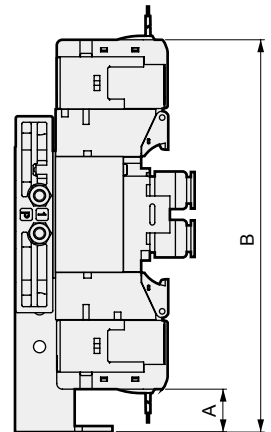
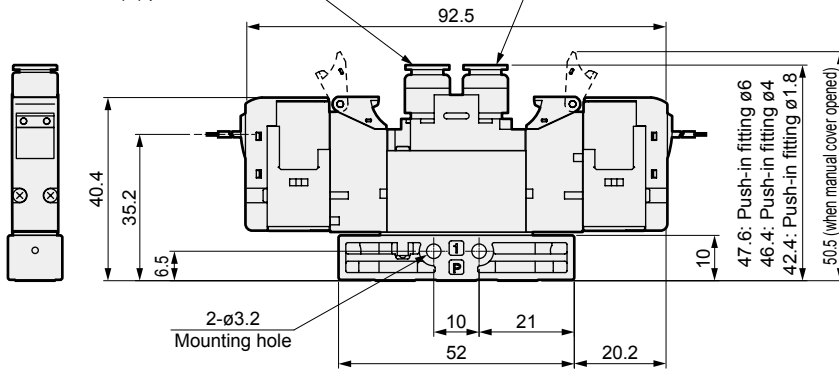


Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



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

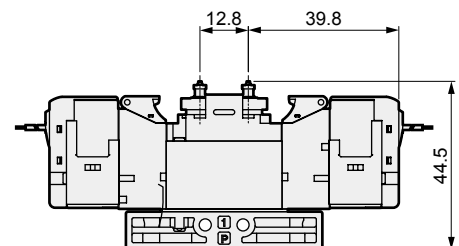
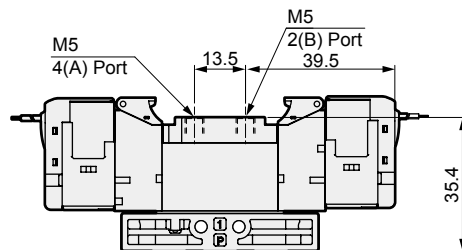
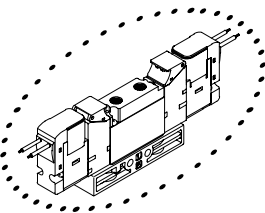
Push-in fitting ϕ 1.8, ϕ 4, ϕ 6 (selection)
2(B) port



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

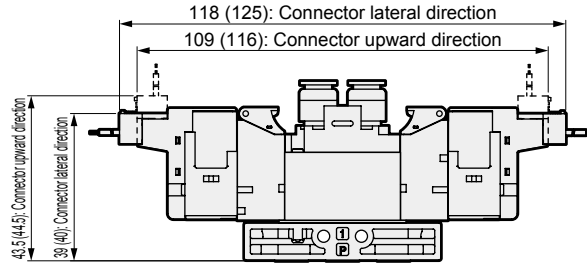
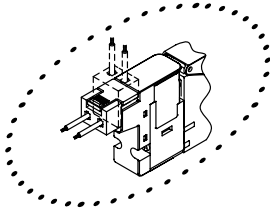
● M5 female thread (M5)

● ϕ 1.8 barbed fitting (CF)



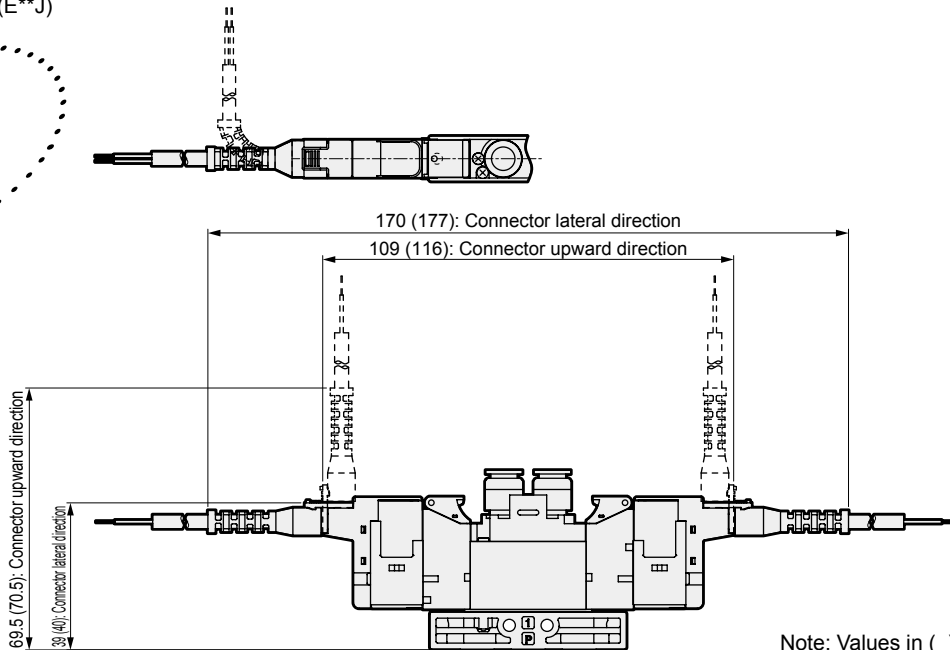
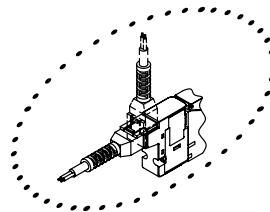
Dimensions

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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

4GA1 Series

Discrete valve; body piping

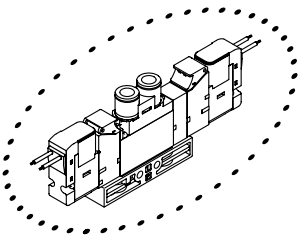
Dimensions



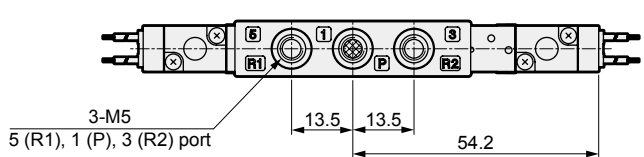
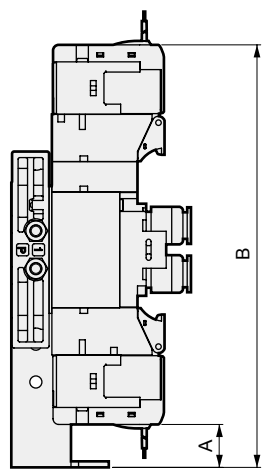
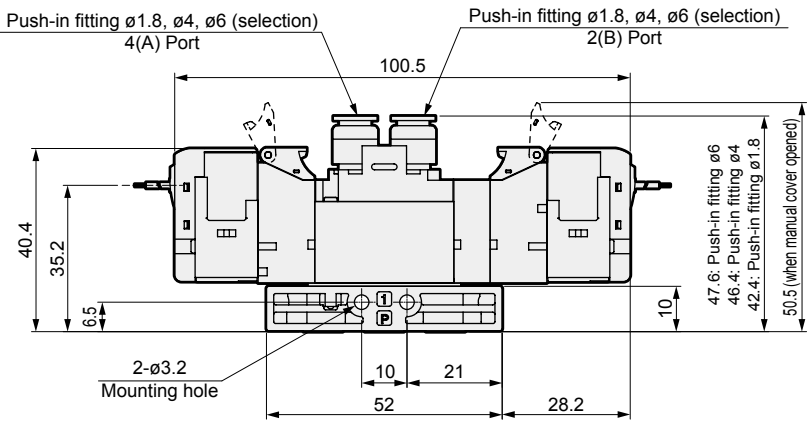
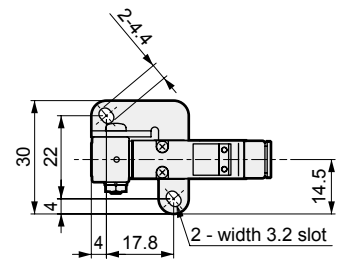
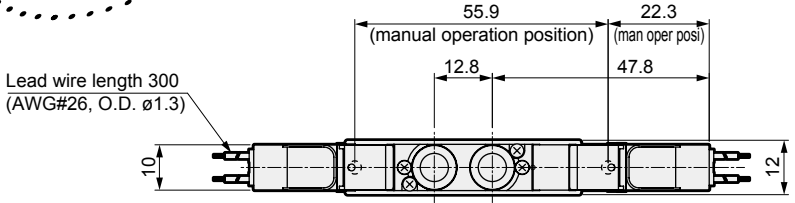
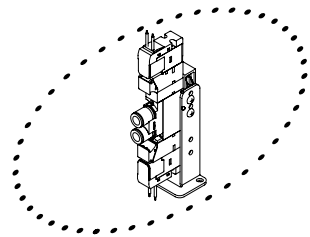
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

4GA1^{3/8}0R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 3-position grommet lead wire (blank)

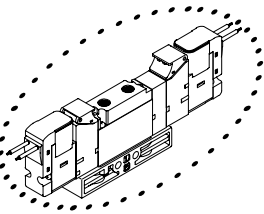


● Mounting plate (P)

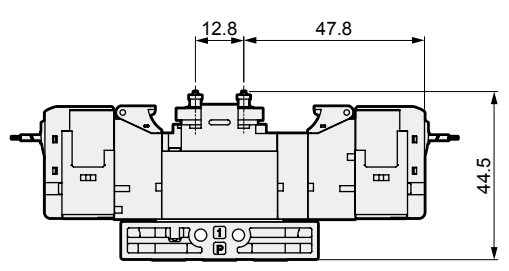
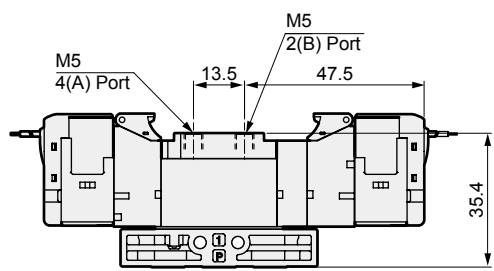


Electrical connections	A	B
Grommet lead wire	11.3	111.8
E, EJ type connector (upward direction), DC voltage	3	120
E, EJ type connector (upward direction), AC voltage	5	132

● M5 female thread (M5)

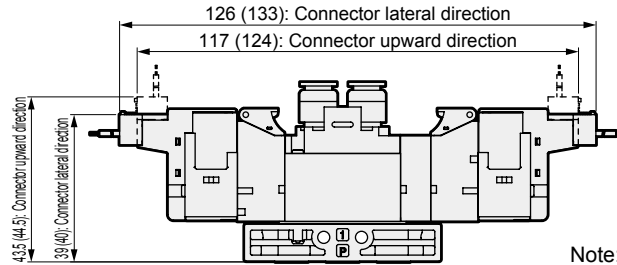
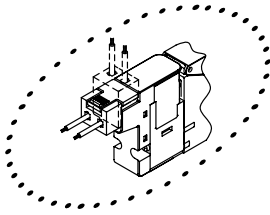


● ø1.8 barbed fitting (CF)



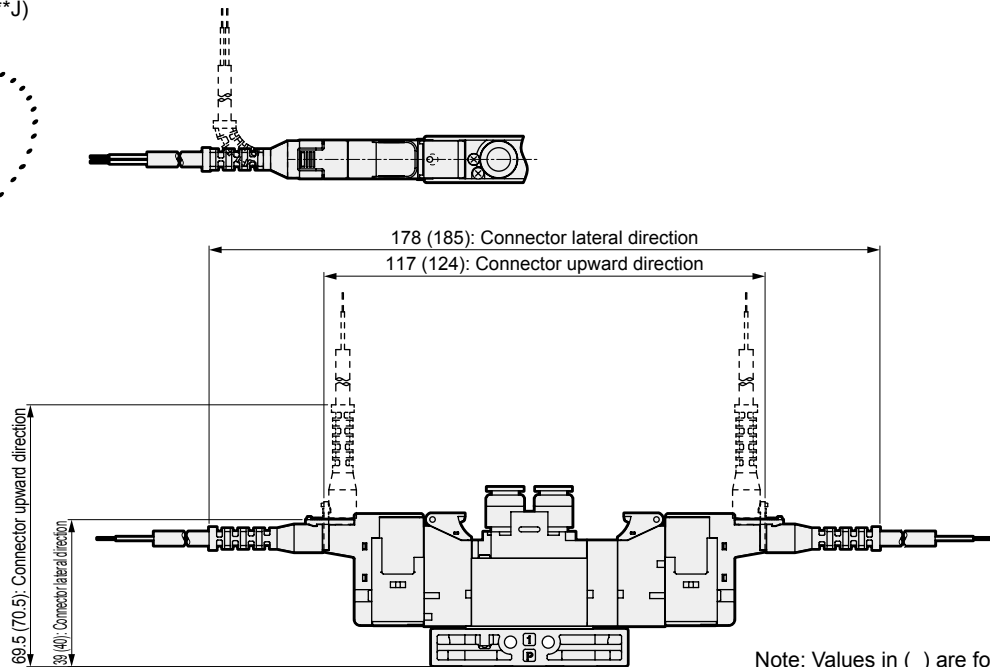
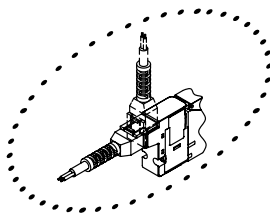
Dimensions

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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

4GA2 Series

Discrete valve; body piping

Dimensions



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

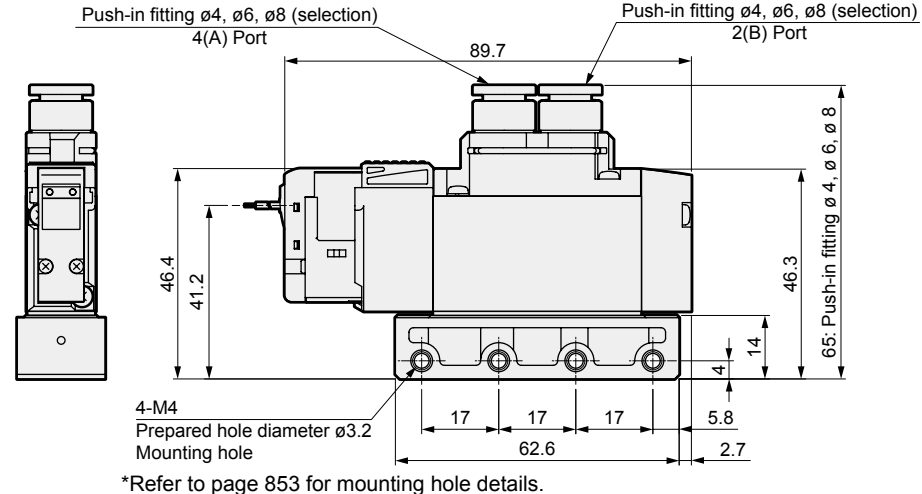
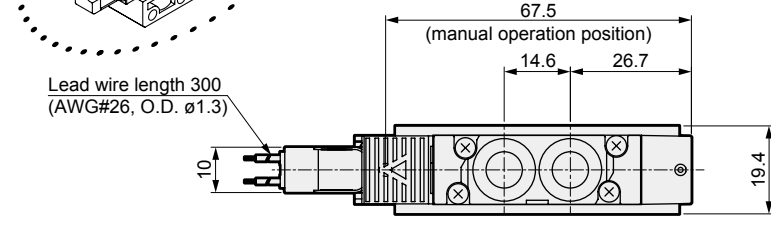
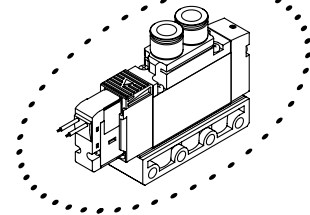
TotAirSys
(Total Air)

TotAirSys
(Gamma)

Ending

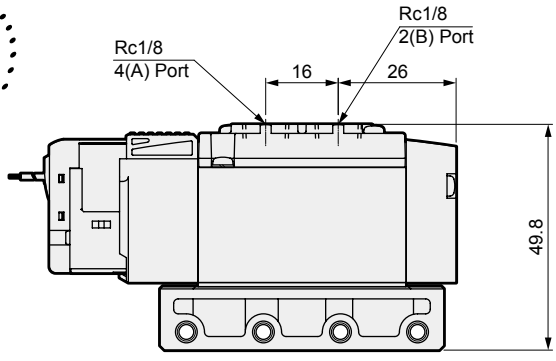
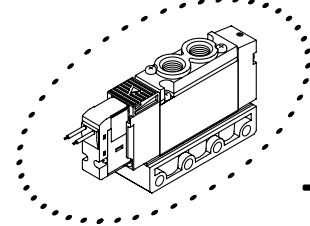
4GA210R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 2-position single grommet lead wire (blank)

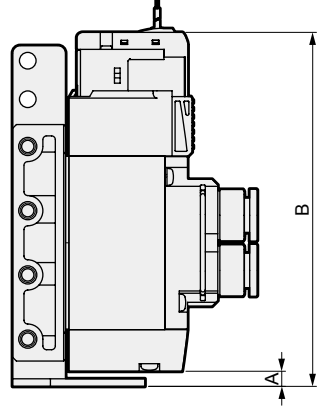
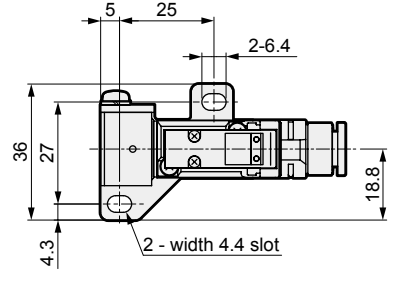
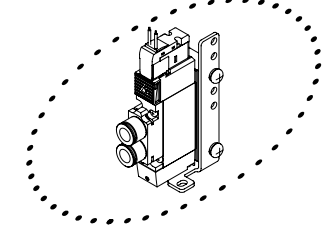


*Refer to page 853 for mounting hole details.

● Rc1/8 female thread (06)



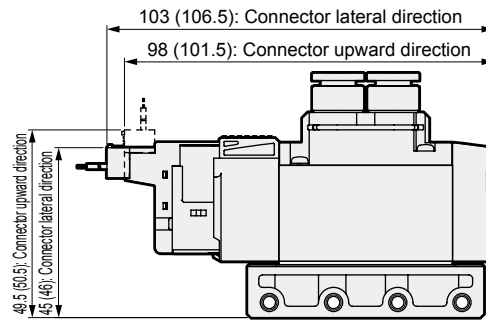
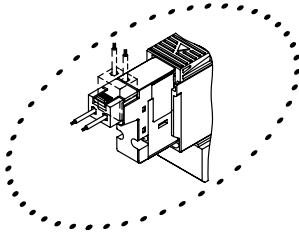
● Mounting plate (P)



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

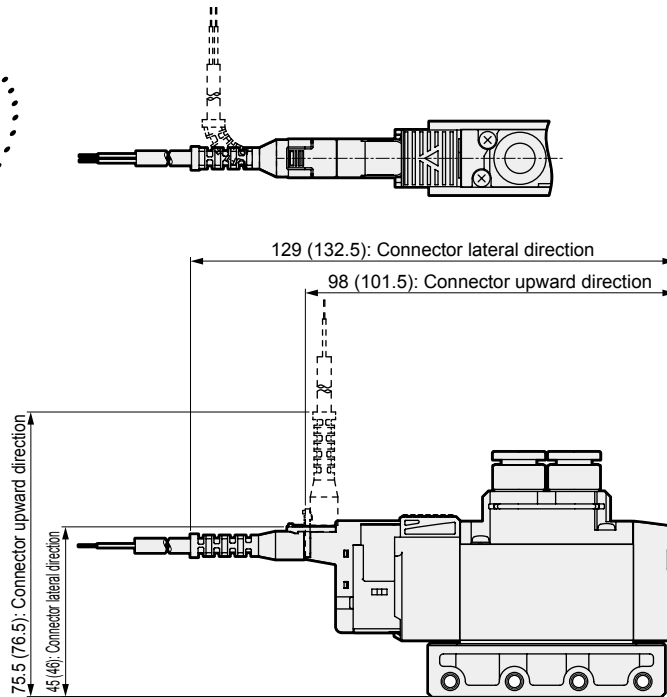
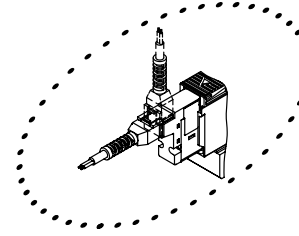
Dimensions

● E type connector (E)



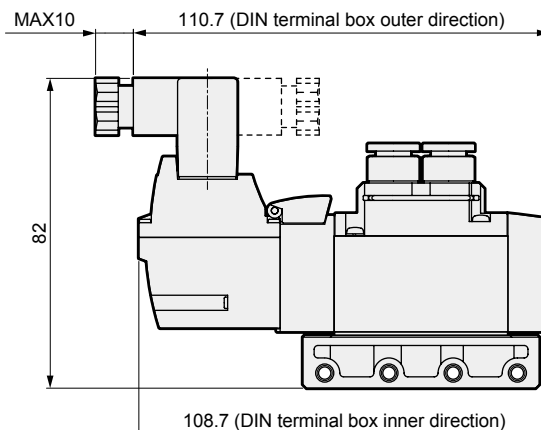
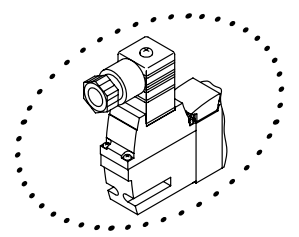
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GA2 Series

Discrete valve; body piping

Dimensions



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

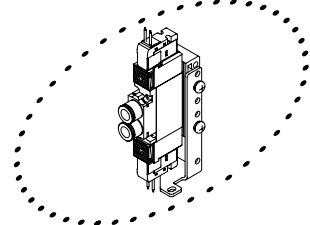
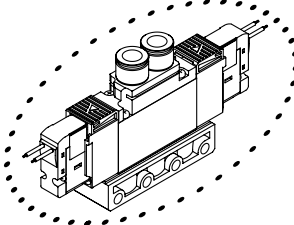
4GA220R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 2-position double grommet lead wire (blank)

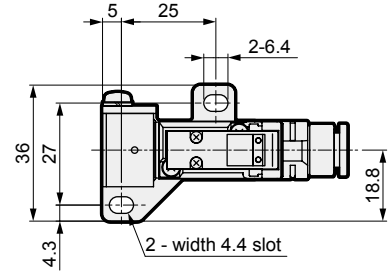
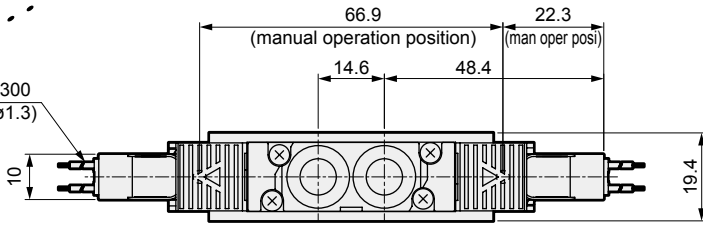
3GA2660R, 3GA2670R, 3GA2760R, 3GA2770R

● Two 3-port valves integrated grommet lead wire (blank)

● Mounting plate (P)

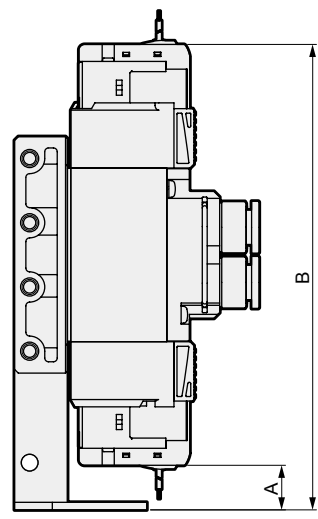
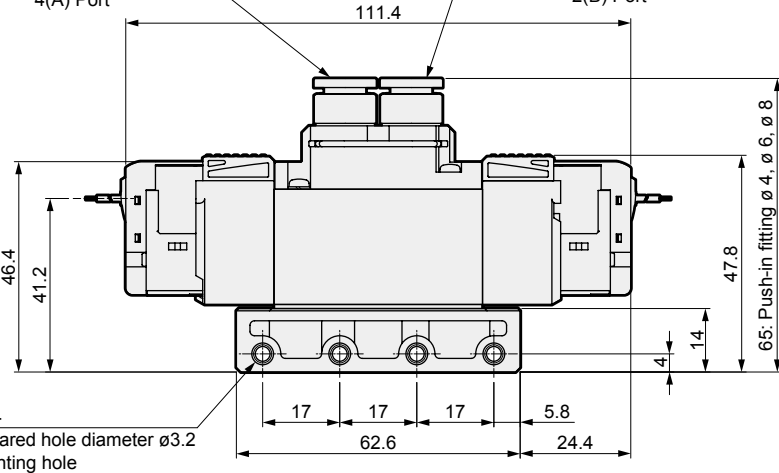
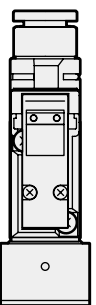


Lead wire length 300 (AWG#26, O.D. ø1.3)

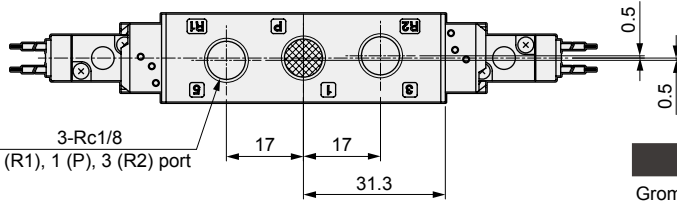


Push-in fitting ø4, ø6, ø8 (selection) 4(A) Port

Push-in fitting ø4, ø6, ø8 (selection) 2(B) Port

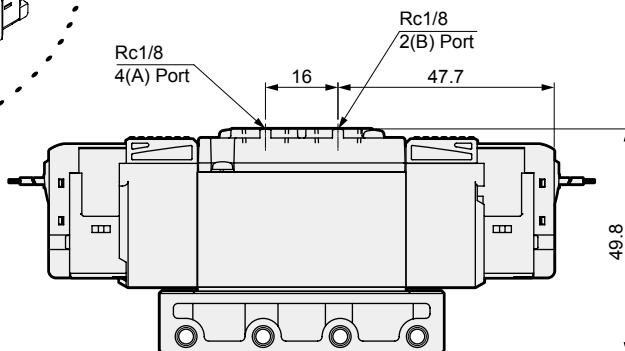
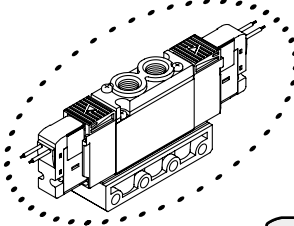


*Refer to page 853 for mounting hole details.



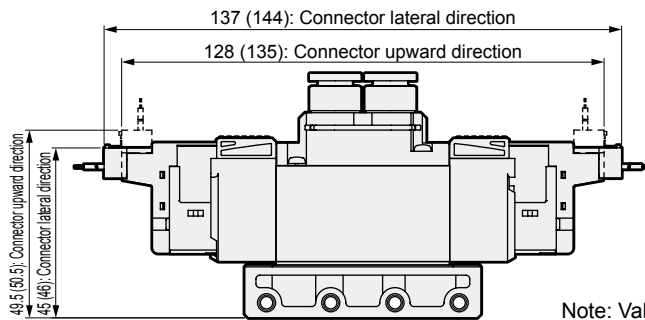
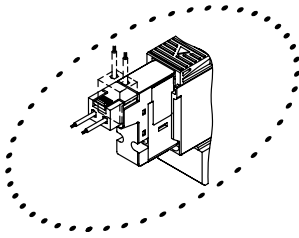
Electrical connections	A	B
Grommet lead wire	11.8	123.2
E, EJ type connector (upward direction), DC voltage	3.5	131.5
E, EJ type connector (upward direction), AC voltage	10.5	148.5
DIN terminal box (inner direction)	3	152.4

● Rc1/8 female thread (06)



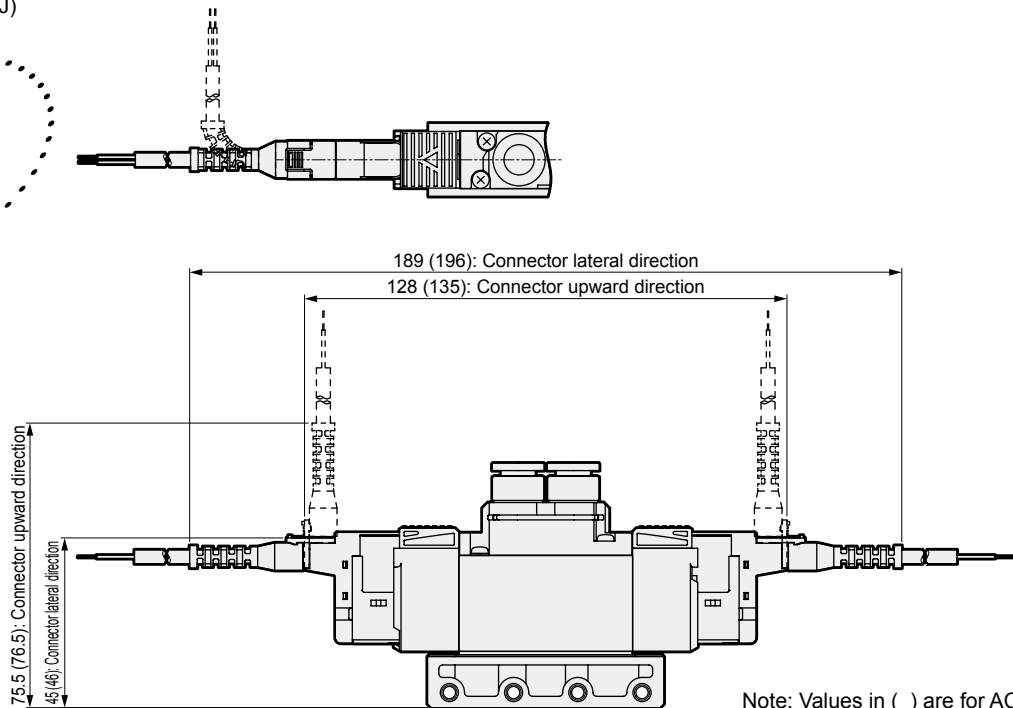
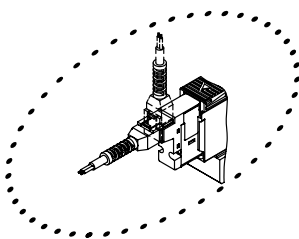
Dimensions

● E type connector (E)



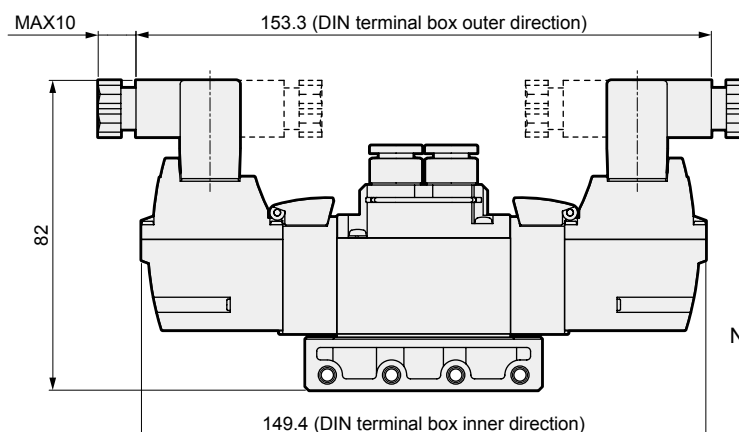
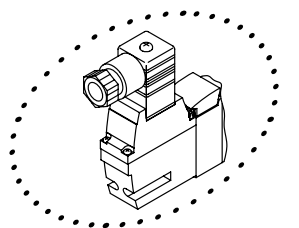
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GA2 Series

Discrete valve; body piping

Dimensions



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)

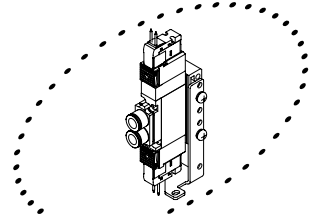
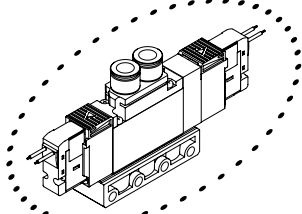
TotAirSys
(Gamma)

Ending

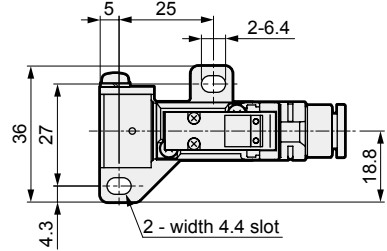
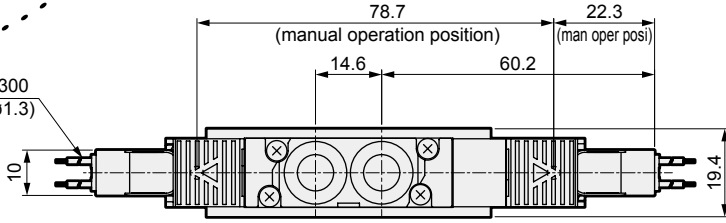
4GA2³/₀R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 3-position grommet lead wire (blank)

● Mounting plate (P)

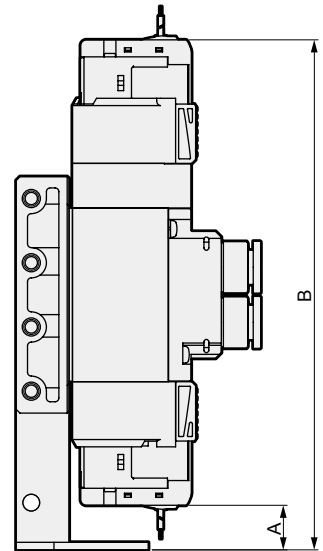
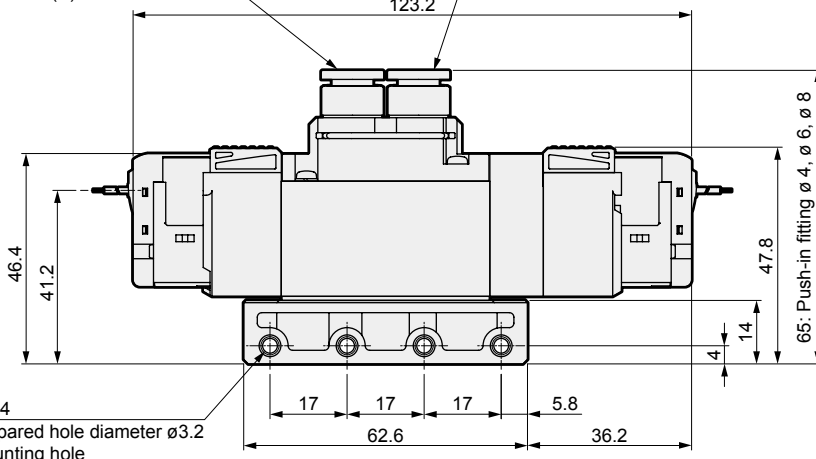
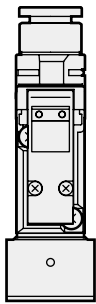


Lead wire length 300
(AWG#26, O.D. ϕ 1.3)

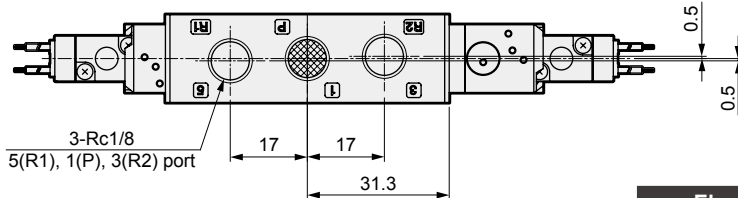


Push-in fitting ϕ 4, ϕ 6, ϕ 8 (selection)
4(A) Port

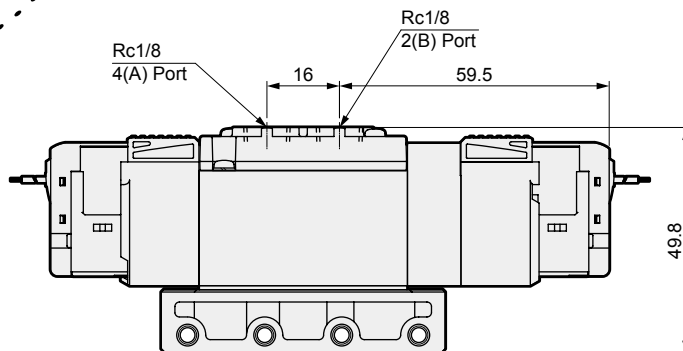
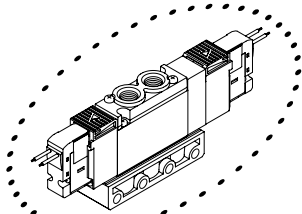
Push-in fitting ϕ 4, ϕ 6, ϕ 8 (selection)
2(B) Port



*Refer to page 853 for mounting hole details.



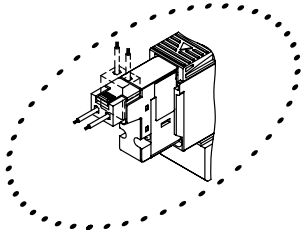
● Rc1/8 female thread (06)



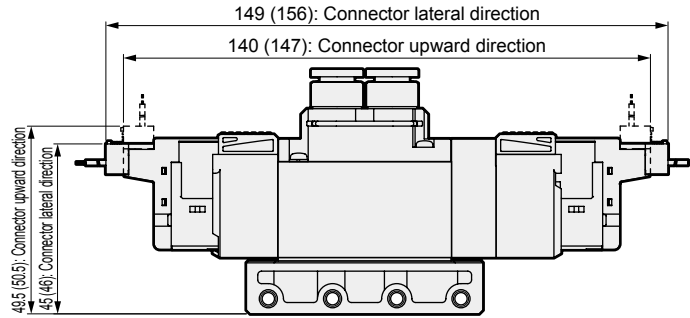
Electrical connections	A	B
Grommet lead wire	11.8	135
E, EJ type connector (upward direction), DC voltage	3.5	143
E, EJ type connector (upward direction), AC voltage	10.5	160.5
DIN terminal box (inner direction)	3	164.2

Dimensions

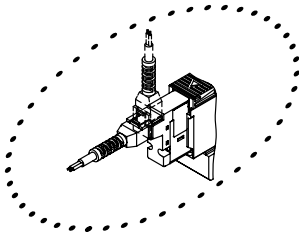
● E type connector (E)



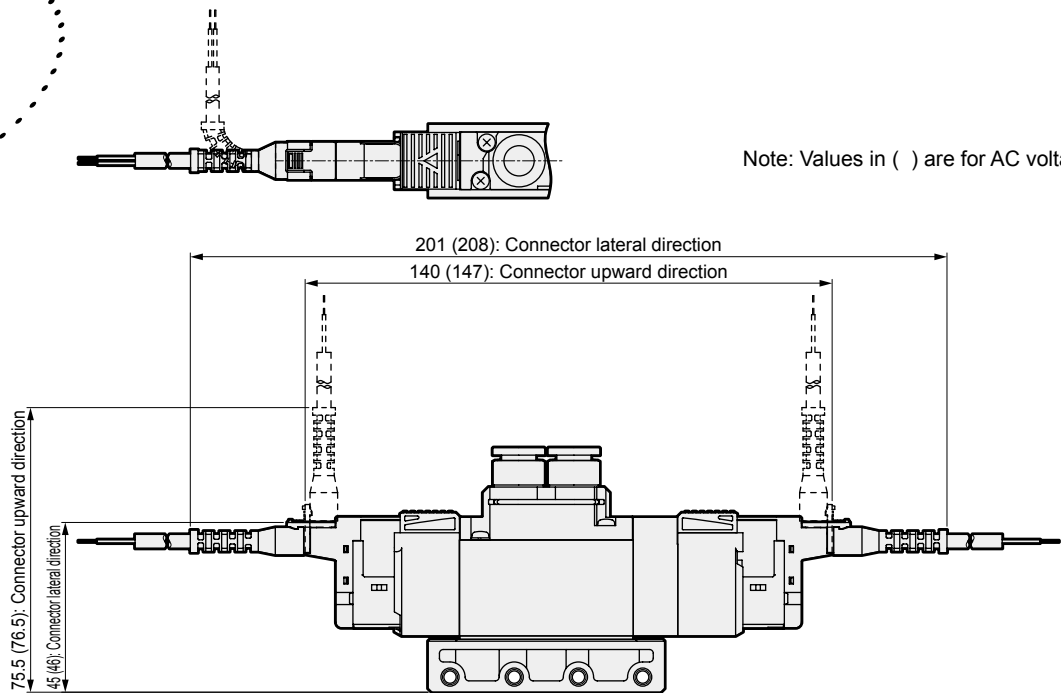
Note: Values in () are for AC voltage.



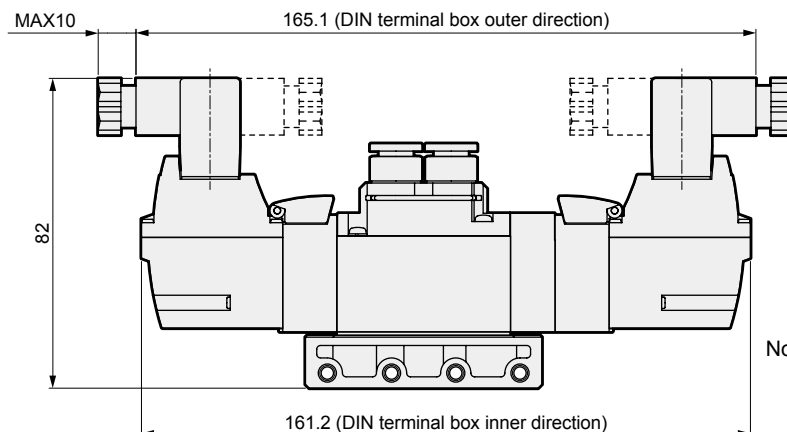
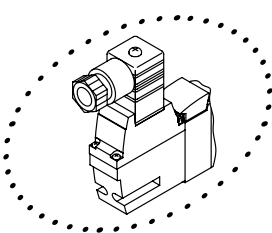
● EJ type connector (E**J)



Note: Values in () are for AC voltage.



● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GA3 Series

Discrete valve; body piping

Dimensions

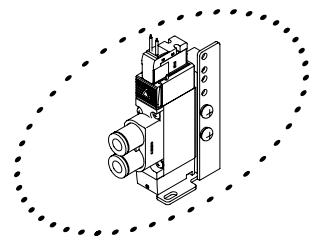
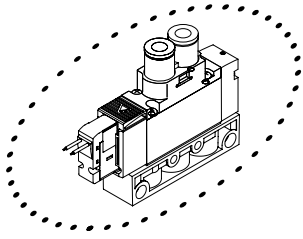


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

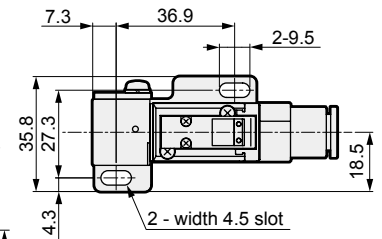
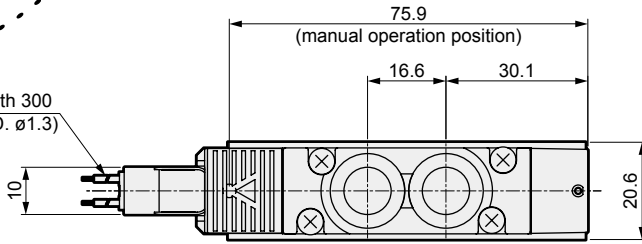
4GA310R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 2-position single grommet lead wire (blank)

● Mounting plate (P)

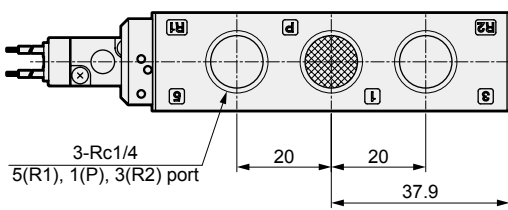
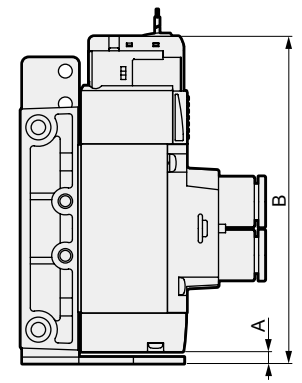
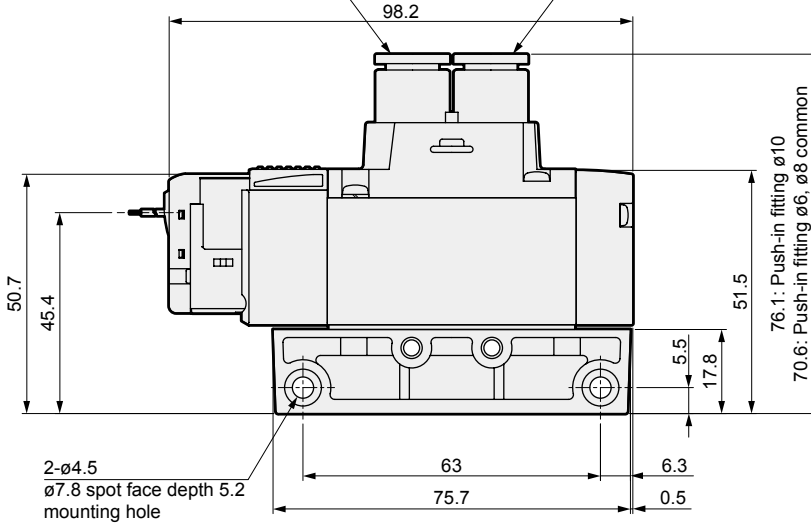
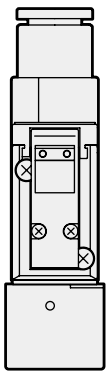


Lead wire length 300
(AWG#26, O.D. ϕ 1.3)



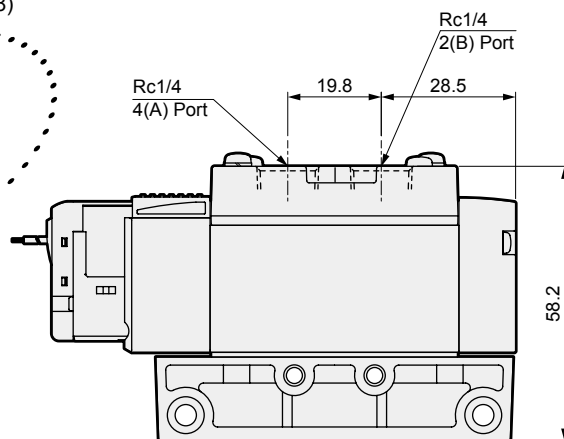
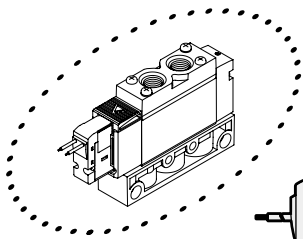
Push-in fitting ϕ 6, ϕ 8, ϕ 10 (selection)
4(A) Port

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



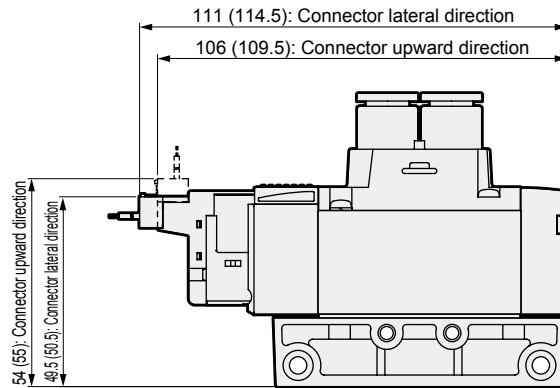
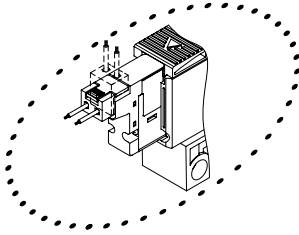
Electrical connections	A	B
Grommet lead wire	3.7	101.8
E, EJ type connector (upward direction), DC voltage		110
E, EJ type connector (upward direction), AC voltage		113.5
DIN terminal box (inner direction)		120.9

● Rc1/4 female thread (08)



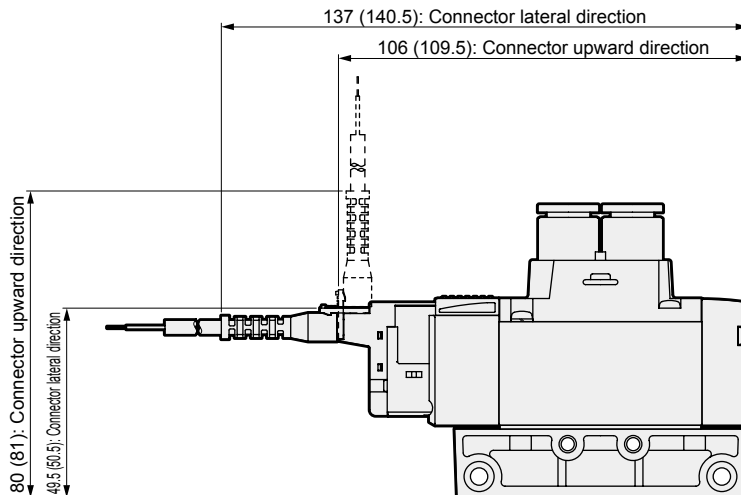
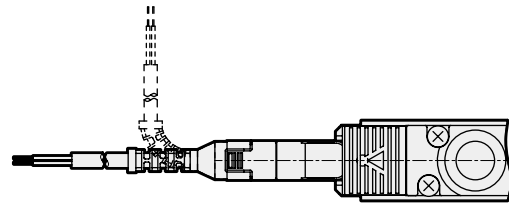
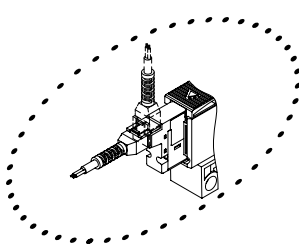
Dimensions

● E type connector (E)



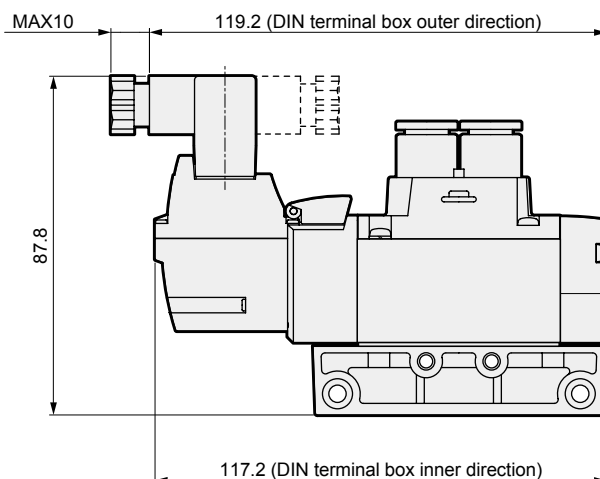
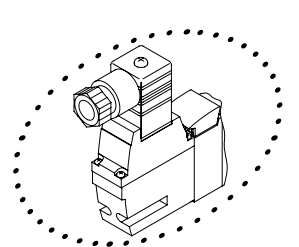
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GA3 Series

Discrete valve; body piping

Dimensions

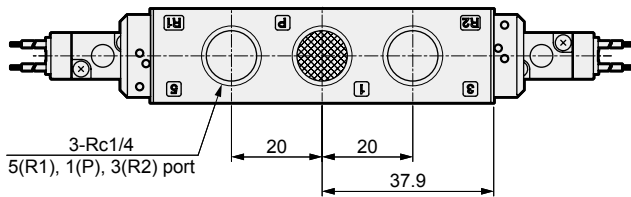
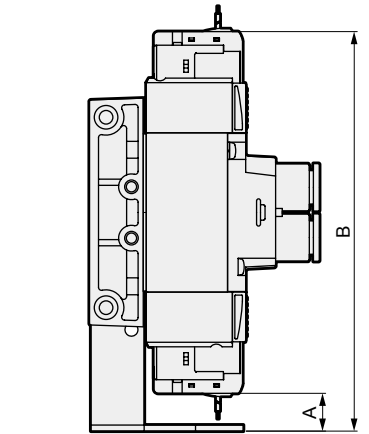
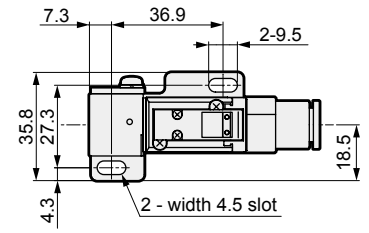
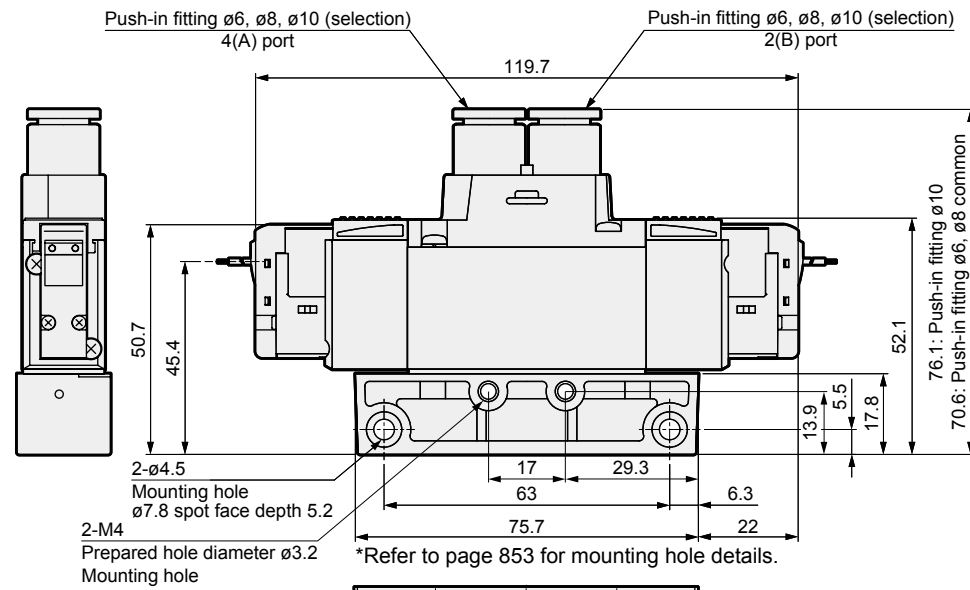
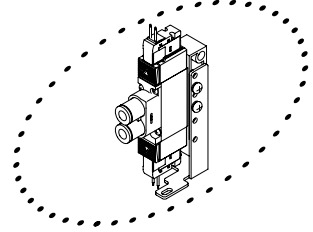
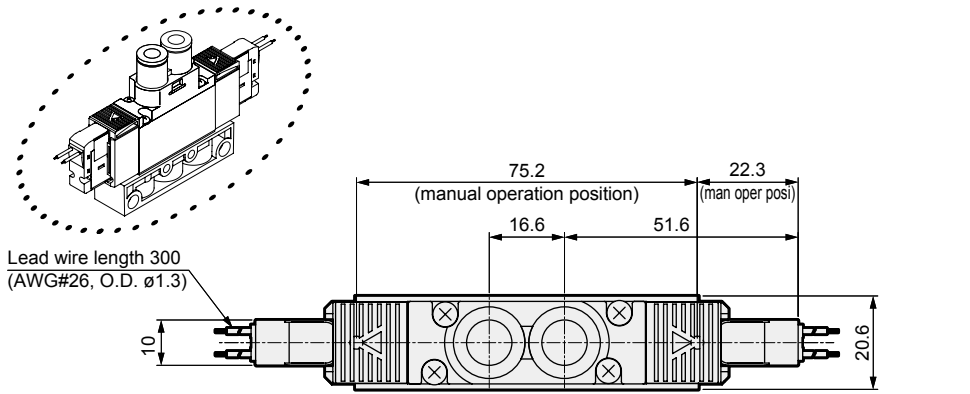


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

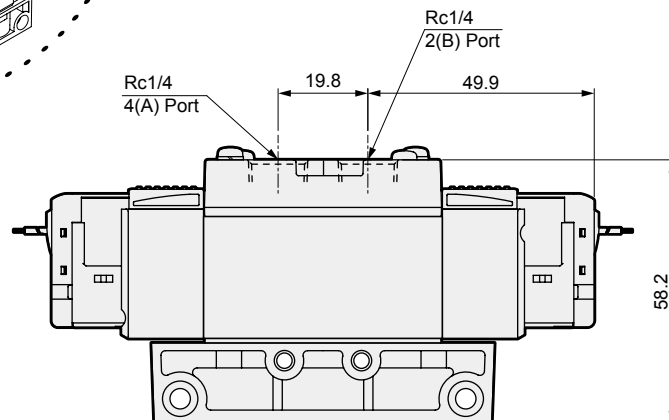
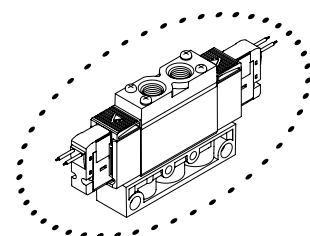
4GA320R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 2-position double grommet lead wire (blank)

● Mounting plate (P)



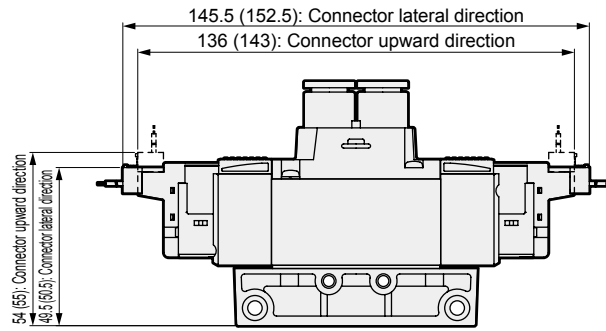
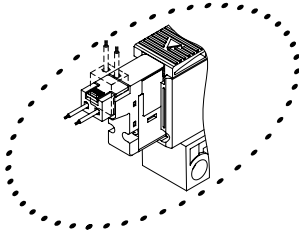
● Rc1/4 female thread (08)



Electrical connections	A	B
Grommet lead wire	12.6	132.2
E, EJ type connector (upward direction), DC voltage	4.5	140.5
E, EJ type connector (upward direction), AC voltage	11	157.5
DIN terminal box (inner direction)	3.7	161.4

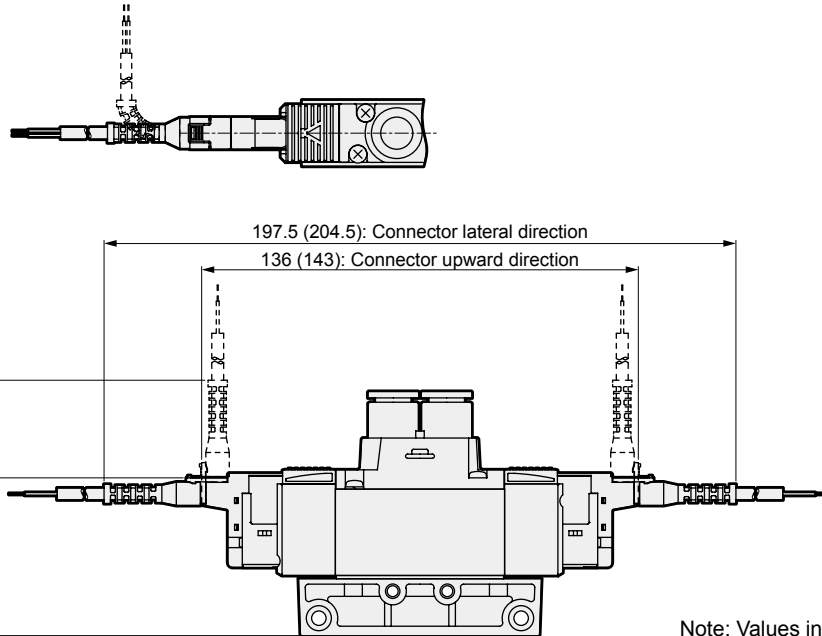
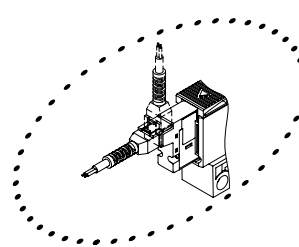
Dimensions

● E type connector (E)



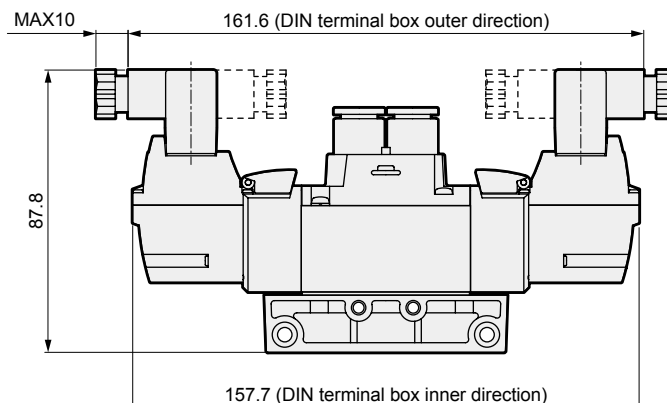
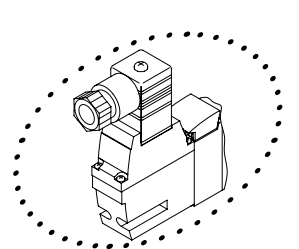
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GA3 Series

Discrete valve; body piping

Dimensions



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)

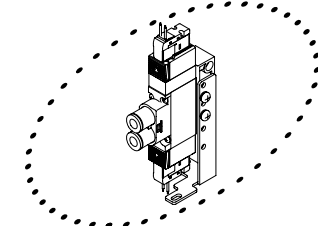
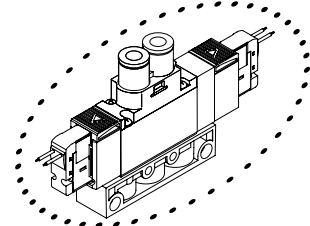
TotAirSys (Gamma)

Ending

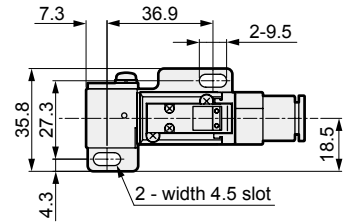
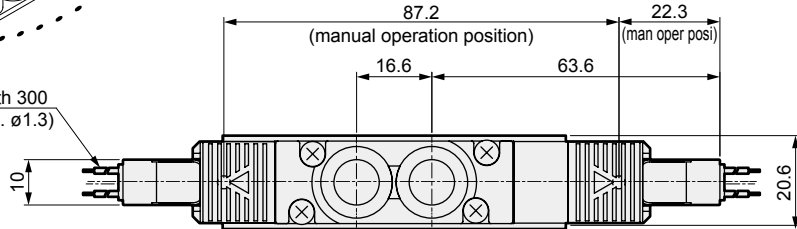
4GA3³/₀R * NPT thread and G thread specifications are listed on pages 52 to 59.

● 3-position grommet lead wire (blank)

● Mounting plate (P)

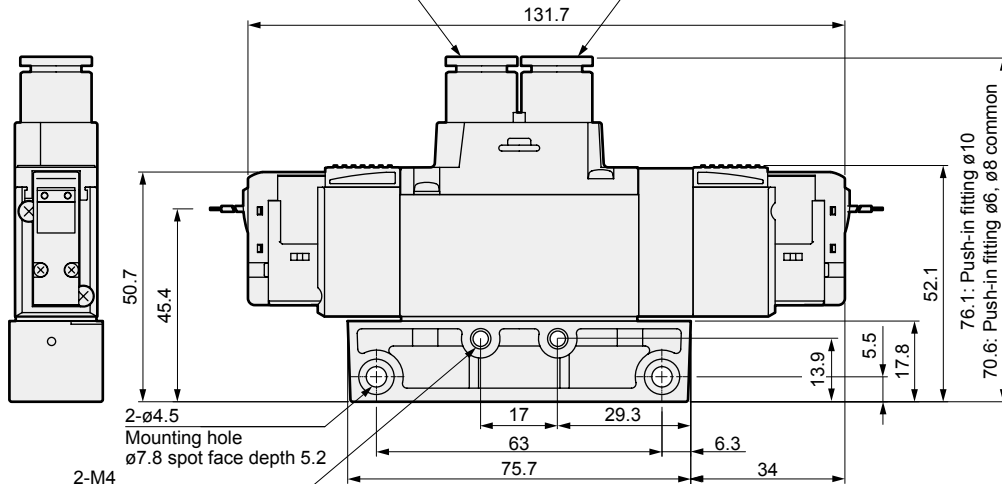


Lead wire length 300 (AWG#26, O.D. ø1.3)

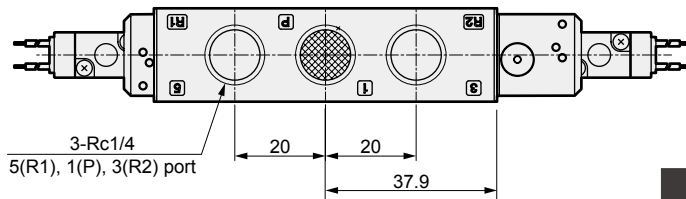


Push-in fitting ø6, ø8, ø10 (selection)
4(A) Port

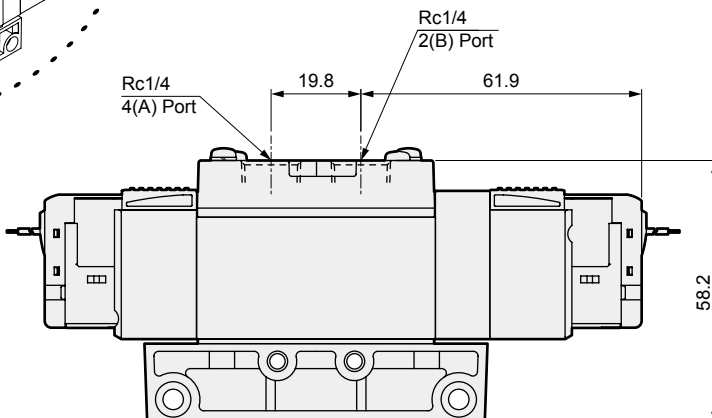
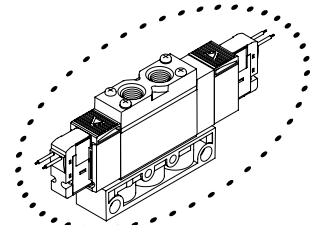
Push-in fitting ø6, ø8, ø10 (selection)
2(B) Port



*Refer to page 853 for mounting hole details.



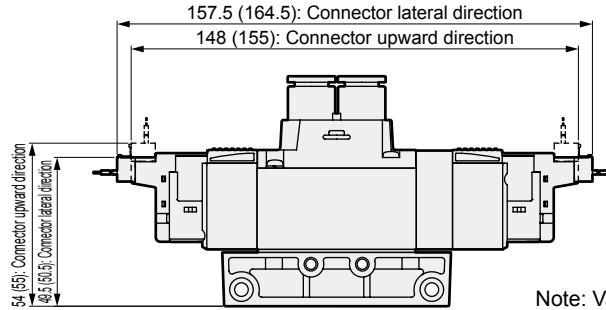
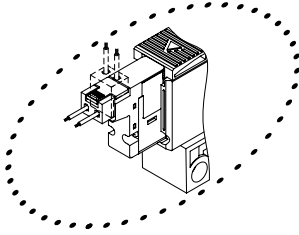
● Rc1/4 female thread (08)



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

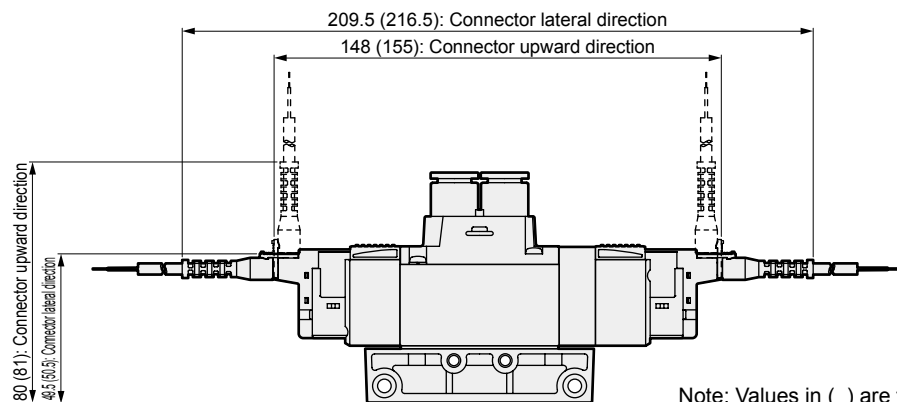
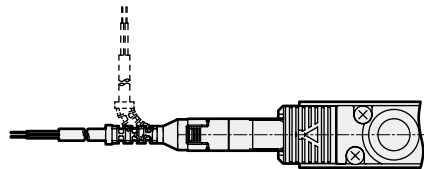
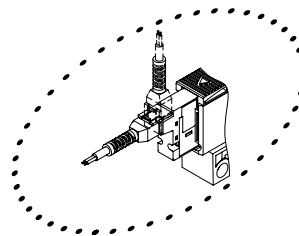
Dimensions

● E type connector (E)



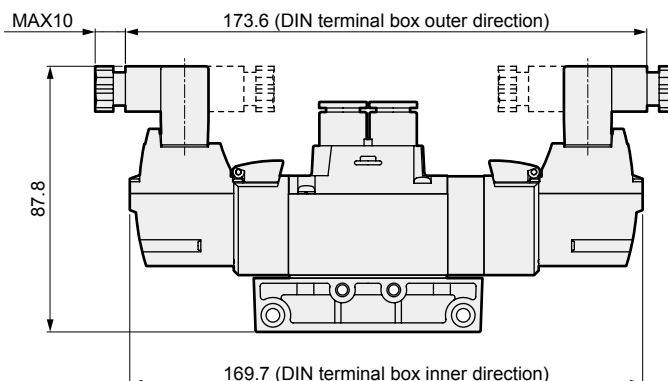
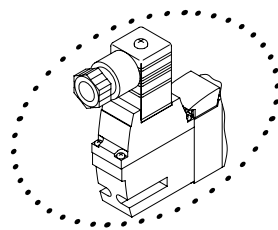
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

3GA1/4GA1 Series

Discrete valve; body piping

Dimensions Port size; NPT thread

- 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

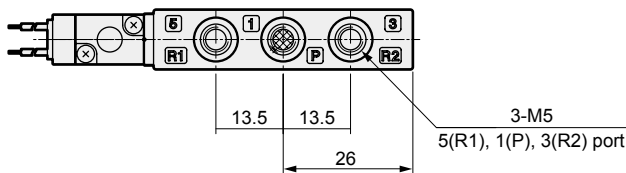
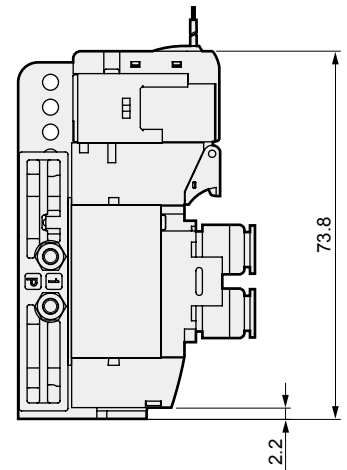
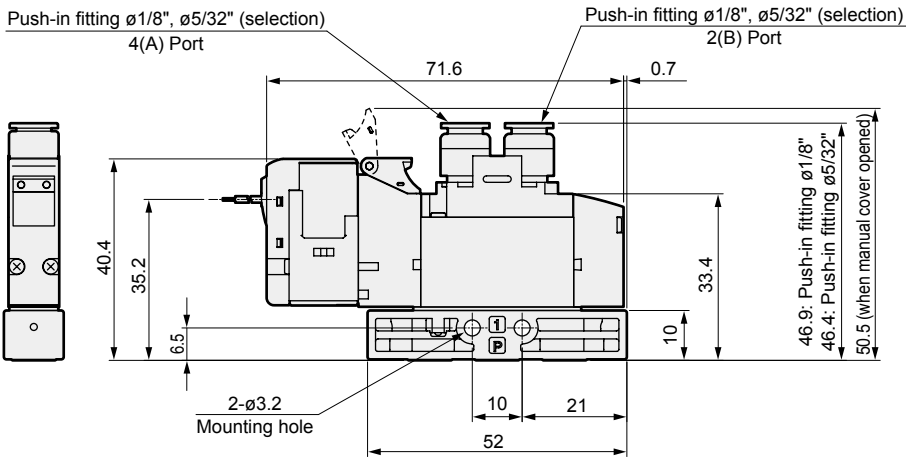
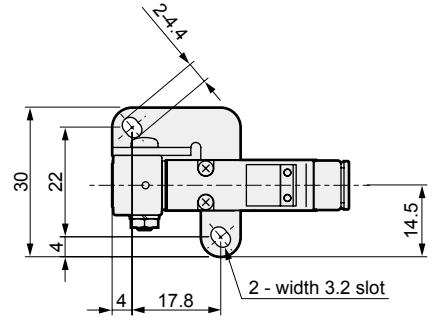
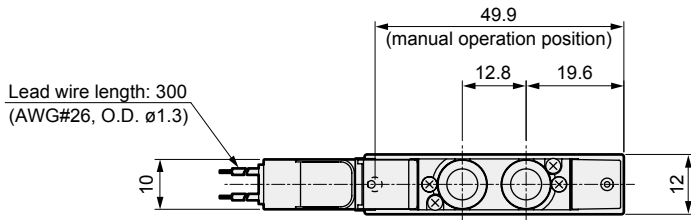
3GA1 1/2, 4GA1 1/2 OR

11
66
67
76
77

1
2
5

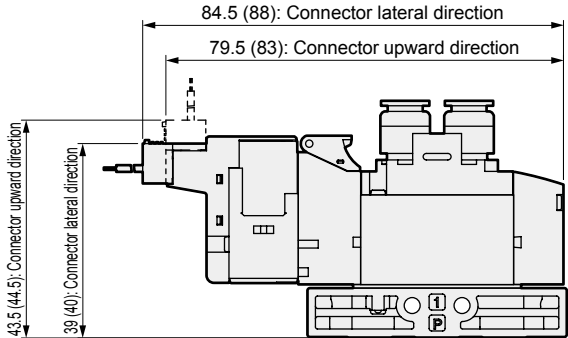
● 2-position single grommet lead wire (blank)

● Mounting plate (P)



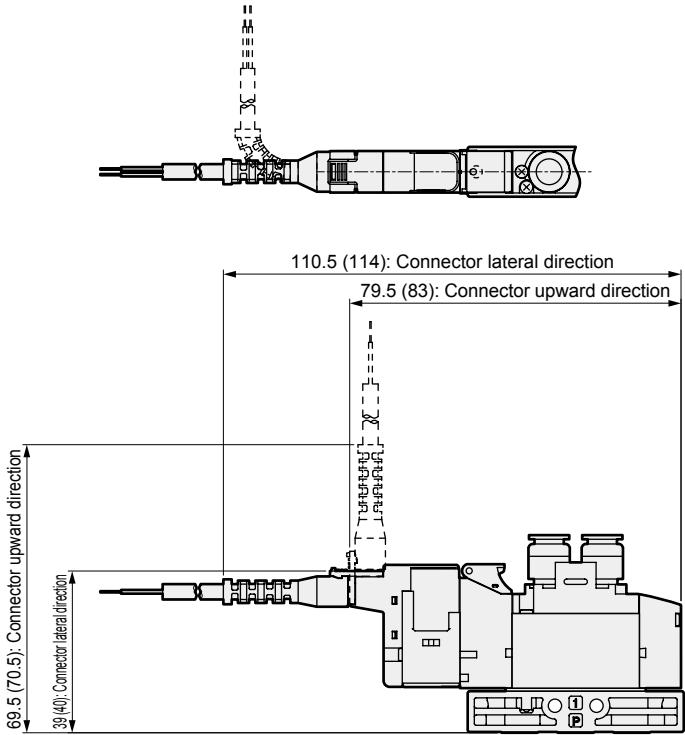
Dimensions Port size; NPT thread

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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

3GA2/4GA2 Series

Discrete valve; body piping

Dimensions Port size; NPT thread

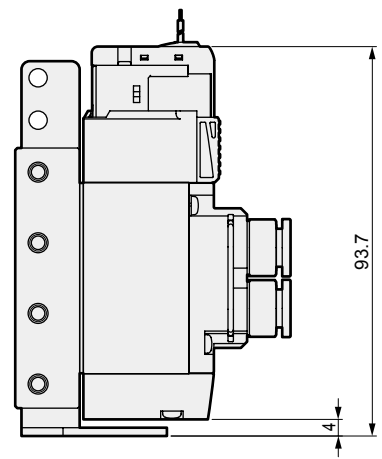
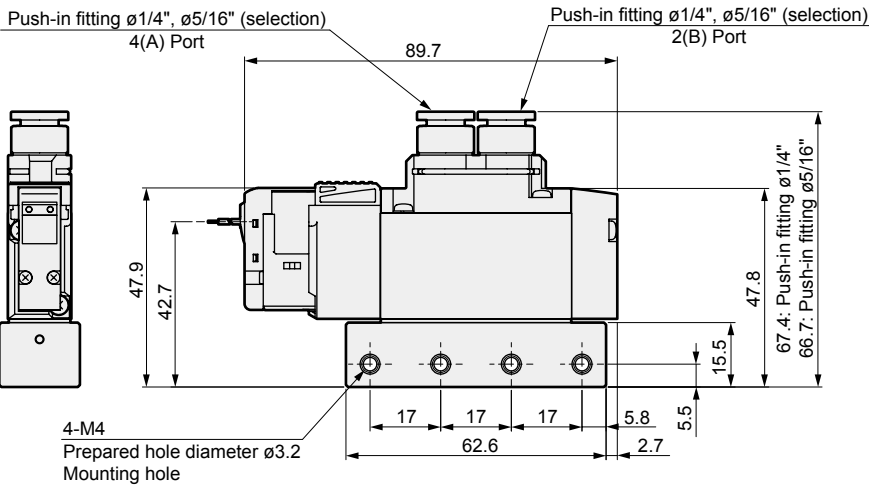
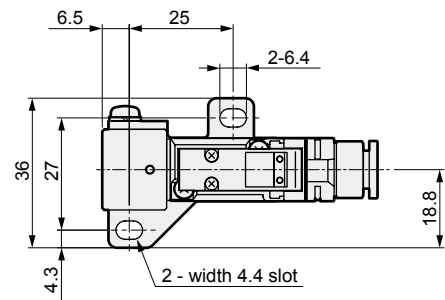
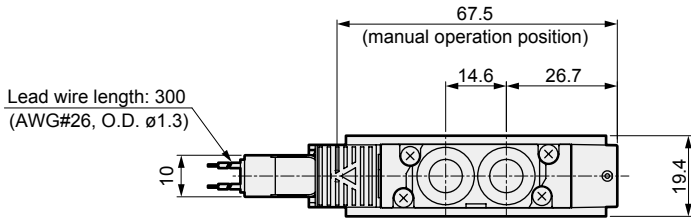
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

3GA2¹0R, 4GA2¹OR

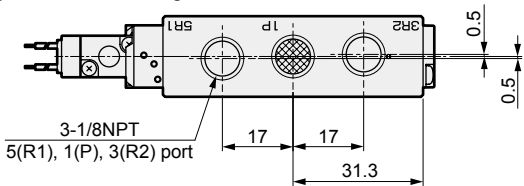
¹₁₁
²₆₆
³₆₇
⁴₇₆
⁵₇₇

● 2-position single grommet lead wire (blank)

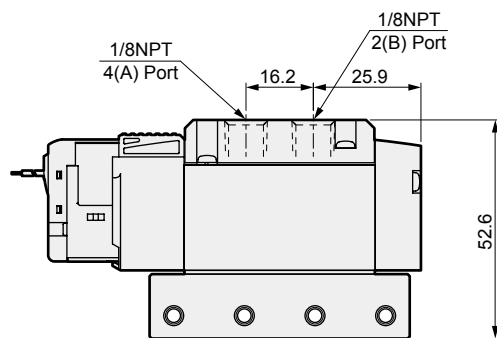
● Mounting plate (P)



*Refer to page 853 for mounting hole details.

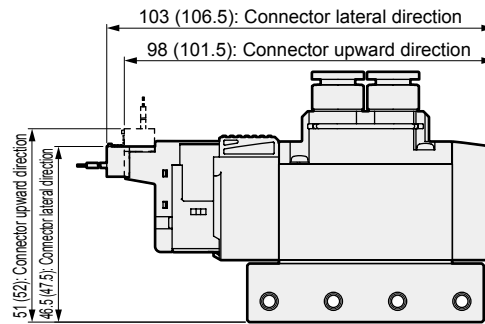


● 1/8NPT female thread (06N)



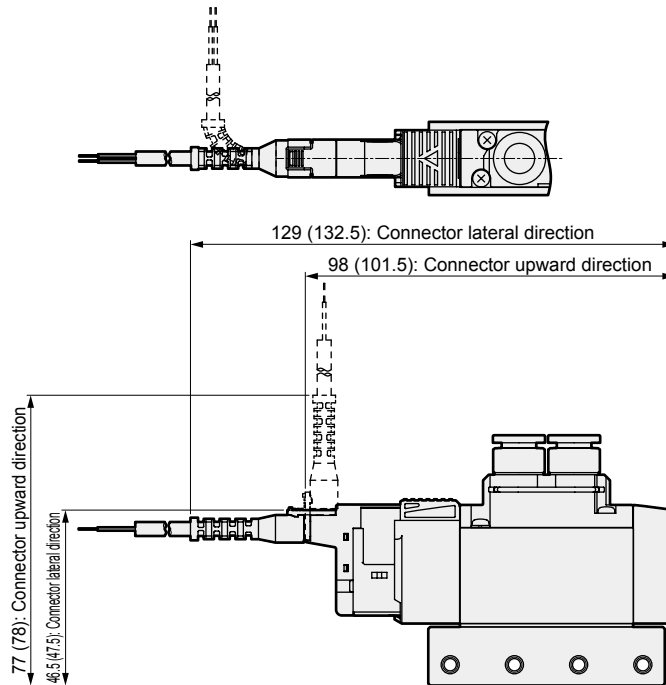
Dimensions Port size; NPT thread

● E type connector (E)



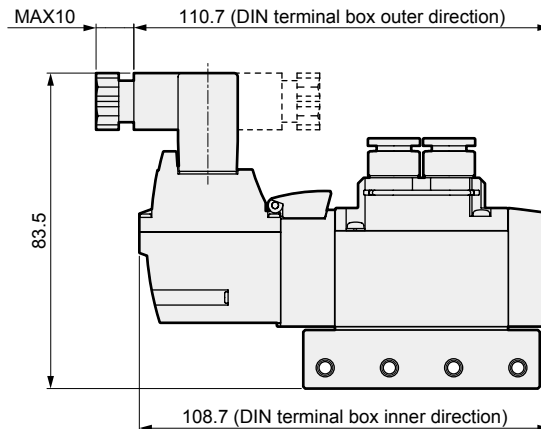
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

3GA3/4GA3 Series

Discrete valve; body piping

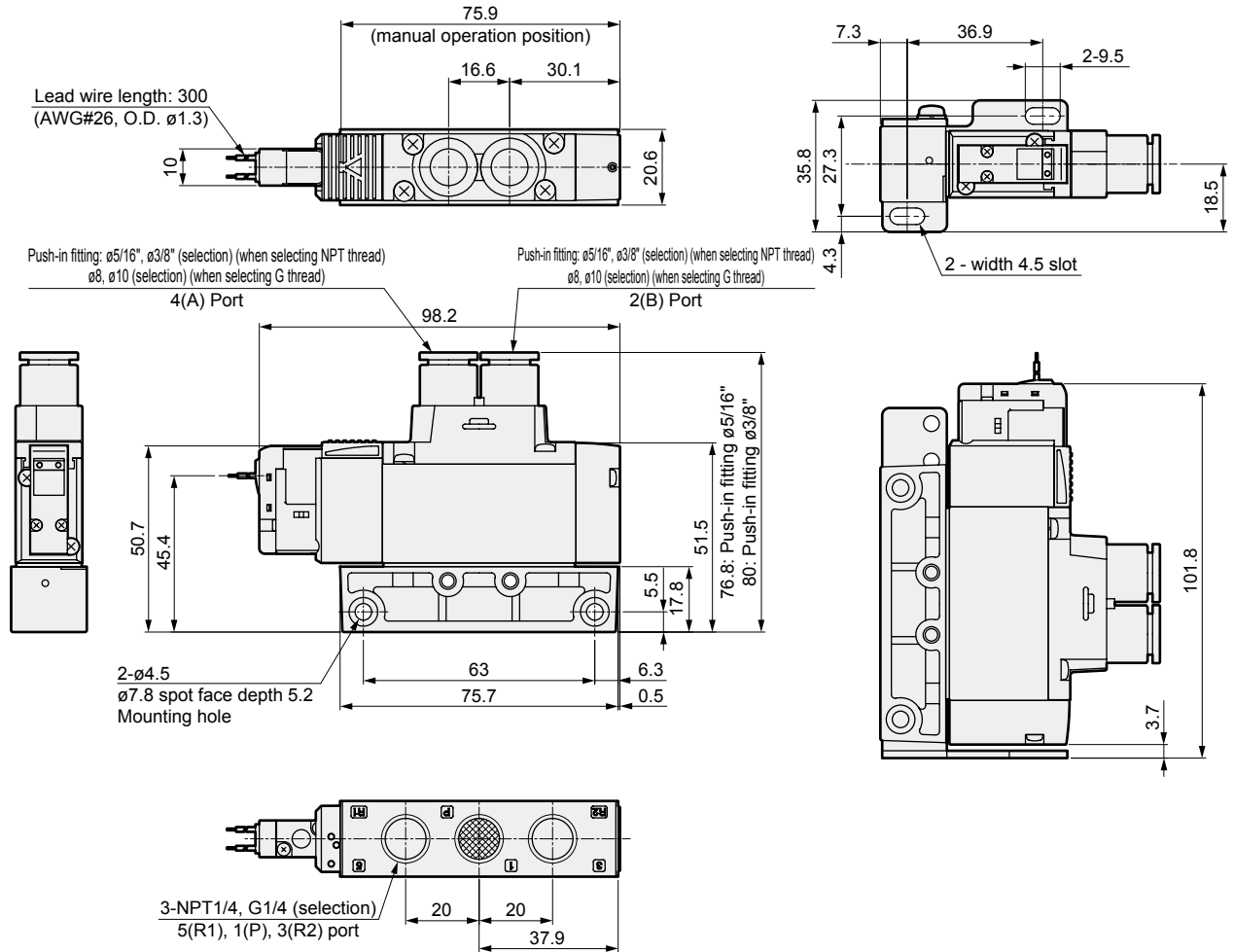
Dimensions Port size; NPT thread, G1/4 thread

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

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

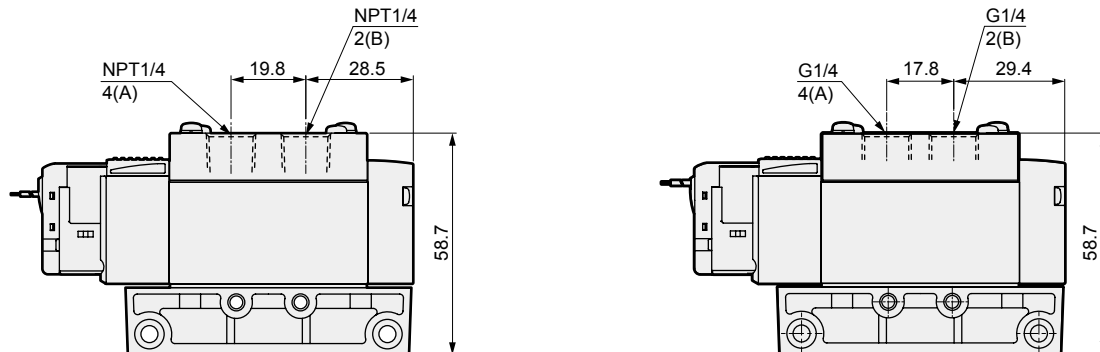
● 2-position single grommet lead wire (blank)

● Mounting plate (P)



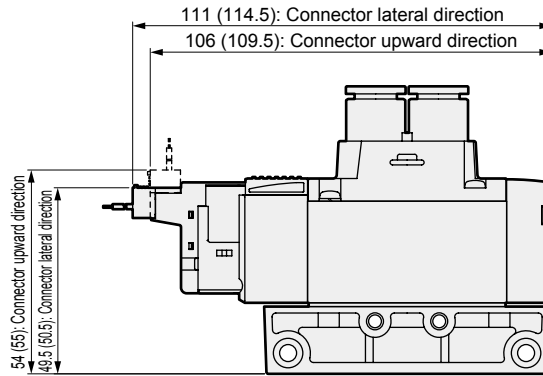
● NPT1/4 female thread (08N)

● G1/4 female thread (08G)



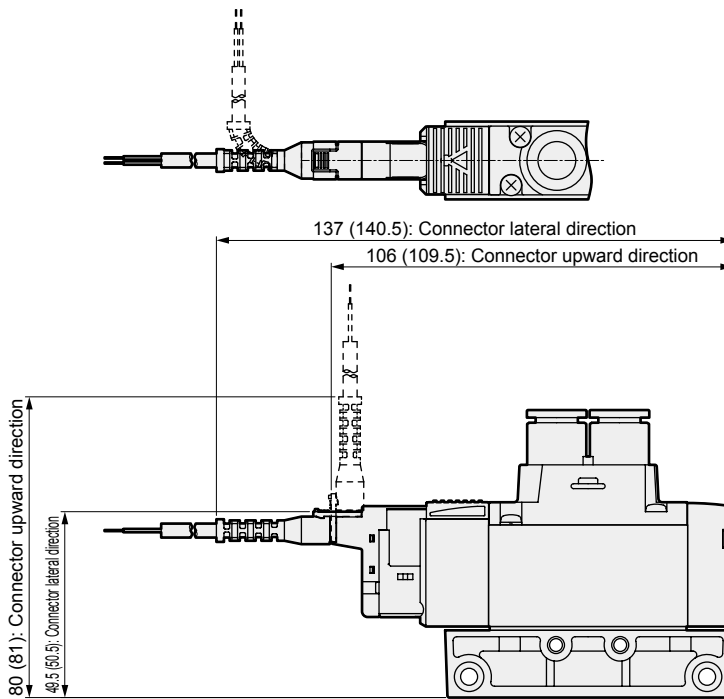
Dimensions Port size; NPT thread

● E type connector (E)



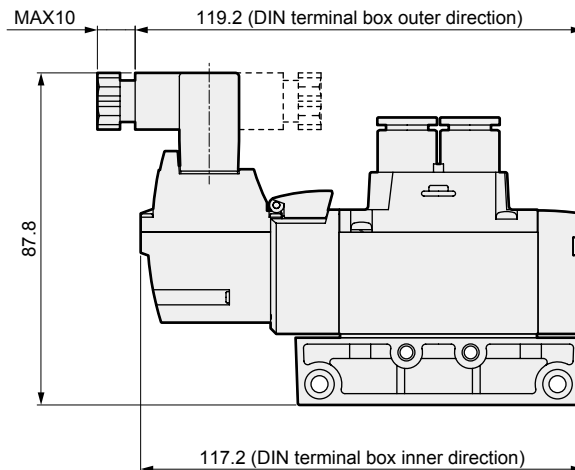
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

3GA2/4GA2 Series

Discrete valve; body piping

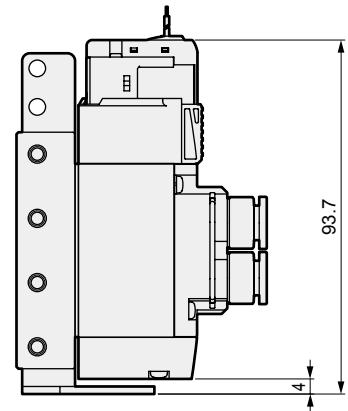
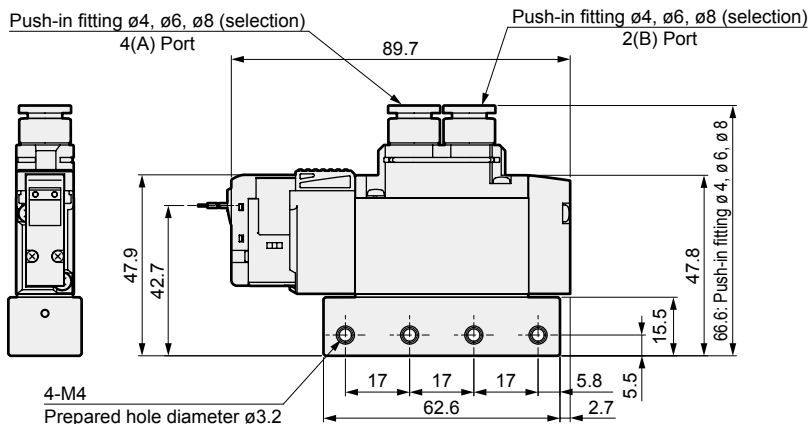
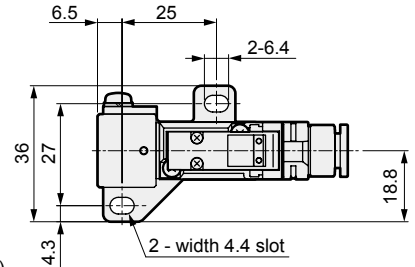
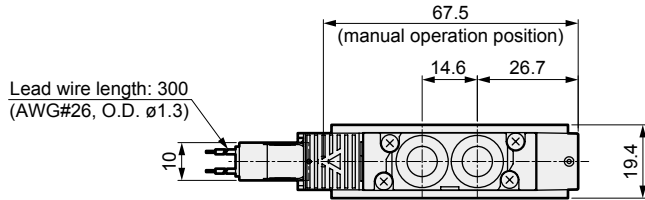
Dimensions Port size; G thread

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

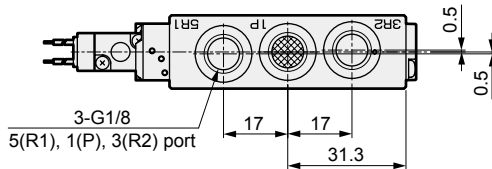
3GA2¹₁₁0R, 4GA2¹₁₁0R

● 2-position single grommet lead wire (blank)

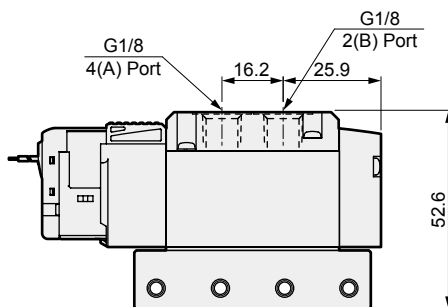
● Mounting plate (P)



*Refer to page 853 for mounting hole details.

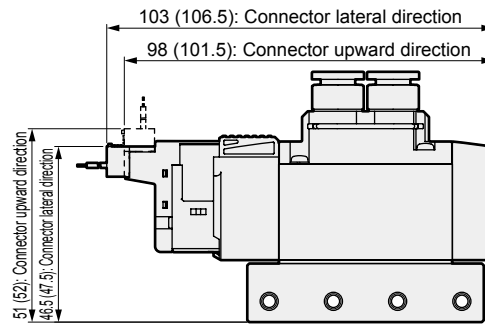


● G1/8 female thread (06G)



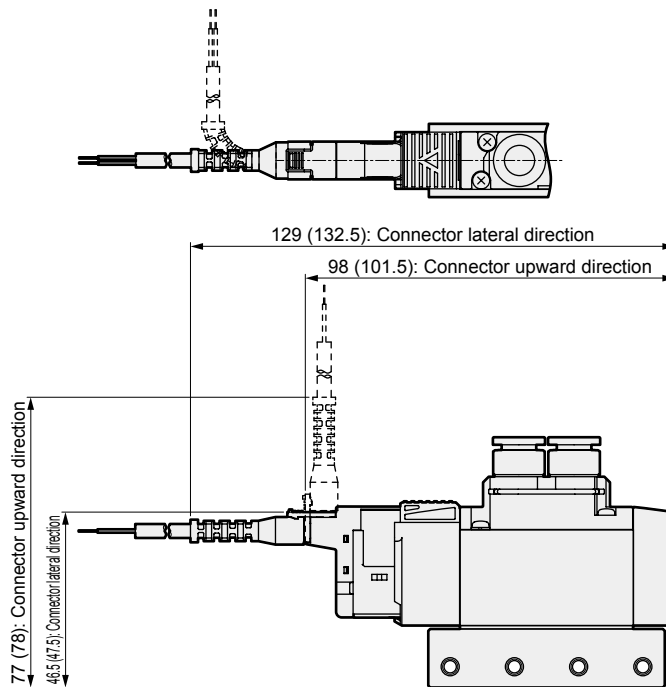
Dimensions Port size; G thread

● E type connector (E)



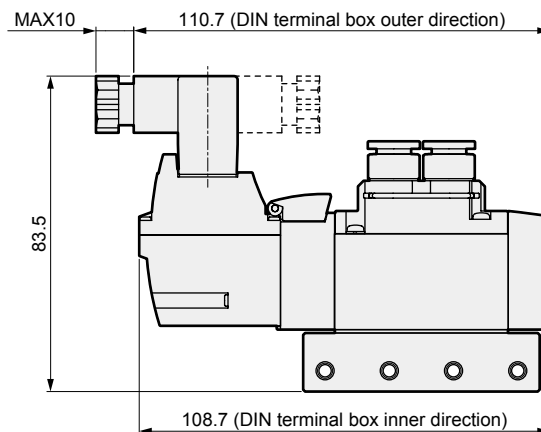
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

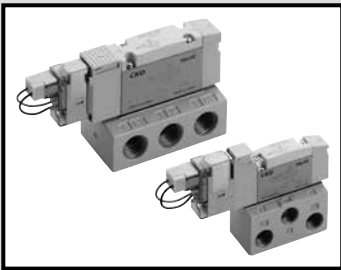
● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

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



Discrete valve
Base piping

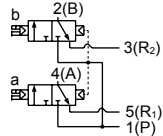
3GB1/2 / 4GB1/2/3 Series

● Cylinder bore size: $\varnothing 20$ to $\varnothing 100$

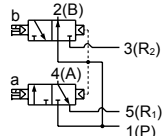


JIS symbol

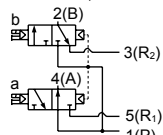
- Two 3-port valves integrated
(A side valve: NC, B side valve: NC)



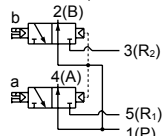
- (A side valve: NC, B side valve: NO)



- (A side valve: NO, B side valve: NC)

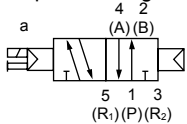


- (A side valve: NO, B side valve: NO)

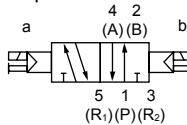


- 5-port valve

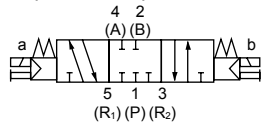
2-position single



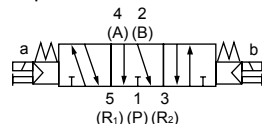
2-position double



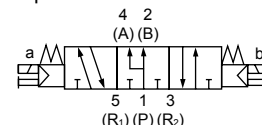
3-position all ports closed



3-position A/B/R connection



3-position P/A/B connection



Common specifications

Item	Description
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7 (≈ 100 psi, 7 bar)
Min. working pressure MPa	0.2 (≈ 29 psi, 2 bar) (*3)
Proof pressure MPa	1.05 (≈ 150 psi, 10.5 bar)
Ambient temperature $^{\circ}\text{C}$	-5 (23 $^{\circ}\text{F}$) to 55 (131 $^{\circ}\text{F}$) (no freezing)
Fluid temperature $^{\circ}\text{C}$	5 (41 $^{\circ}\text{F}$) to 55 (131 $^{\circ}\text{F}$)
Manual override	Non-locking/locking common (standard)
Pilot exhaust method	Internal pilot Main valve/pilot valve common exhaust External pilot Main valve/pilot valve individual exhaust
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof
Vibration resistance m/s^2	50 or less
Shock resistance m/s^2	300 or less
Atmosphere	Cannot be used in corrosive gas environments

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

Electrical specifications

Item	Description	Rated voltage V					
		DC24	DC12	DC5	DC3	AC100	AC200
Voltage fluctuation range		$\pm 10\%$					
Holding current A	Standard	0.015 (0.017)	0.030 (0.034)	0.072 (0.082)	0.120 (0.136)	0.009 (0.009)	0.006 (0.006)
	Low energy/energy circuit (*4)	0.005	0.010	-	-	-	-
Power consumption W (*4)	Standard	0.35(0.40)	0.35(0.40)	-	-	-	-
	Low energy/energy circuit	0.1	-	-	-	-	-
Apparent power VA (*4, 5)	Standard	-	-	-	0.93 (0.98)	1.40	-
	Thermal class	B					
Surge suppressor	Option						
Indicator	Lamp (option)						

- *4: Values in () apply when lamp is included. In addition, the type with low exoergic/energy-saving circuit is only available with lamp.
- *5: 200 VAC is the value of DIN terminal box with lamp.

Individual specifications

Port size		3GB1, 4GB1	3GB2, 4GB2	4GB3
Rc thread	A/B port	Rc1/8	Rc1/4	Rc1/4, Rc3/8
	P/R1/R2 port	Rc1/8	Rc1/4	Rc1/4, Rc3/8
NPT thread (*5)	A/B port	NPT1/8	NPT1/4	NPT1/4, NPT3/8
	P/R1/R2 port	NPT1/8	NPT1/4	NPT1/4, NPT3/8
G thread (*5)	A/B port	G1/8	G1/4	G1/4, G3/8
	P/R1/R2 port	G1/8	G1/4	G1/4, G3/8

- *5: Available as custom-order.

Performance/characteristics by model

Item	3GB1/4GB1		3GB2/4GB2		4GB3		
	ON	OFF	ON	OFF	ON	OFF	
Response time ms	Two 3-port valves integrated		9	12	12	29	-
	2-position	Single	12	12	19	19	25
		Double	9	-	18	-	24
	3-position	ABR connection	8	15	17	30	23

Values with a lamp/surge suppressor are shown. The response times are the values with supply pressure of 0.5 MPa at 20 $^{\circ}\text{C}$ without lubrication. They depend on the pressure and the lubricant quality.

Weight

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

- Values in parenthesis () do not include the single sub-plate. Values for the E type connector include the socket assembly (with 300 mm lead wire). For the EJ type connector, add 16 g/connector to the E type connector weight.
- The weight of the two 3-port valves integrated 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 4GB1	Two 3-port valves integrated		0.92	0.08	1.1	0.26
	2-position		1.3	0.27	1.2	0.22
	3-position	All ports closed	1.1	0.31	1.1	0.27
		ABR connection	1.1	0.31	1.3	0.29
		PAB connection	1.4	0.30	1.1	0.26
	3GB2 4GB2	Two 3-port valves integrated		1.7	0.42	2.1
2-position		2.6	0.20	2.6	0.19	
3-position		All ports closed	2.3	0.32	2.2	0.22
		ABR connection	2.2	0.23	2.6	0.16
		PAB connection	2.4	0.10	2.4	0.22
4GB3		2-position		4.3	0.24	4.2
	3-position	All ports closed	3.3	0.40	3.4	0.27
		ABR connection	3.3	0.36	4.2	0.18
		PAB connection	4.5	0.28	3.4	0.30

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

Ozone-proof specifications · Coolant proof specifications

Can be selected with "How to order" Item (E) option "A" on page 62.

Clean-room specifications

- Anti-dust generation structure for use in cleanrooms

** - Voltage - **P7***

Specifications for rechargeable battery (Catalog No. CC-1226A)

- For use in the rechargeable battery manufacturing process, materials used for air path and sliding section are limited

** - Voltage - **P4**

CE marking specifications

** - Voltage - **ST**

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

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

Discrete valve; base piping

How to order

4GB1 1 0 R - 06 - E2 - 3

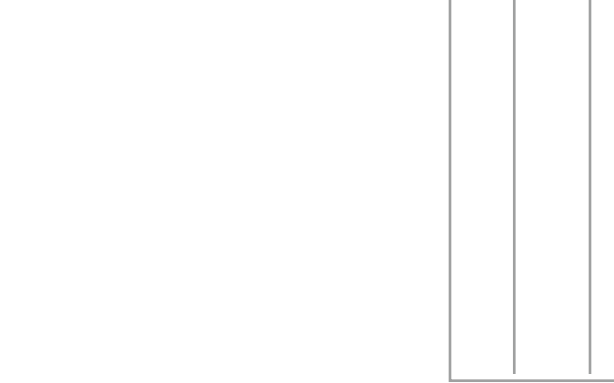
3GB1 66 0 R - 06 - E2 - 3

Discrete valve for mounting base

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

3 port discrete valve for mounting base

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



Refer to page 11 for the circuit diagram with surge suppressor/lamp.



⚠ Precautions for model No. selection

- *1 : Not compatible with combination with external pilot (K). Dimensions are the same as those of the respective 2-position double solenoid.
- *2 : Custom order.
- *3 : 3-position all ports closed and PAB connection are not provided with the exhaust check valve. Refer to page 851 for details on the exhaust check valve.
- *4 : E2* type and E2*J type connectors support 12/24 VDC only. In addition, surgeless "S" and low exoergic/energy-saving circuit "E" cannot be selected together.
- *5 : Surgeless specifications.
- *6 : A filter is built into the P-port as standard.
- *7 : DIN terminal box only is supported.
- *8 : Grommet lead wire specifications are compatible with DC voltage only.
- *9 : AC voltages and 12/24 VDC are supported. In addition, a lamp comes with the terminal box.
- *10: AC voltage is with a rectifier circuit.
- *11: The terminal box conforms to EN175301-803 Type C (former DIN 43650-C). Refer to pages 856 and 857 for details.
- *12: Compatible only with 4GB1 and 4GB2 (R) solenoid positions 3 or 4.

A Model No.

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

Code	Description	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	Two 3-port valves integrated (*1)	●	●			
67	Two 3-port valves integrated (*1)	●	●			
76	Two 3-port valves integrated (*1)	●	●			
77	Two 3-port valves integrated (*1)	●	●			

Port 4(A)/2(B) port		P/R1/R2 port (2) = Rc1/8 (3) = Rc1/4 (4) = Rc3/8			
06	Rc1/8	(2)	(2)		
08	Rc1/4		(3)	(3)	(3)
10	Rc3/8				(4)
Port 4(A)/2(B) port		P/R1/R2 port (5) = 1/8NPT, (6) = 1/4NPT, (7) = 3/8NPT			
06N	NPT1/8 (*2)	(5)	(5)		
08N	NPT1/4 (*2)		(6)	(6)	(6)
10N	NPT3/8 (*2)				(7)
Port 4(A)/2(B) port		P/R1/R2 port (8)=G1/8, (9)=G1/4, (10)=G3/8			
06G	G1/8 (*2)	(8)	(8)		
08G	G1/4 (*2)		(9)	(9)	(9)
10G	G3/8 (*2)				(10)
00	Discrete valve for mounting base	●	●	●	●

D Electrical connections		3GB1	3GB2	4GB1	4GB2	4GB3
Blank	Grommet lead wire (300 mm) (*8)	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/lamp (*9) (*11)		●		●	●
BN	DIN term. box (Pg7) (no terminal box) + surge suppressor (*9) (*11)		●		●	●
E type connector (upward/lateral common)						
E0	Lead wire (300 mm) (*10)	●	●	●	●	●
E00	Lead wire (500 mm) (*10)	●	●	●	●	●
E01	Lead wire (1000 mm) (*10)	●	●	●	●	●
E02	Lead wire (2000 mm) (*10)	●	●	●	●	●
E03	Lead wire (3000 mm) (*10)	●	●	●	●	●
E0N	Without lead wire (without socket) (*10)	●	●	●	●	●
E1	Without lead wire (socket/terminal attached) (*10)	●	●	●	●	●
E2	Lead wire (300 mm), surge suppressor/indicator lamp	●	●	●	●	●
E20	Lead wire (500 mm), surge suppressor/indicator lamp	●	●	●	●	●
E21	Lead wire (1000 mm), surge suppressor/indicator lamp	●	●	●	●	●
E22	Lead wire (2000 mm), surge suppressor/indicator lamp	●	●	●	●	●
E23	Lead wire (3000 mm), surge suppressor/indicator lamp	●	●	●	●	●
E2N	No lead wire (without socket), surge suppressor/indicator lamp	●	●	●	●	●
E3	No lead wire (with socket/terminal), surge suppressor/indicator lamp	●	●	●	●	●
EJ type connector (socket with cover, upward/lateral common)						
E01J	Lead wire (1000 mm) (*10)	●	●	●	●	●
E02J	Lead wire (2000 mm) (*10)	●	●	●	●	●
E03J	Lead wire (3000 mm) (*10)	●	●	●	●	●
E21J	Lead wire (1000 mm), surge suppressor/indicator lamp	●	●	●	●	●
E22J	Lead wire (2000 mm), surge suppressor/indicator lamp	●	●	●	●	●
E23J	Lead wire (3000 mm), surge suppressor/indicator lamp	●	●	●	●	●

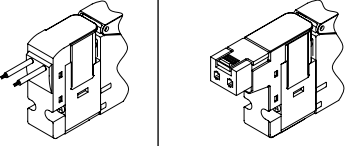
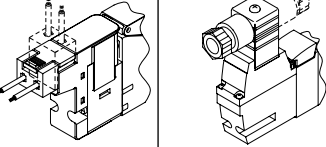
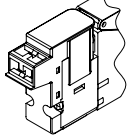
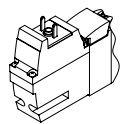
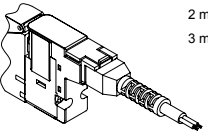
E Option		3GB1	3GB2	4GB1	4GB2	4GB3
Blank	Non-locking/locking common manual override	●	●	●	●	●
M	Non-locking manual override	●	●	●	●	●
H	With exhaust check valve (*3)	●	●	●	●	●
K	External pilot			●	●	●
A	Ozone/coolant proof			●	●	●
S	Surgeless (*4)	●	●	●	●	●
E	Low exoergic/energy saving circuit (*4), (*5)	●	●	●	●	●
F	A/B-port filter built in (*6)			●	●	●
X	Non-locking residual pressure exhaust structure (*12)			●	●	●
X1	Locking residual pressure exhaust structure (*12)			●	●	●

F Voltage		3GB1	3GB2	4GB1	4GB2	4GB3
1	100 VAC (rectifier integrated)	●	●	●	●	●
2	200 VAC (rectifier integrated) (*7)		●		●	●
3	24 VDC	●	●	●	●	●
4	12 VDC	●	●	●	●	●
7	3 VDC	○	○	○	○	○
8	5 VDC	○	○	○	○	○

is not available.
○ indicates a custom order.

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	BN DIN terminal box without terminal box
	
E0*J E2*J EJ type connector	
<p>● Lead wire length 1 m 2 m 3 m</p> 	

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

3GB1/4GB1 Series

Discrete valve; base piping

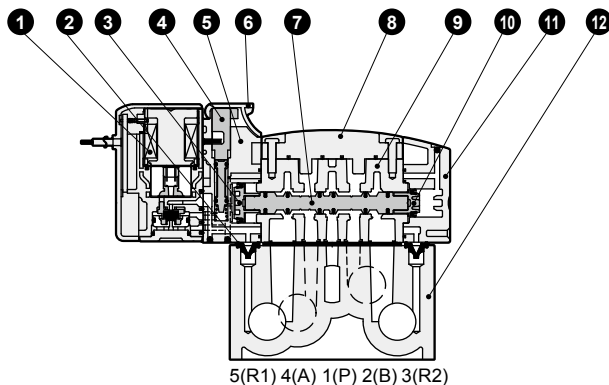
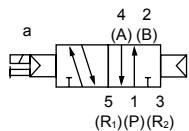
4GA/B Internal structure and parts list

M4GA/B 3GB1660R, 1670R, 1760R, 1770R

- Two 3-port valves integrated Refer to page 66.
- Grommet lead wire (blank)

4GB110R

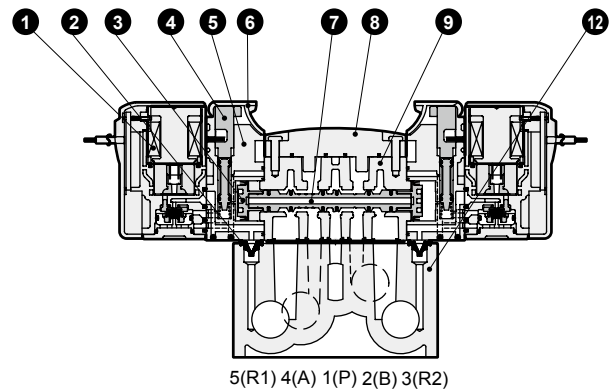
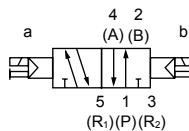
- 2-position single
- Grommet lead wire (blank)



MN3E
MN4E

W4GA/B2 4GB120R

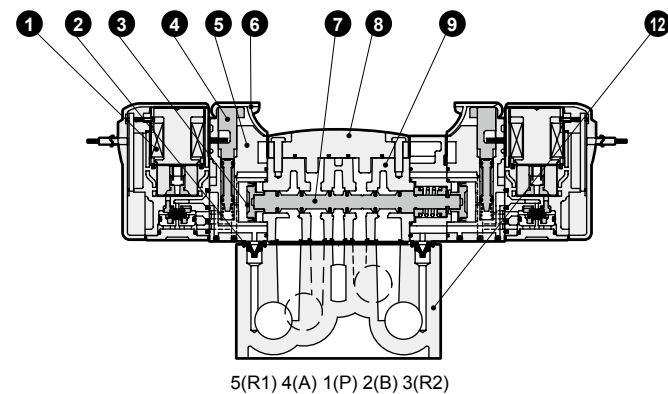
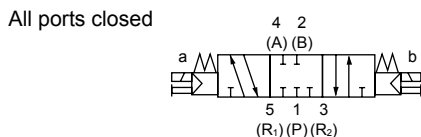
- 2-position double
- Grommet lead wire (blank)



4F

4F (master) 4GB1³/₄/₅0R

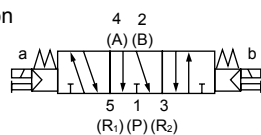
- 3-position
- Grommet lead wire (blank)



3Q

MV3QR

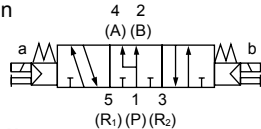
A/B/R connection



3PA/B

P/M/B

P/A/B connection



4G*0EJ

4F*0EX

4F*0E

HMV

HSV

2QV

3QV

SKH

Silencer

TotAirSys (Total Air)

TotAirSys (Gamma)

Ending

Main parts list

No.	Part name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston D assembly	-
4	Manual override	Resin
5	Piston chamber	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.	Part name	Model No.
1	Coil assembly	4GR -electrical connections- <input type="checkbox"/> - COIL -voltage Blank: Standard A: Ozone specification S: Surgeless E: Low exoergic/energy saving circuit K: External pilot Blank: Grommet lead wire

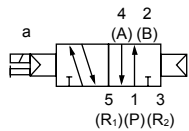
Internal structure and parts list

3GB2660R, 2670R, 2760R, 2770R

- Two 3-port valves integrated
 - Grommet lead wire (blank)
- Refer to page 66.

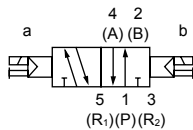
4GB210R/4GB310R

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



4GB220R/4GB320R

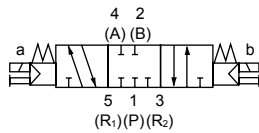
- 2-position double
- Grommet lead wire (blank)



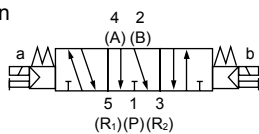
4GB2³/₅0R/4GB3³/₅0R

- 3-position
- Grommet lead wire (blank)

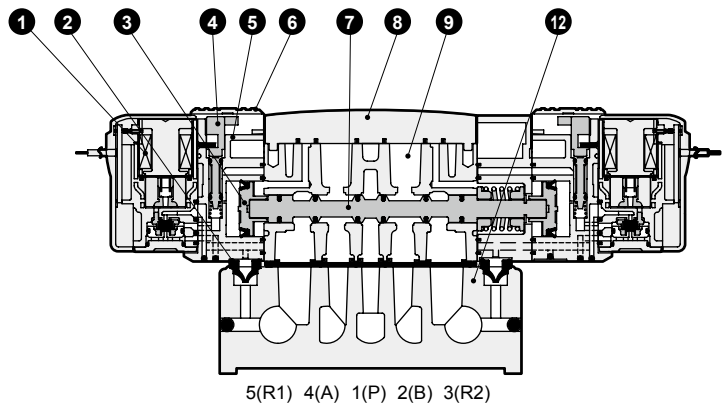
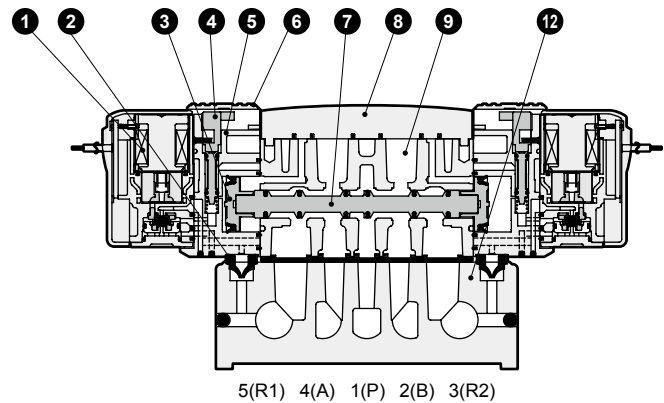
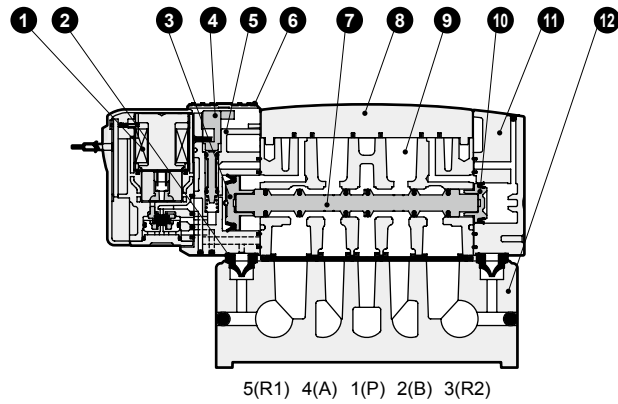
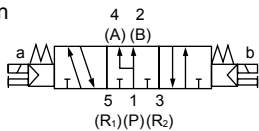
All ports closed



A/B/R connection



P/A/B connection



Main parts list

No.	Part name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston D assembly	-
4	Manual override	Resin
5	Piston chamber	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.	Part name	Model No.
1	Coil assembly	4GR - [electrical connections] - [] - COIL - [voltage]

Blank: Standard
A: Ozone specifications
S: Surgeless
E: Low exoergic/energy saving circuit
K: External pilot
Blank: Grommet lead wire

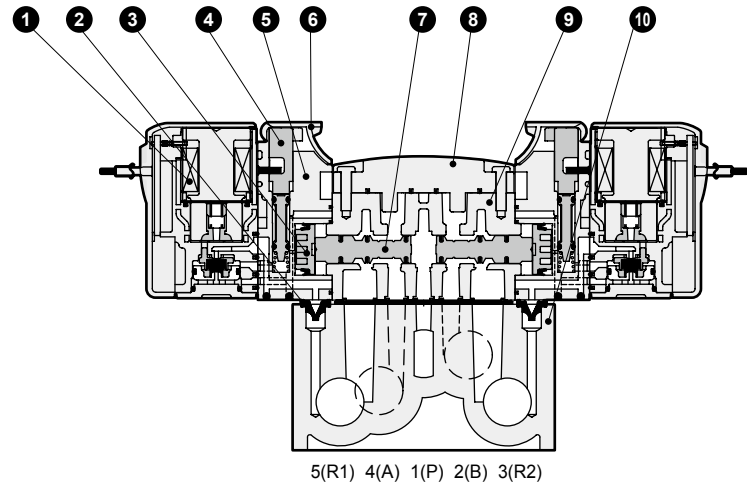
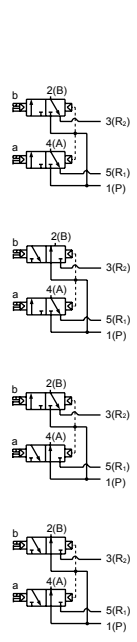
4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E MN4E
W4GA/B2
W4GB4
MN3S0 MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G GMF
PV5 GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP NVP
4C*0EJ
4F*0EX
4F*0E
HMV HSV
2QV 3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys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

3GB1/2 Series

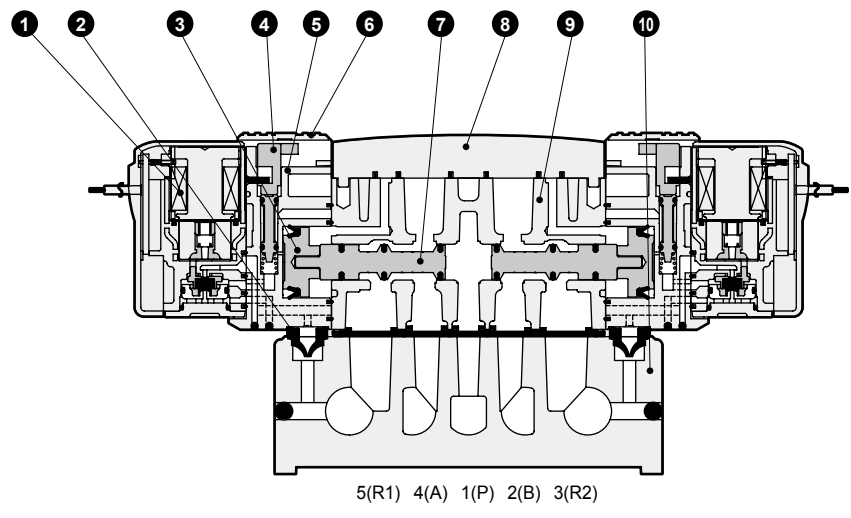
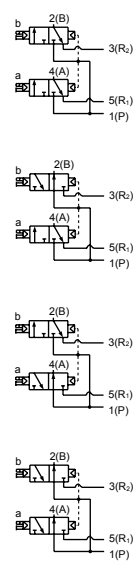
Discrete valve; base piping

4GA/B Internal structure and parts list

- M4GA/B **3GB1⁶⁶ 0R⁶⁷**
⁷⁷
- MN4GA/B ● Two 3-port valves integrated
Grommet lead wire (blank)
- 4GA/B (master) A side valve: Normally closed,
B side valve: Normally closed
NC/NC
- 4GB With sensor
- 4GD/E A side valve: Normally closed,
B side valve: Normally open
NC/NO
- 4MGD/E
- MN4GD/E
- 4GA4/B4 A side valve: Normally open,
B side valve: Normally closed
NO/NC
- MN3E
MN4E
- W4GA/B2
- W4GB4 A side valve: Normally open,
B side valve: Normally open
NO/NO
- MN3S0
MN4S0
- 4SA/B0
- 4KA/B



- 4KA/B (master) **3GB2⁶⁶ 0R⁶⁷**
⁷⁶
⁷⁷
- 4F ● Two 3-port valves integrated
Grommet lead wire (blank)
- 4F (master) A side valve: Normally closed,
B side valve: Normally closed
NC/NC
- PV5G GMF
- PV5 GMF A side valve: Normally closed,
B side valve: Normally open
NC/NO
- PV5S-0
- 3Q
- MV3QR A side valve: Normally open,
B side valve: Normally closed
NO/NC
- 3MA/B0
- 3PA/B
- P/M/B A side valve: Normally open,
B side valve: Normally open
NO/NO
- NP/NAP
NVP
- 4G*0EJ
- 4F*0EX
- 4F*0E



Main parts list

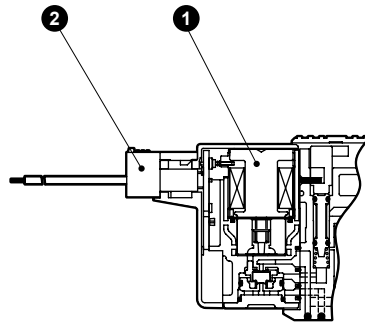
No.	Part name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston assembly	-
4	Manual override	Resin
5	Piston chamber	Resin
6	Manual protection cover	Resin
7	Spool assembly	-
8	Plate	Resin
9	Body	Aluminum alloy die-casting
10	Discrete sub-plate	Aluminum alloy die-casting

Parts list

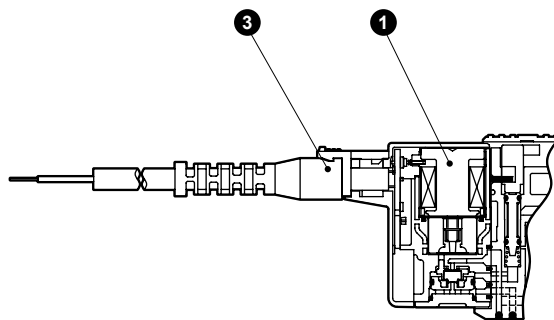
No.	Part name	Model No.
1	Coil assembly	4GR - electrical connections - <input type="checkbox"/> - COIL - [voltage] Blank: Standard A: Ozone specification S: Surgeless E: Low exoergic/energy saving circuit K: External pilot Blank: Grommet lead wire

Electrical connections internal structure and parts list

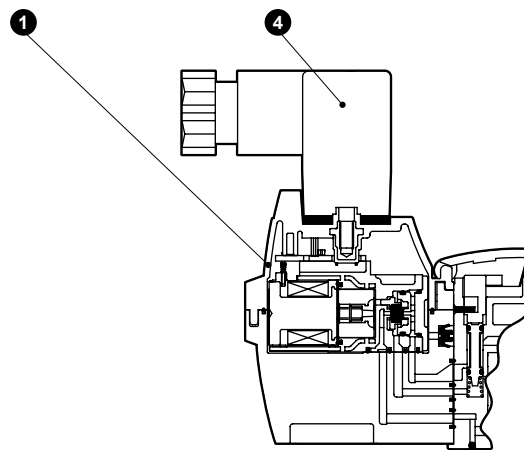
● E type connector E□□



● EJ type connector E□□J



● DIN terminal box B



Main parts list

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

Parts list

No.	Part name	Model No.
1	Coil assembly	4GR-[electrical connections]-□-COIL-[voltage] <small>Blank: Standard A: Ozone specification S: Surgeless E: Low exoergic/energy saving circuit K: External pilot</small> E*: E type connector E*J: Socket with cover type B: DIN terminal box B includes the DIN terminal box BN does not include the DIN terminal box
2	E type connector socket assembly	4GR-SOCKET-ASSY-E**-[Voltage]
3	Socket assembly with cover	4GR-SOCKET-ASSY-E**J
4	DIN terminal box assembly	4GR-TERMINAL-BOX-[Voltage]

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
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

4GB1 Series

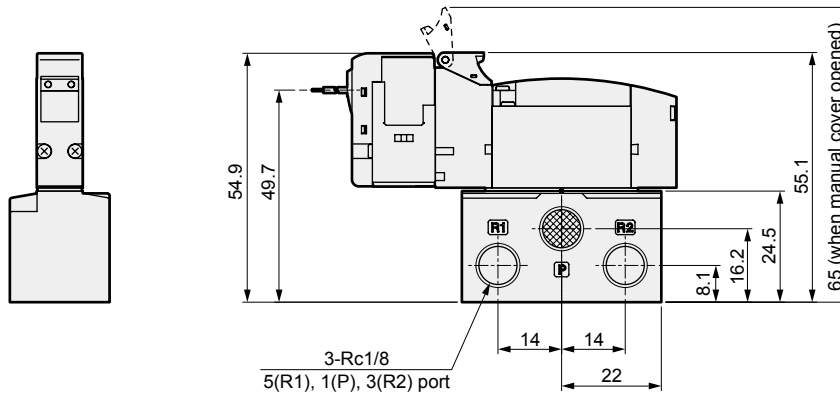
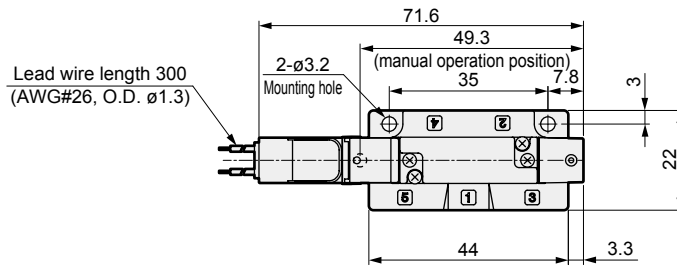
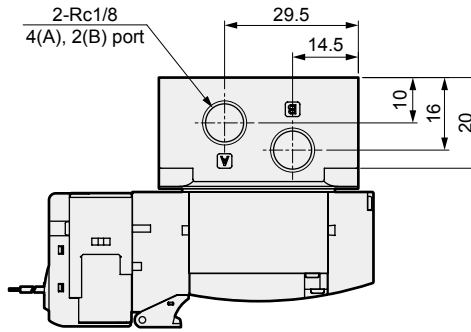
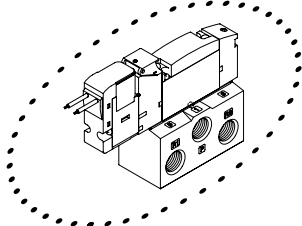
Discrete valve; base piping

Dimensions 

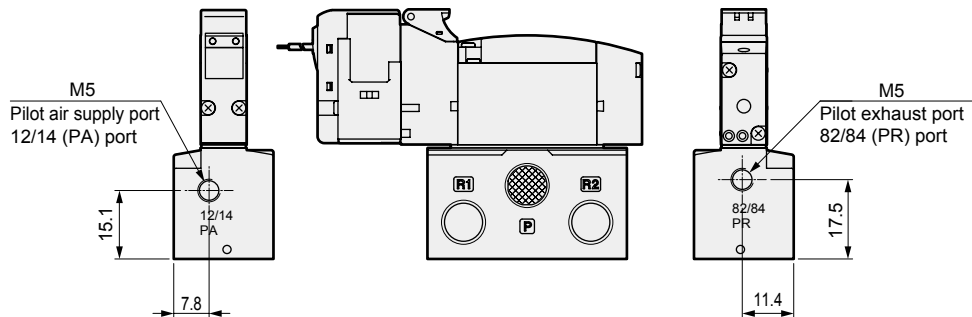
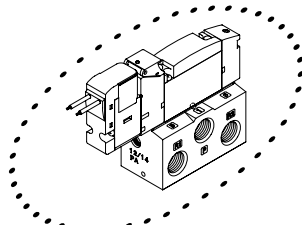
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

4GB110R * NPT thread and G thread specifications are listed on pages 86 to 95.

● 2-position single grommet lead wire (blank)

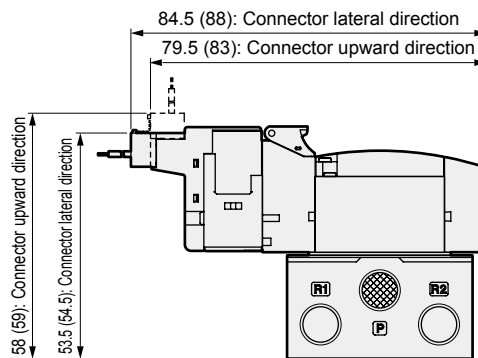
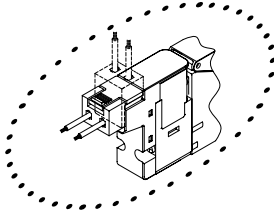


● External pilot (K)



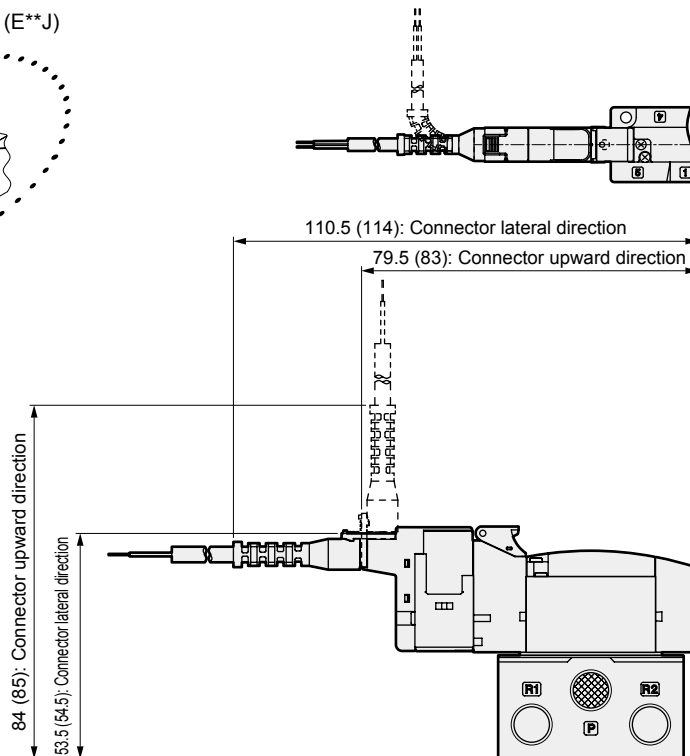
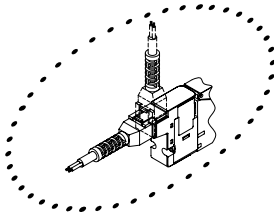
Dimensions

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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
4C*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

4GB1 Series

Discrete valve; base piping

Dimensions



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

● External pilot (K)

4F*0EX

4F*0E

HMV
HSV

2QV
3QV

SKH

Silencer

TotAirSys
(Total Air)

TotAirSys
(Gamma)

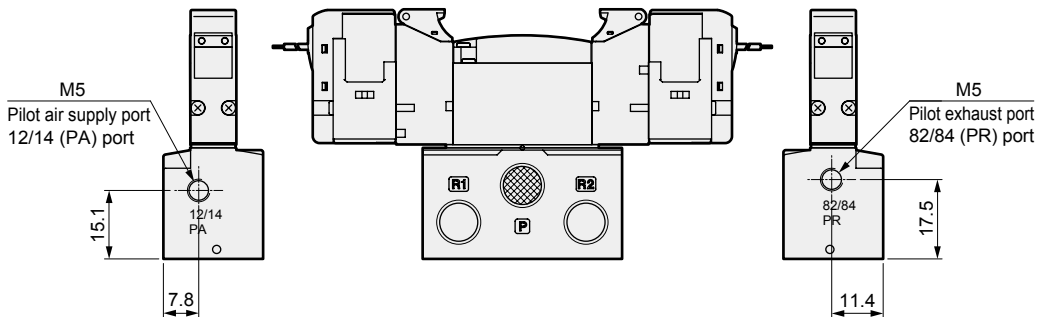
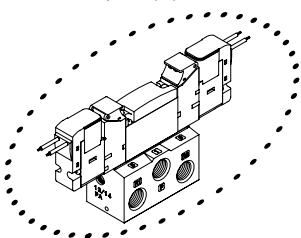
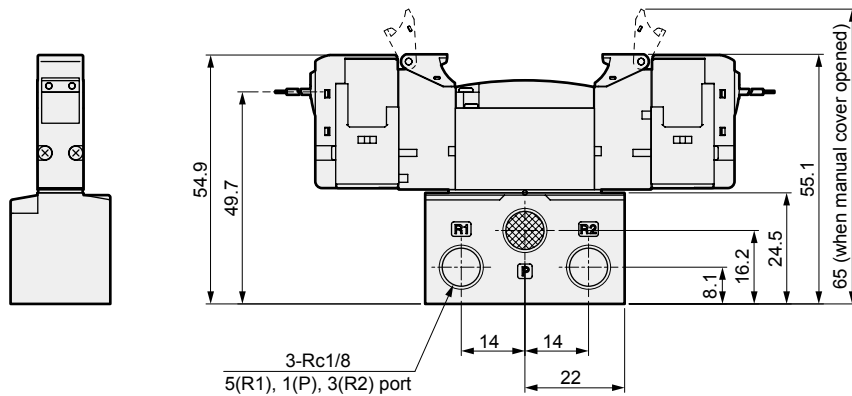
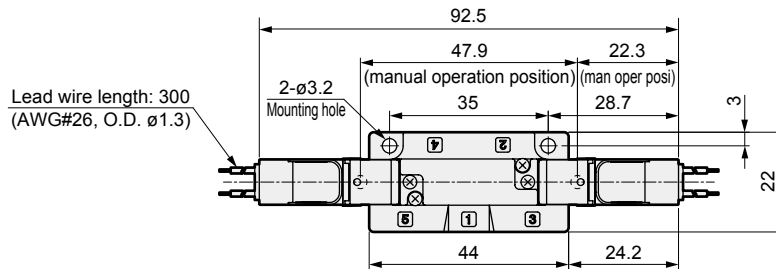
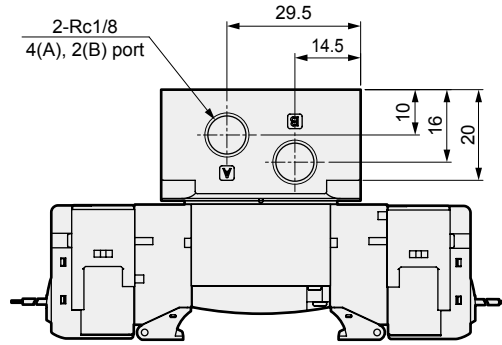
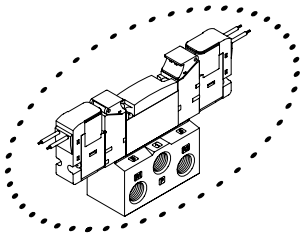
Ending

4GB120R * NPT thread and G thread specifications are listed on pages 86 to 95.

● 2-position double grommet lead wire (blank)

3GB1660R/3GB1670R/3GB1760R/3GB1770R

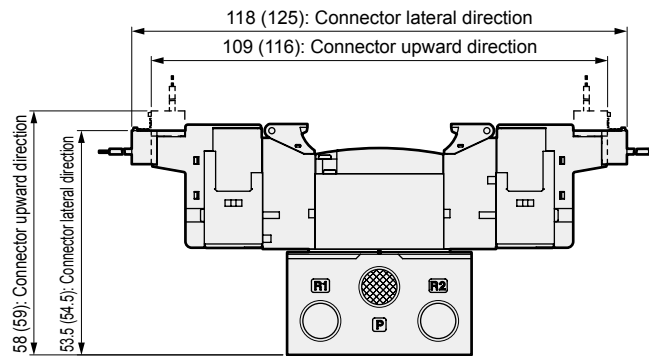
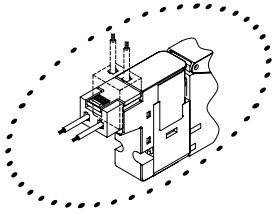
● Two 3-port valves integrated grommet lead wire (blank)



Note: Combination of the two 3-port valves integrated and external pilot is not available.

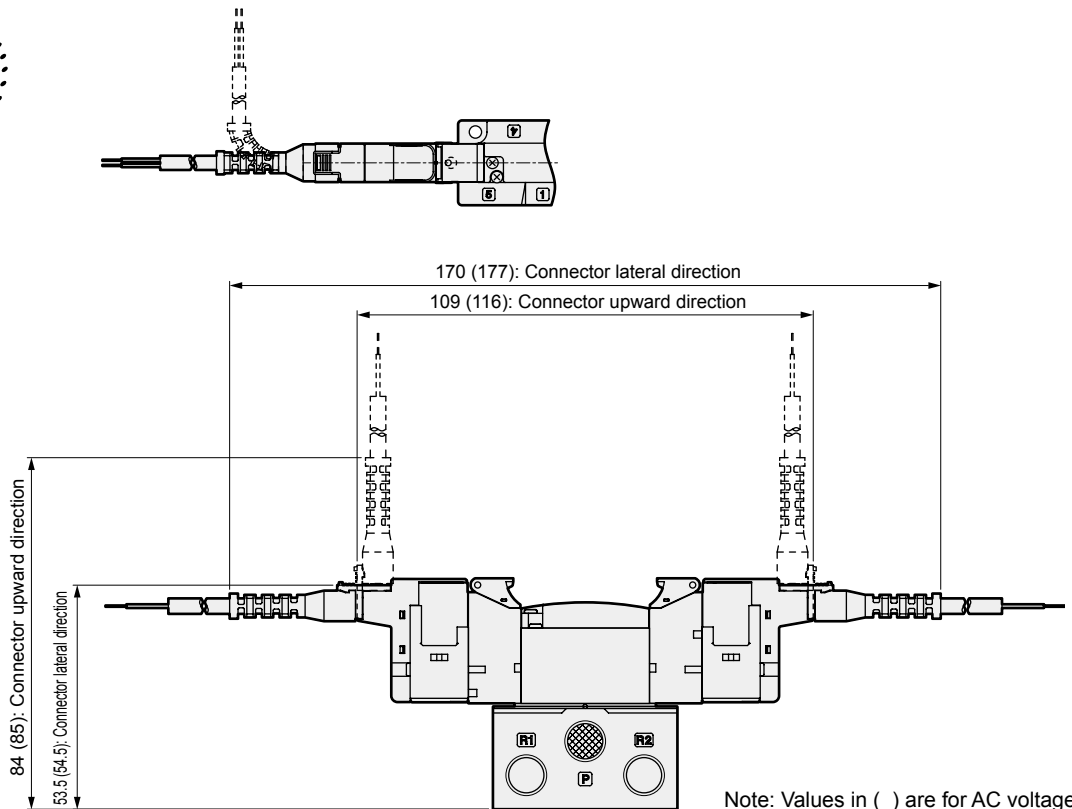
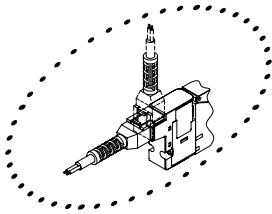
Dimensions

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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
4C*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

4GB1 Series

Discrete valve; base piping

Dimensions



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

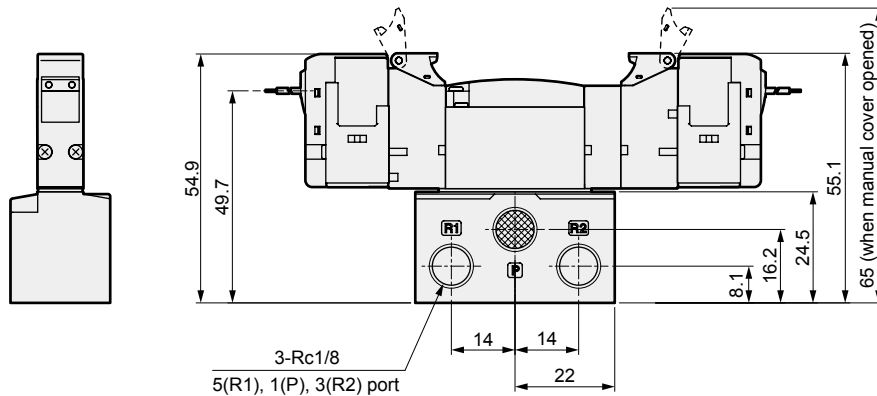
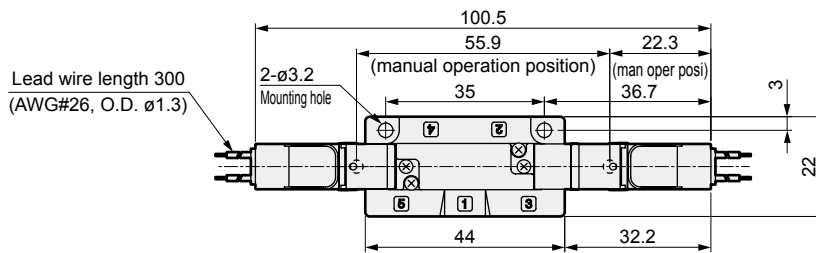
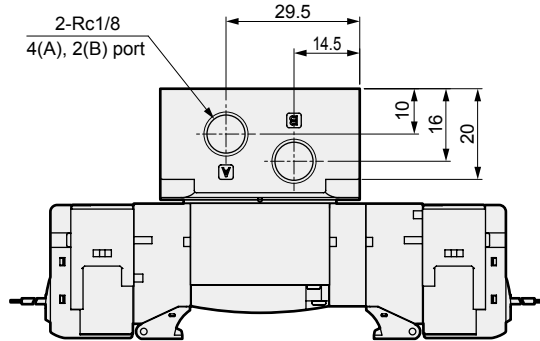
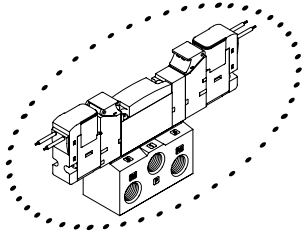
TotAirSys (Total Air)

TotAirSys (Gamma)

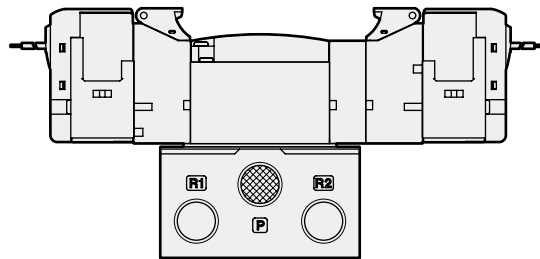
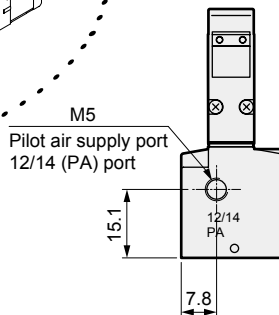
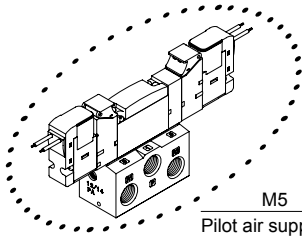
Ending

4GB1 $\frac{3}{4}$ 0R * NPT thread and G thread specifications are listed on pages 86 to 95.

● 3-position grommet lead wire (blank)

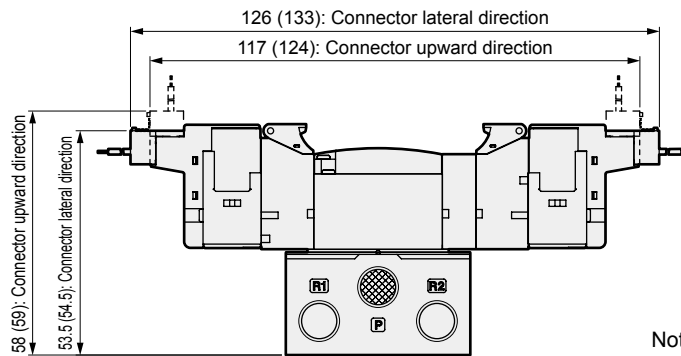
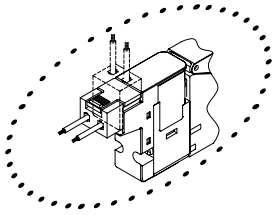


● External pilot (K)



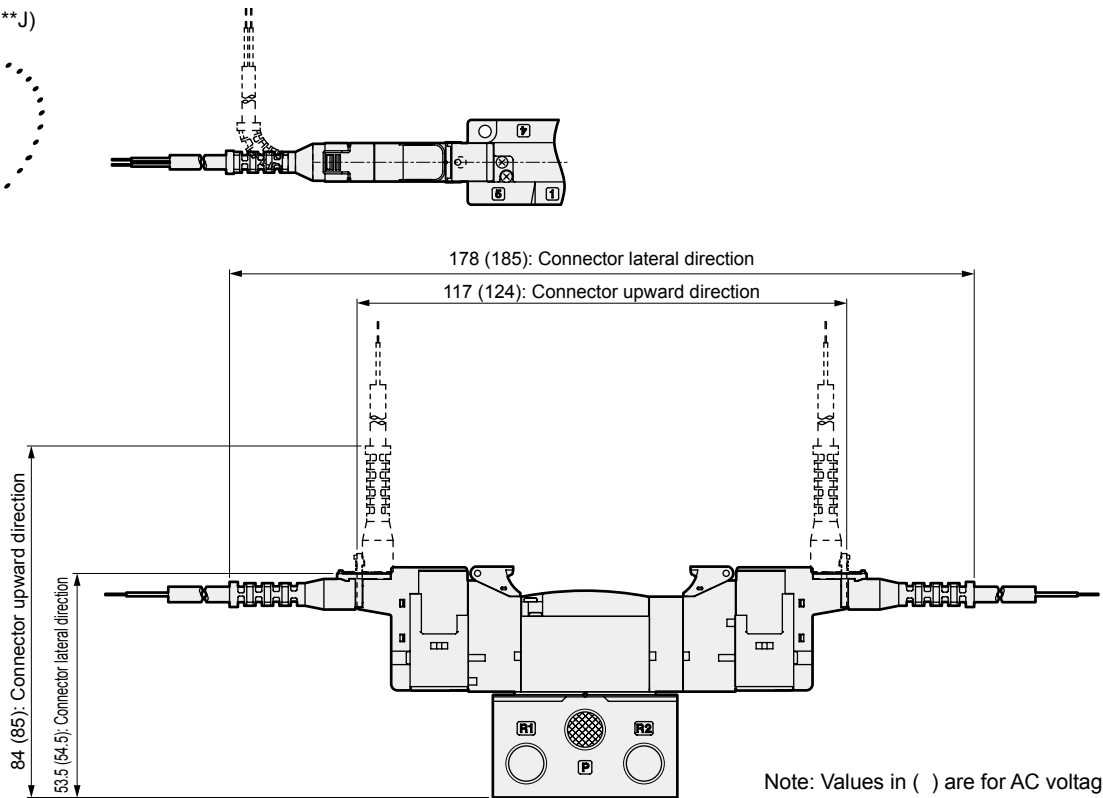
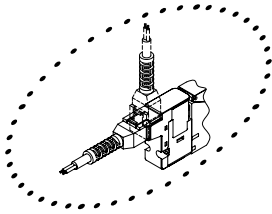
Dimensions

● E type connector (E)



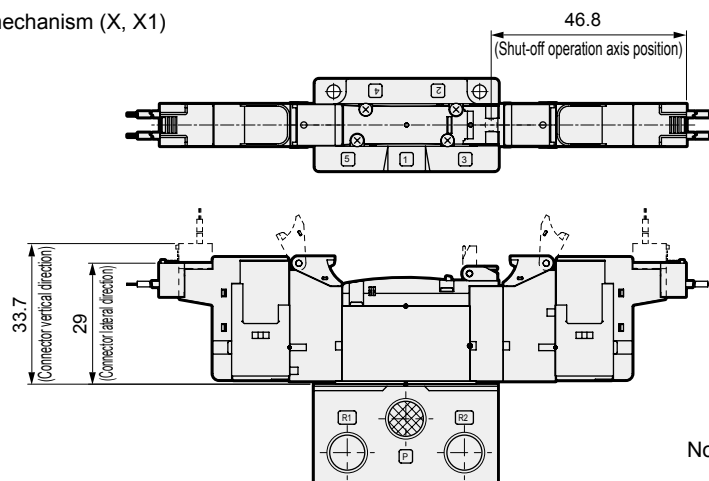
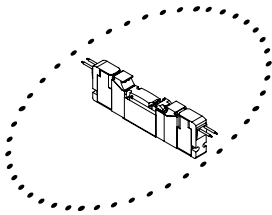
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● Residual pressure exhaust mechanism (X, X1)

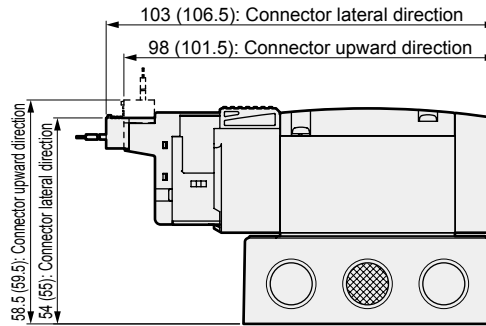
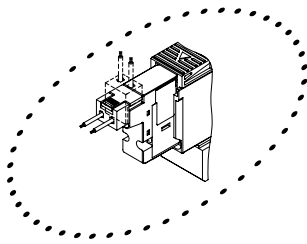


Note: This option is compatible only with 4GB130R and 4GB140R.

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

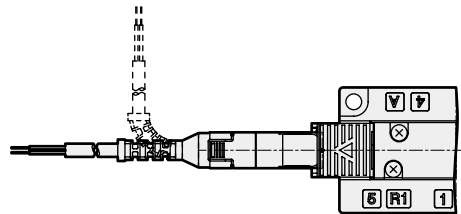
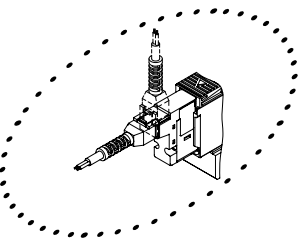
Dimensions

● E type connector (E)

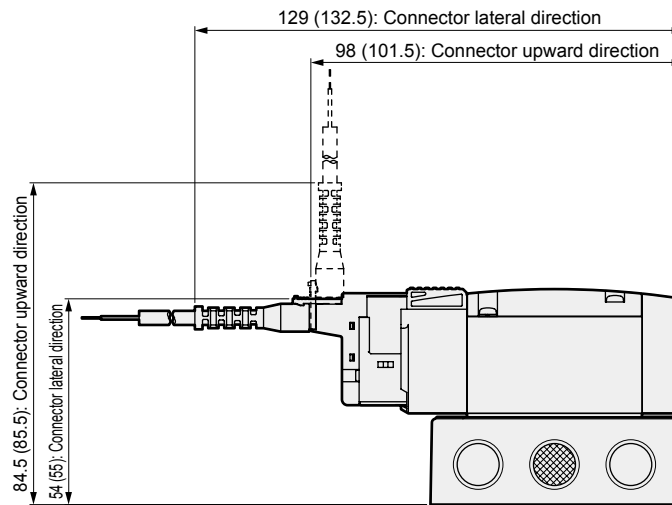


Note: Values in () are for AC voltage.

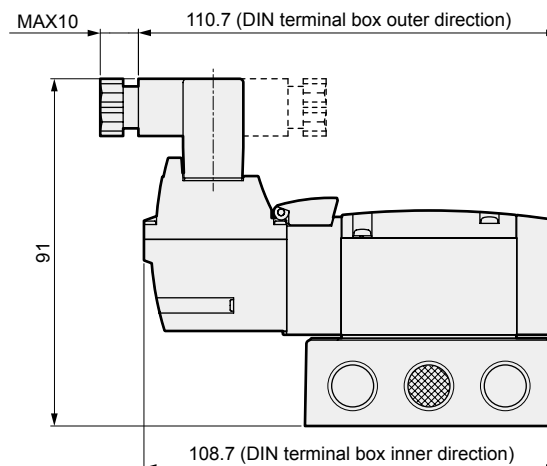
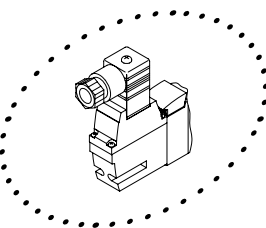
● EJ type connector (E**J)



Note: Values in () are for AC voltage.



● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GB2 Series

Discrete valve; base piping

Dimensions



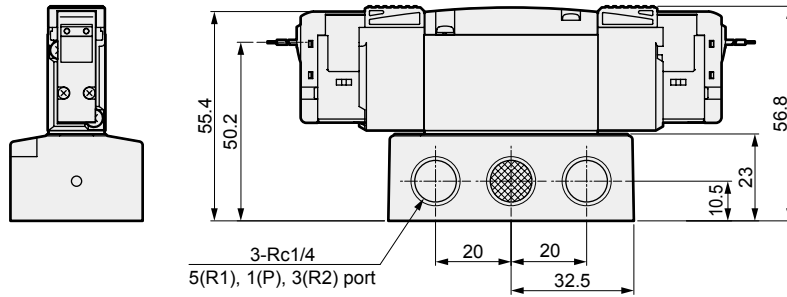
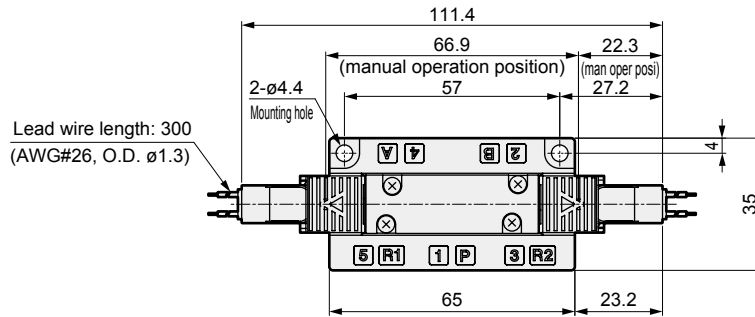
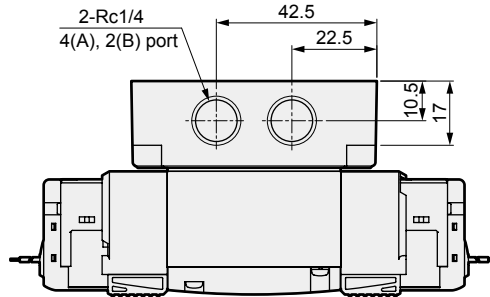
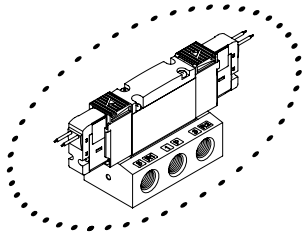
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

4GB220R * NPT thread and G thread specifications are listed on pages 86 to 95.

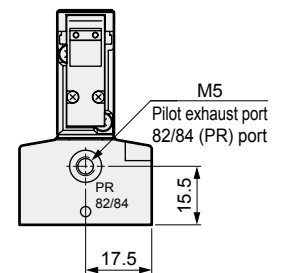
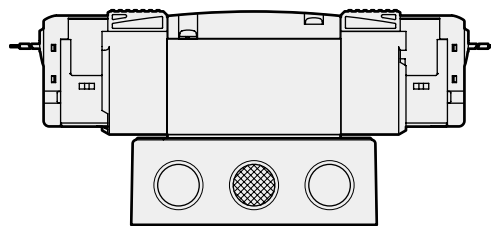
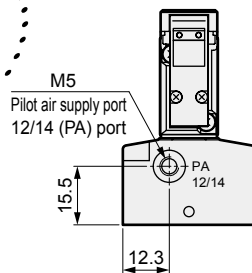
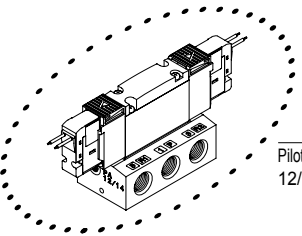
- 2-position double grommet lead wire (blank)

3GB2660R/3GB2670R/3GB2760R/3GB2770R

- Two 3-port valves integrated grommet lead wire (blank)



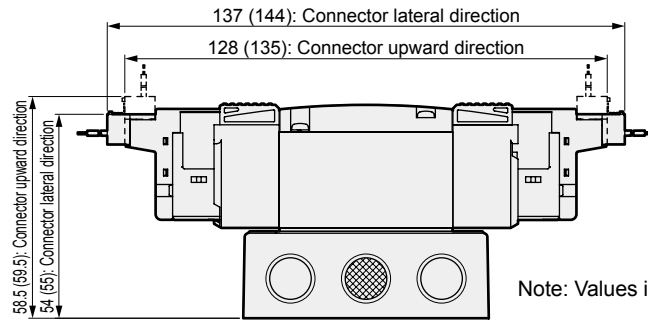
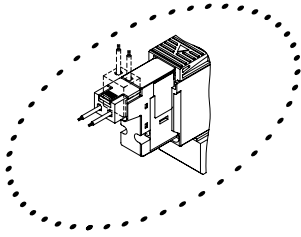
- External pilot (K)



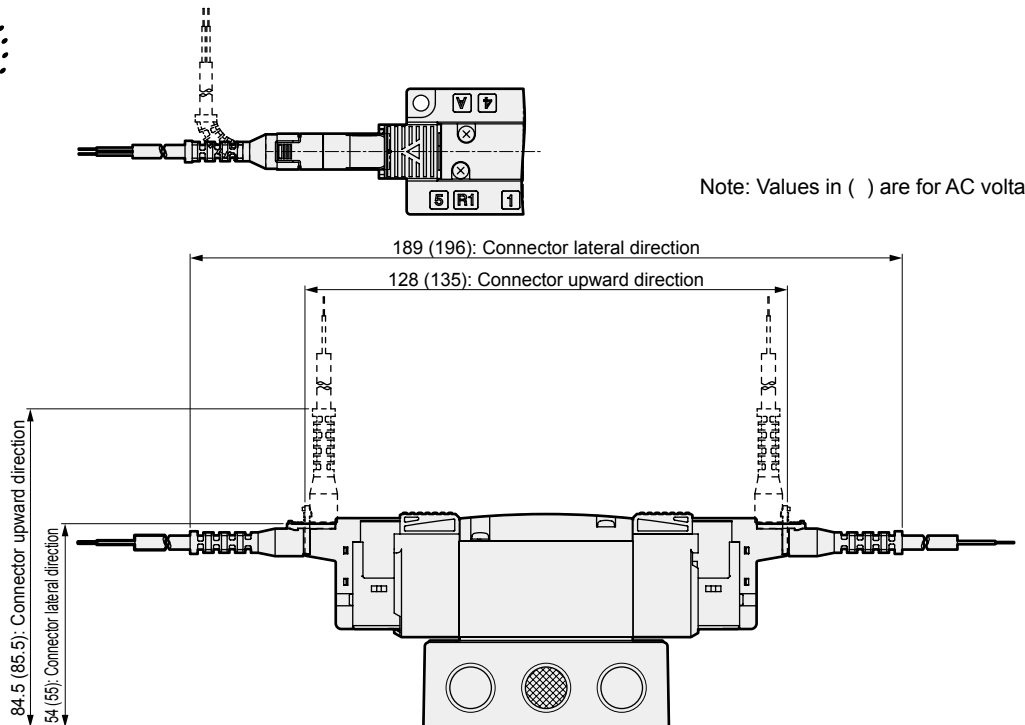
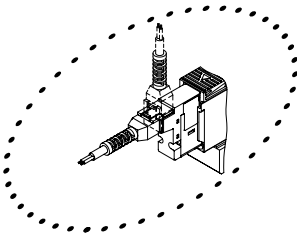
Note: Combination of the two 3-port valves integrated and external pilot is not available.

Dimensions

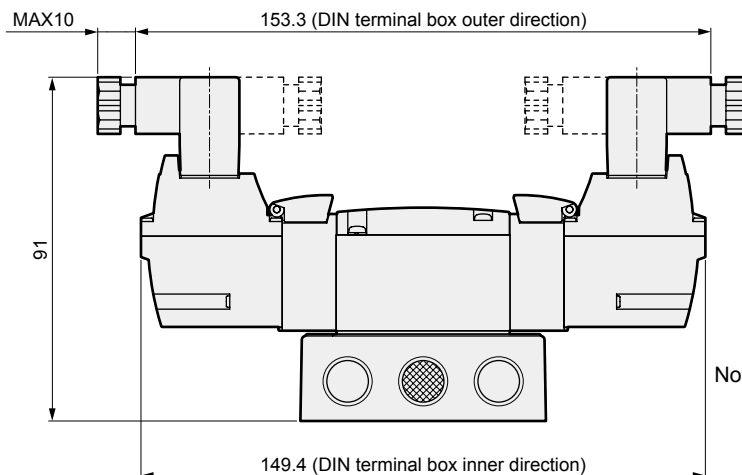
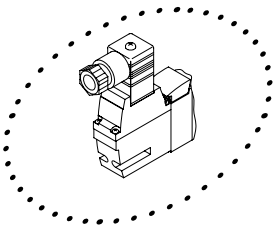
● E type connector (E)



● EJ type connector (E**J)



● DIN terminal box (B)



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

4GB2 Series

Discrete valve; base piping

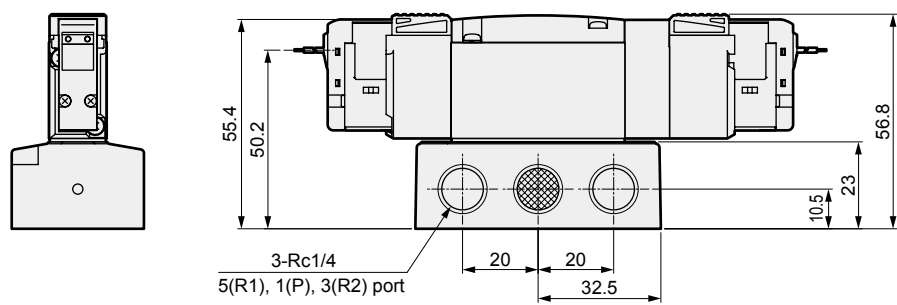
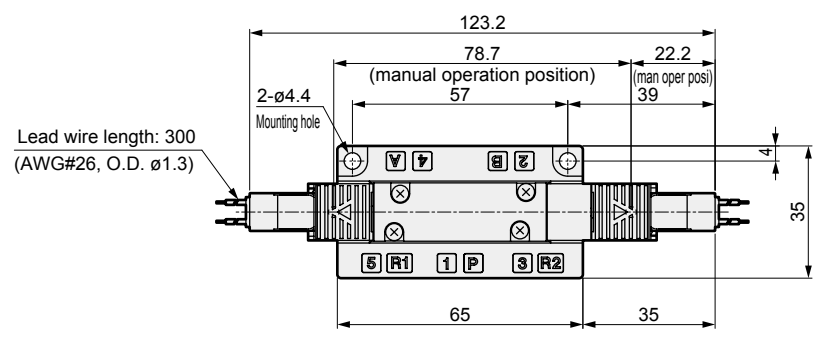
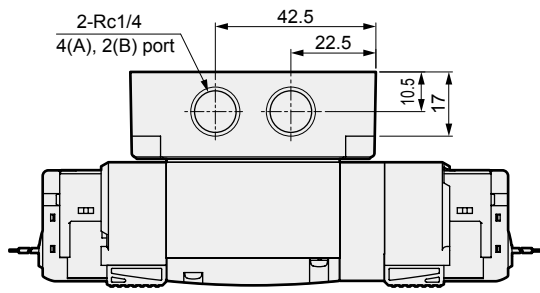
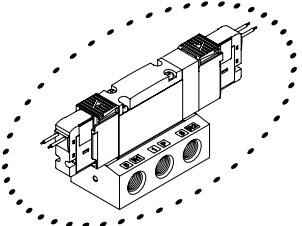
Dimensions



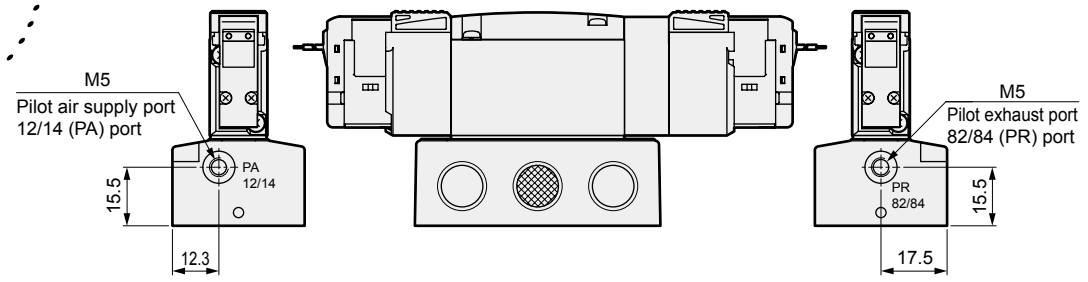
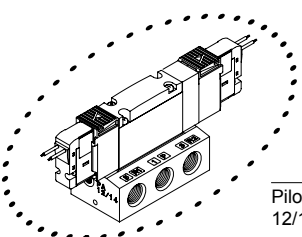
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

4GB2³_{5,4,3} 0R * NPT thread and G thread specifications are listed on pages 86 to 95.

● 3-position grommet lead wire (blank)

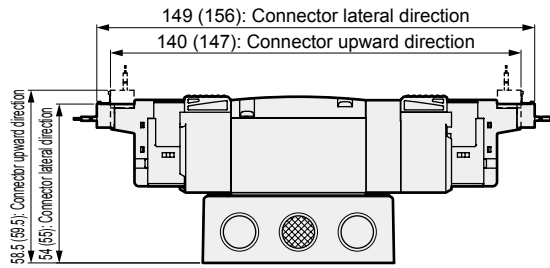
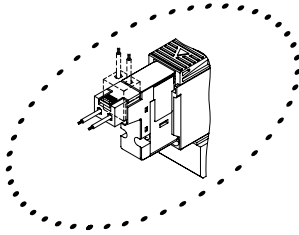


● External pilot (K)



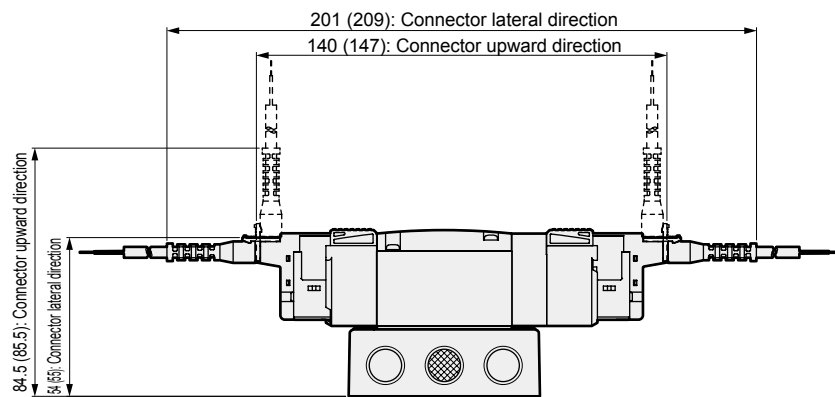
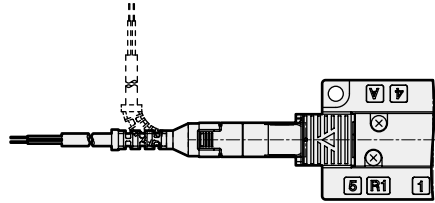
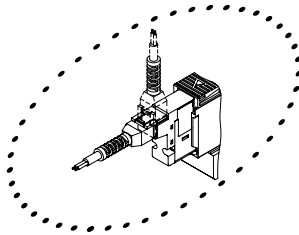
Dimensions

● E type connector (E)



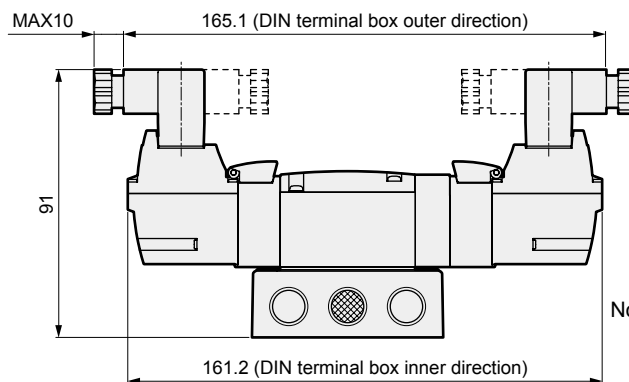
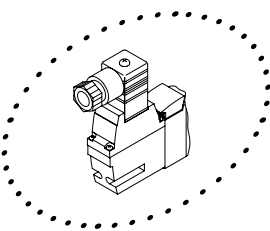
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



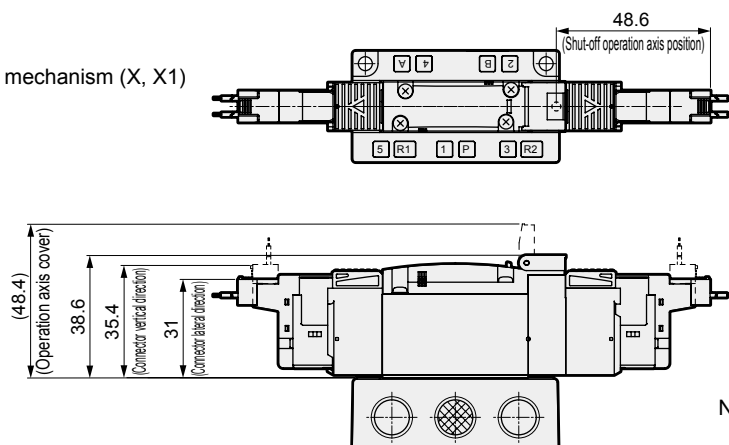
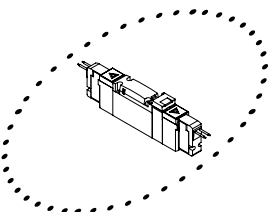
Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

● Residual pressure exhaust mechanism (X, X1)



Note: This option is compatible only with 4GB230R and 4GB240R.

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

4GB3 Series

Discrete valve; base piping

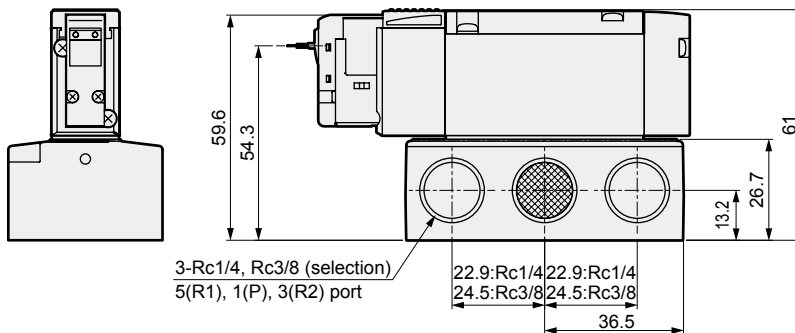
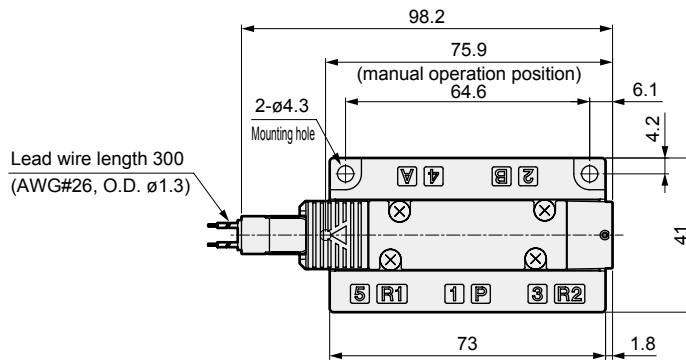
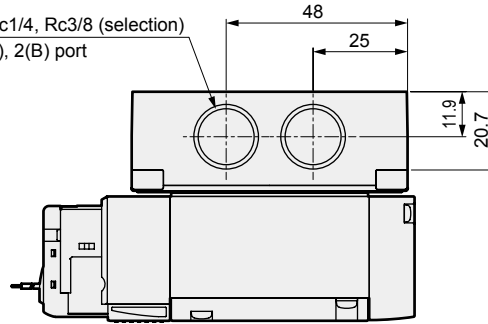
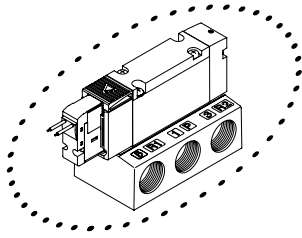
Dimensions



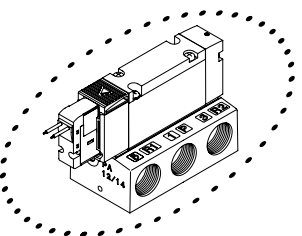
4GB310R * NPT thread and G thread specifications are listed on pages 86 to 95.

● 2-position single grommet lead wire (blank)

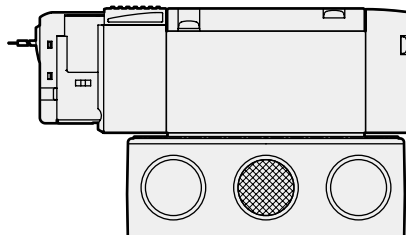
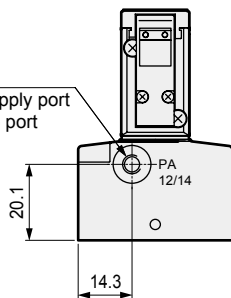
2-Rc1/4, Rc3/8 (selection)
4(A), 2(B) port



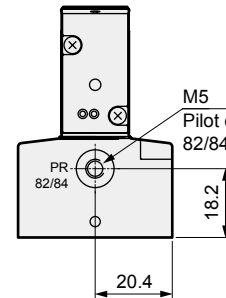
● External pilot (K)



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

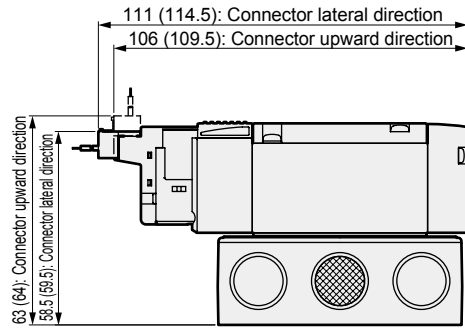
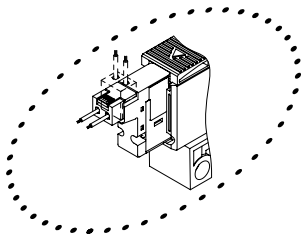


M5
Pilot exhaust port
82/84 (PR) port



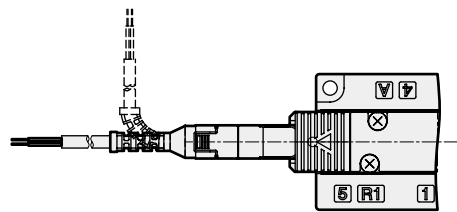
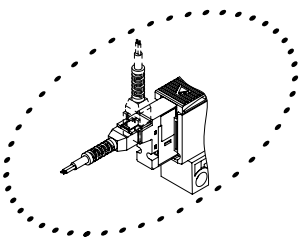
Dimensions

● E type connector (E)

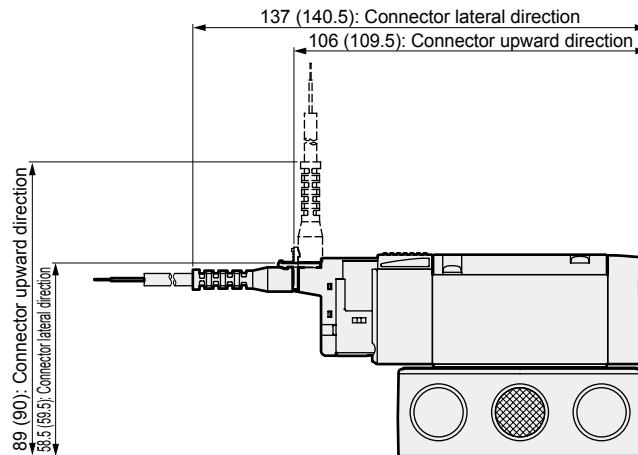


Note: Values in () are for AC voltage.

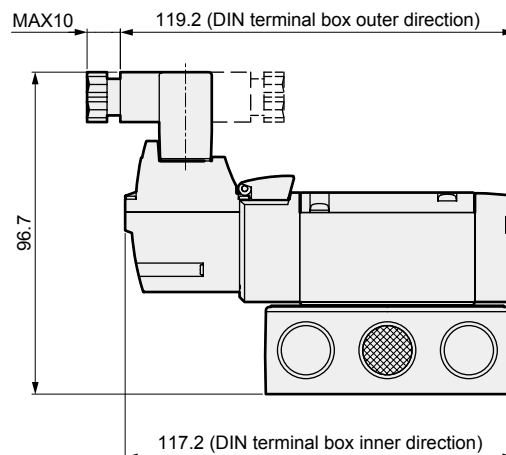
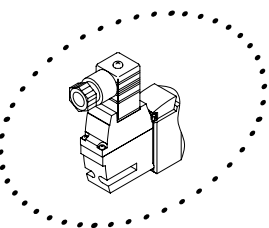
● EJ type connector (E**J)



Note: Values in () are for AC voltage.



● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GB3 Series

Discrete valve; base piping

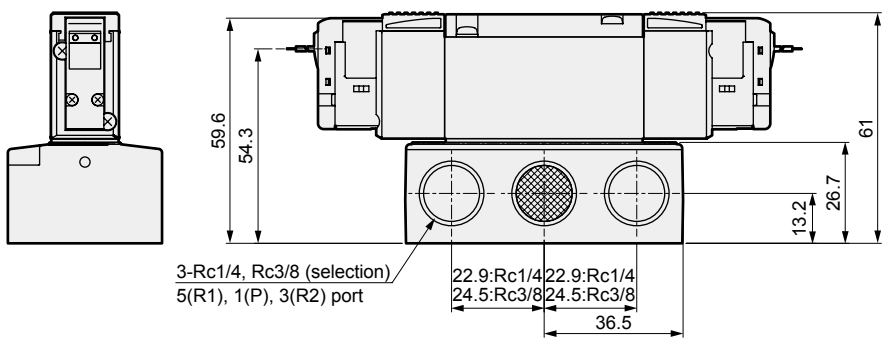
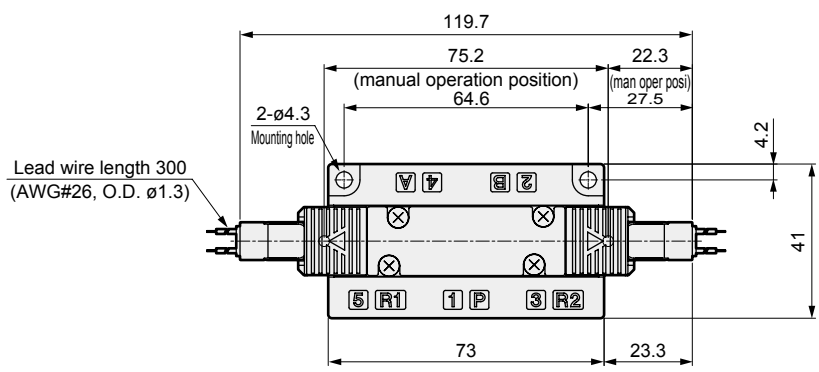
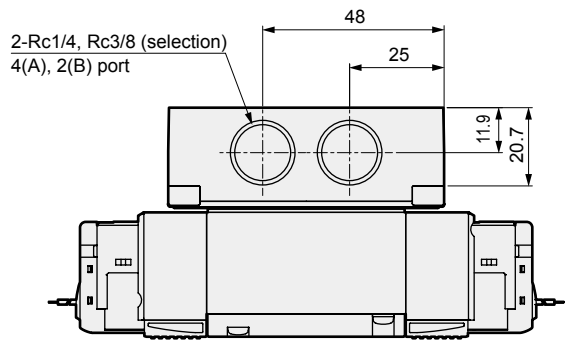
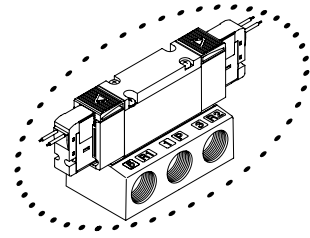
Dimensions



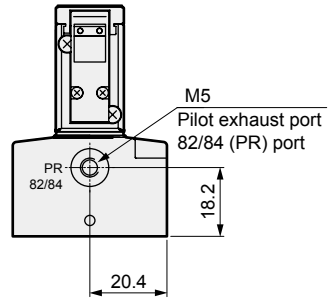
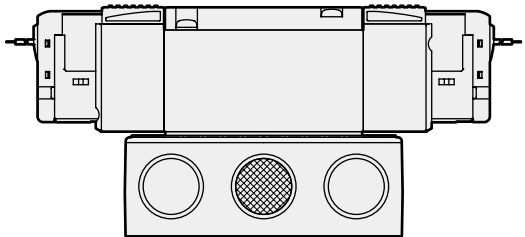
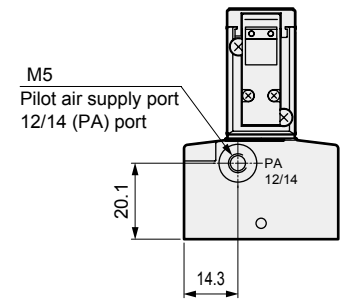
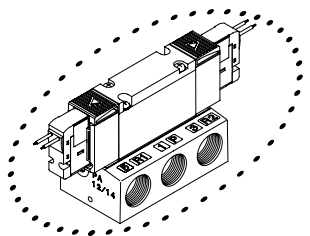
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

4GB320R * NPT thread and G thread specifications are listed on pages 86 to 95.

● 2-position double grommet lead wire (blank)

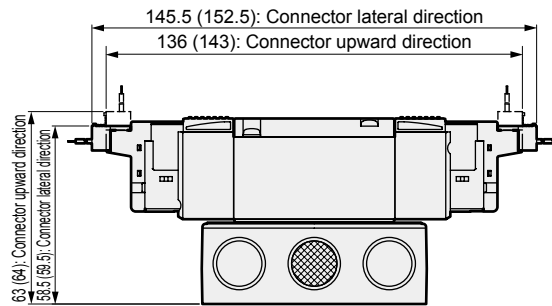
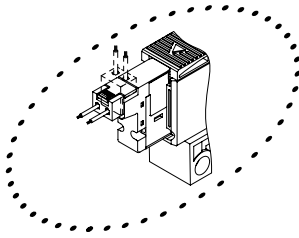


● External pilot (K)



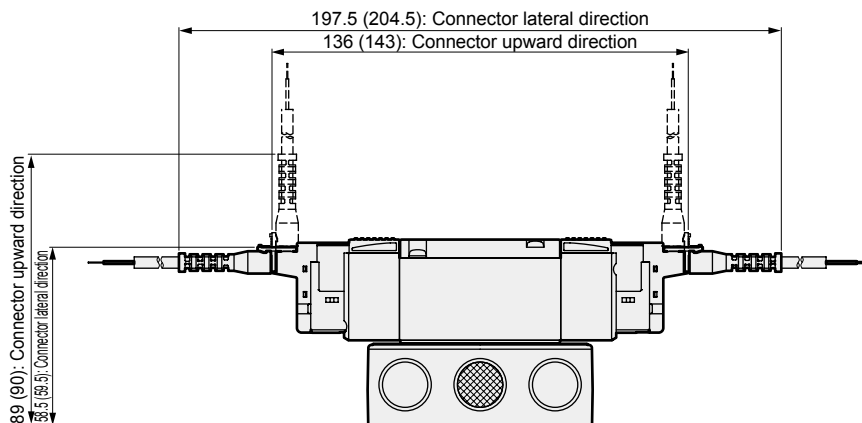
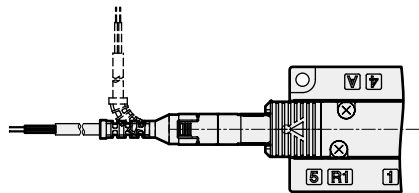
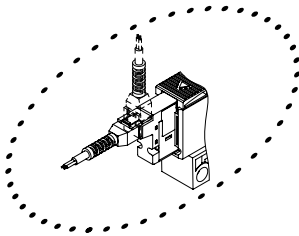
Dimensions

● E type connector (E)



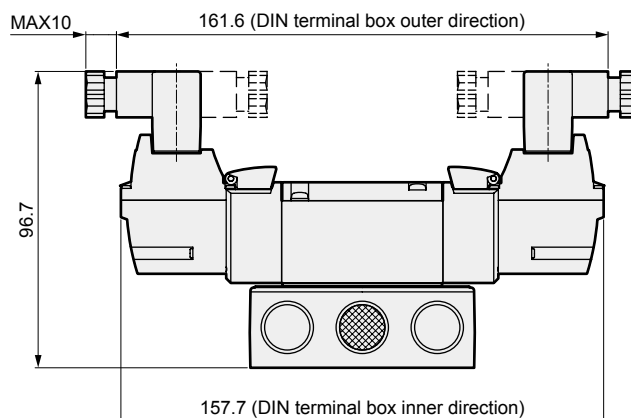
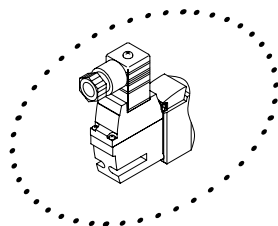
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

4GB3 Series

Discrete valve; base piping

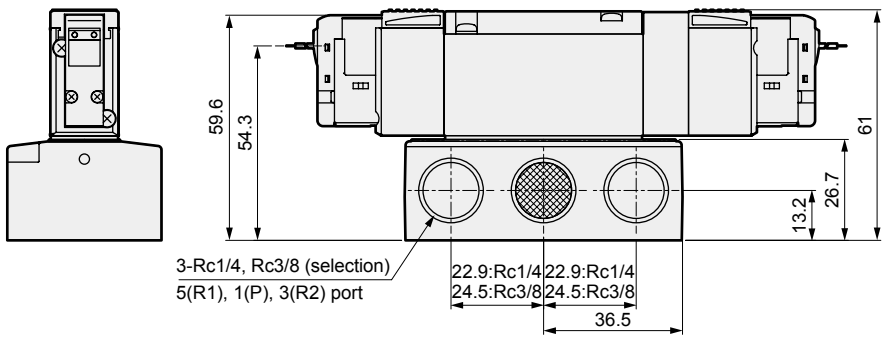
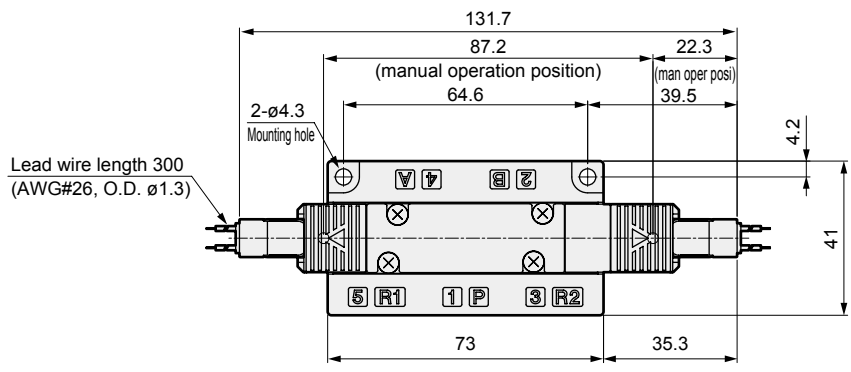
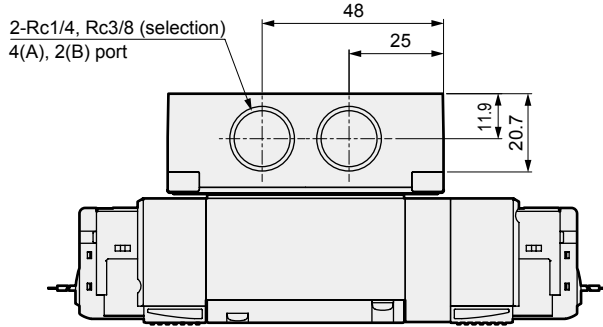
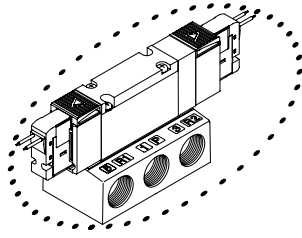
Dimensions



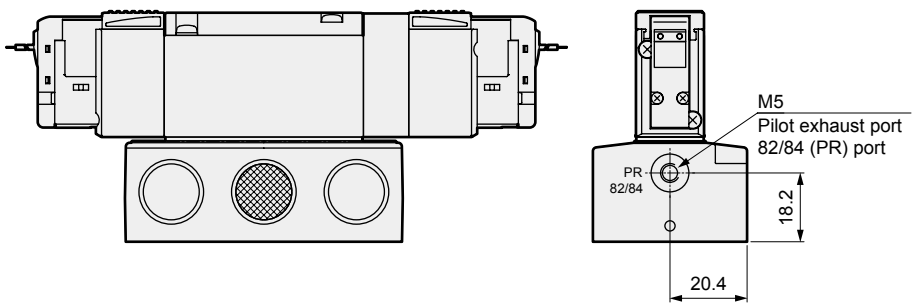
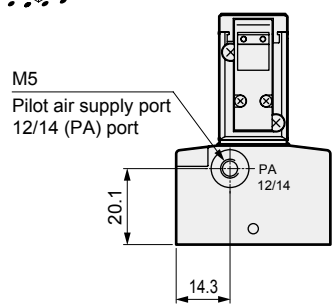
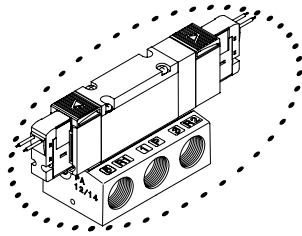
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

4GB3 ³/₄ 0R * NPT thread and G thread specifications are listed on pages 86 to 95.

● 3-position, grommet lead wire (blank)

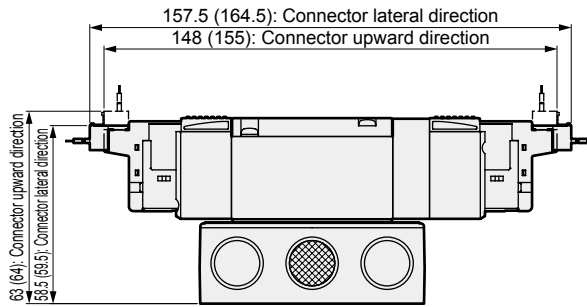
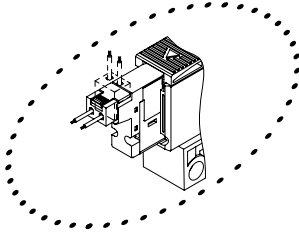


● External pilot (K)



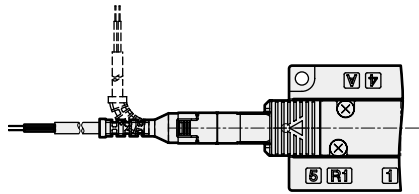
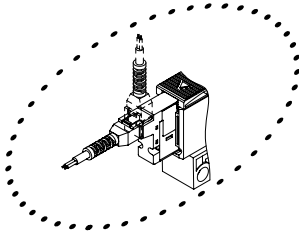
Dimensions

● E type connector (E)

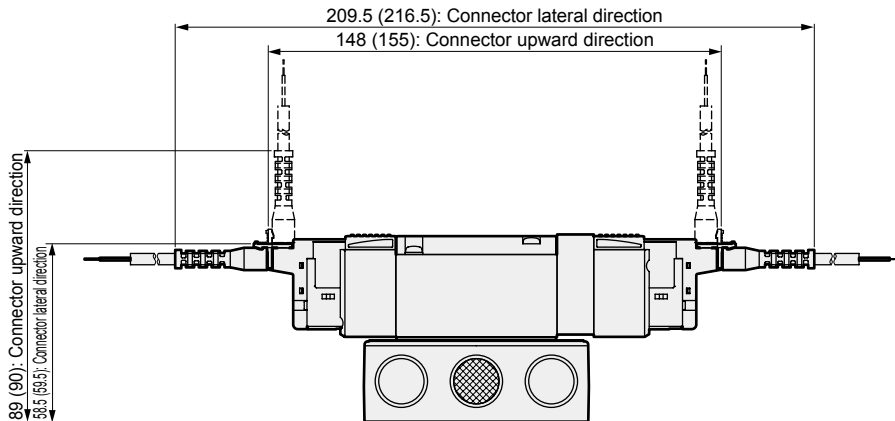


Note: Values in () are for AC voltage.

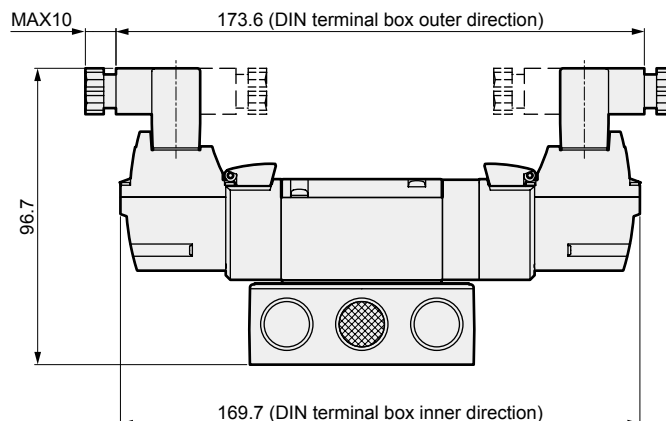
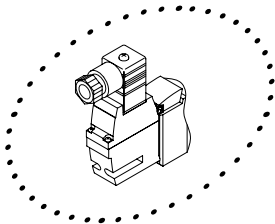
● EJ type connector (E**J)



Note: Values in () are for AC voltage.



● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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

3GB1/4GB1 Series

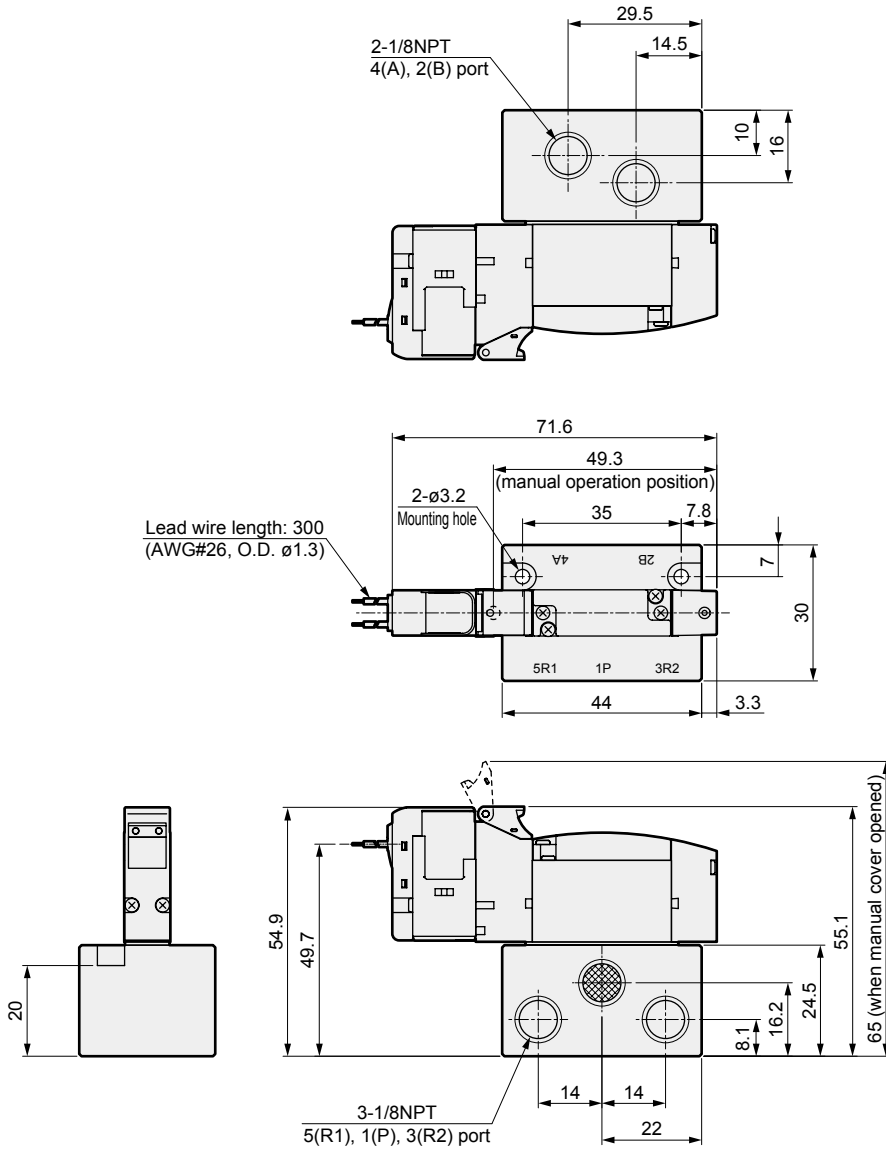
Discrete valve; base piping

Dimensions Port size; NPT thread

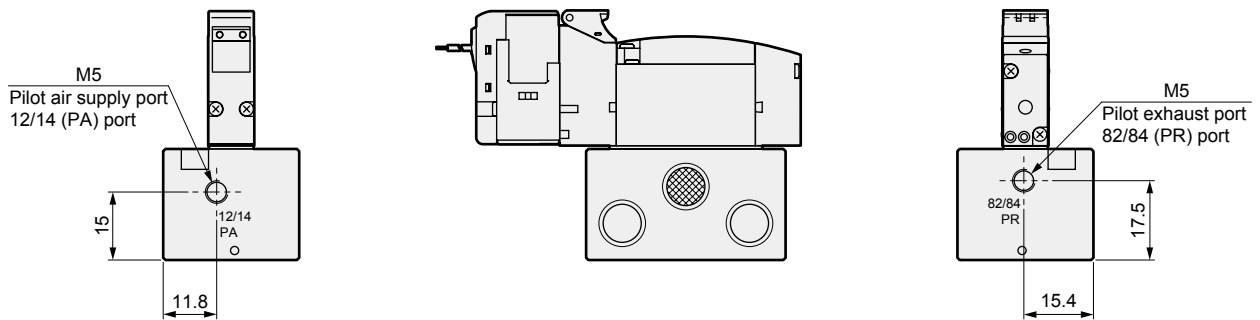
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

3GB1⁶⁶₆₇⁶⁸₇₆ 0R, 4GB1⁶⁶₇₆ 0R

● 2-position single grommet lead wire (blank)

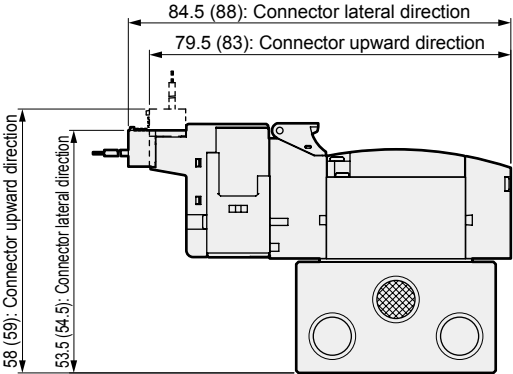


● External pilot (K)



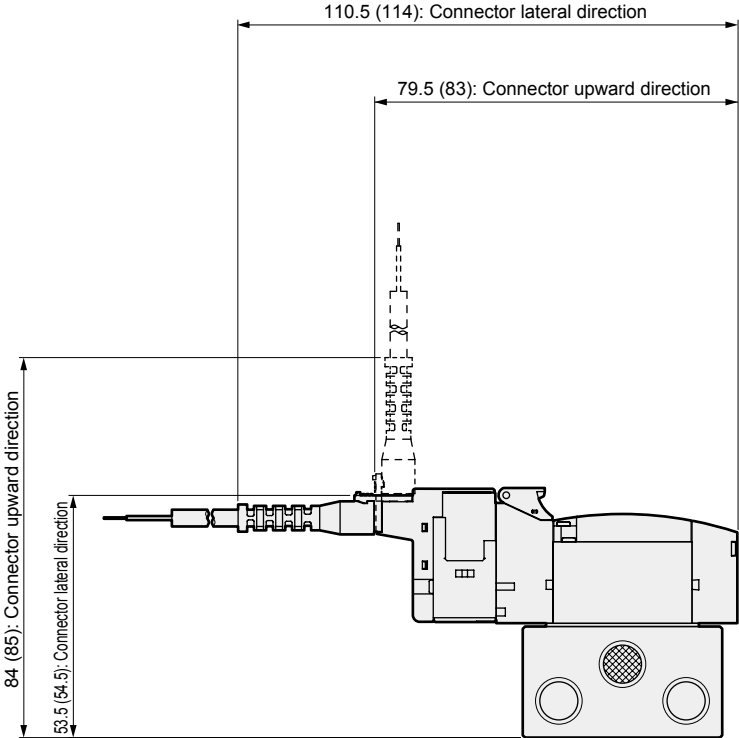
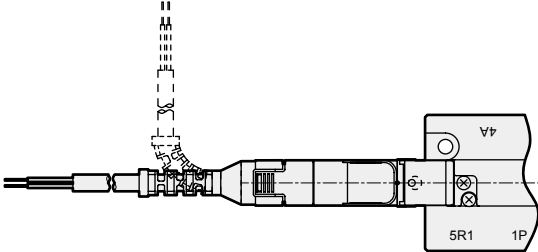
Dimensions Port size; NPT thread

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)

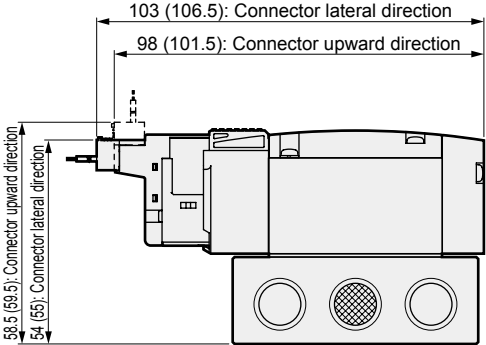


Note: Values in () are for AC voltage.

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

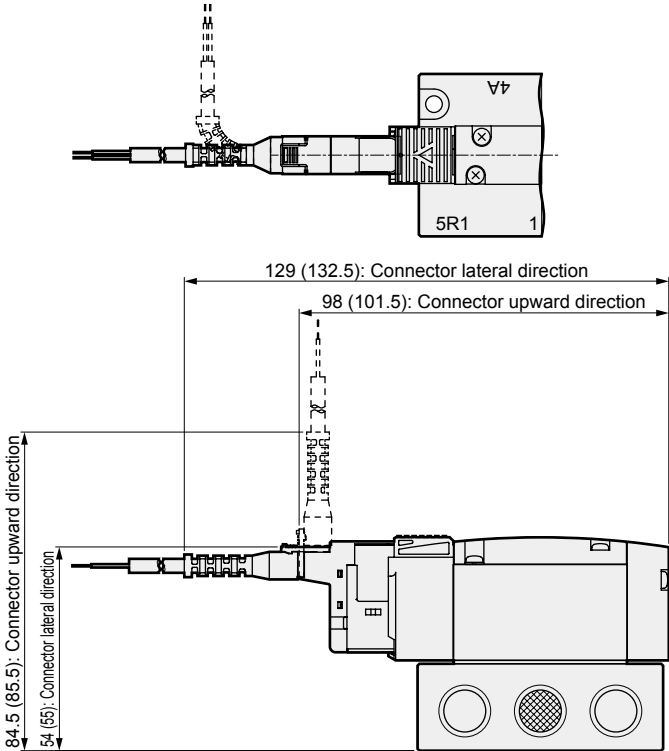
Dimensions Port size; NPT thread

● E type connector (E)



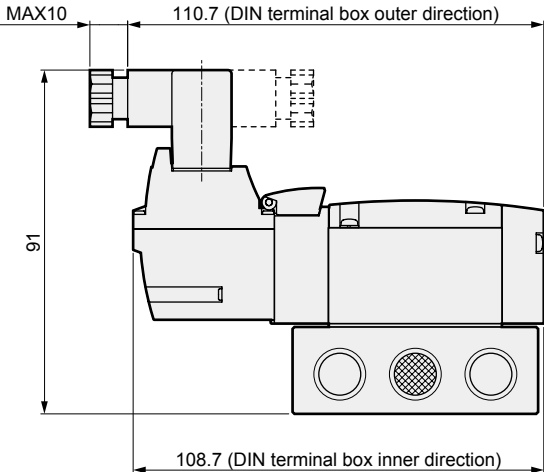
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)

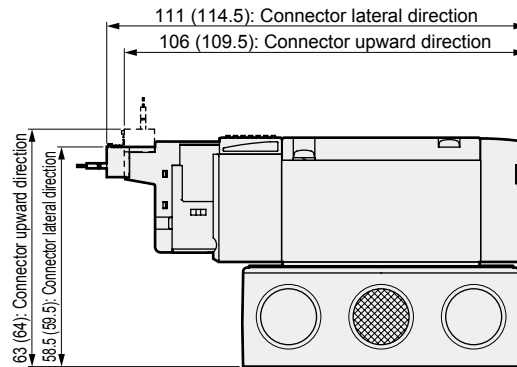


Note: DIN terminal box assembly is shipped facing inward.

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

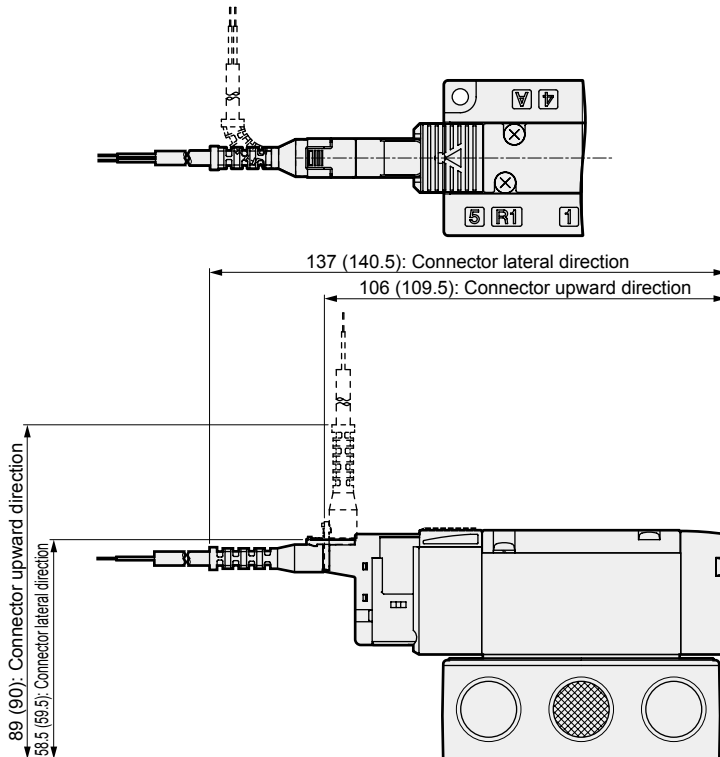
Dimensions Port size; NPT thread, G thread

● E type connector (E)



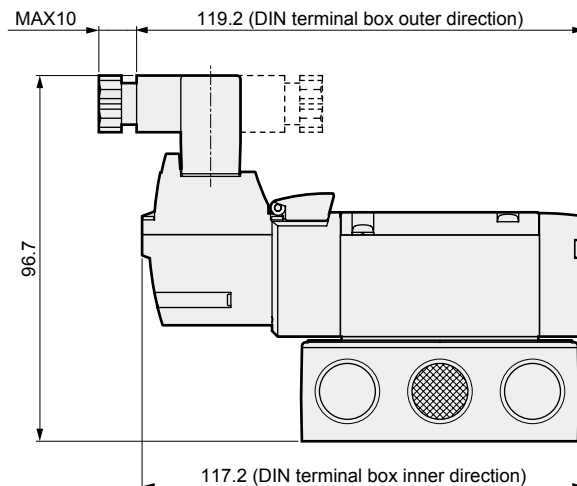
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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
4C*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys (Gamma)
Ending

3GB1/4GB1 Series

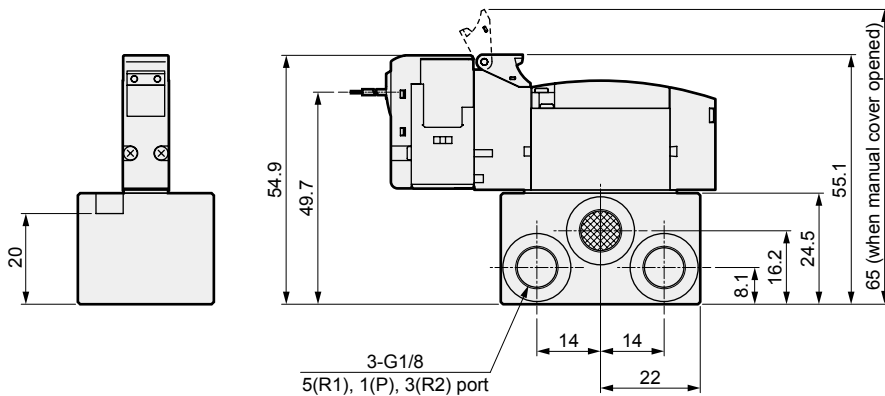
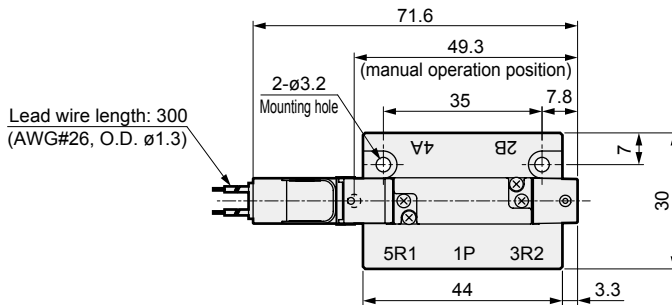
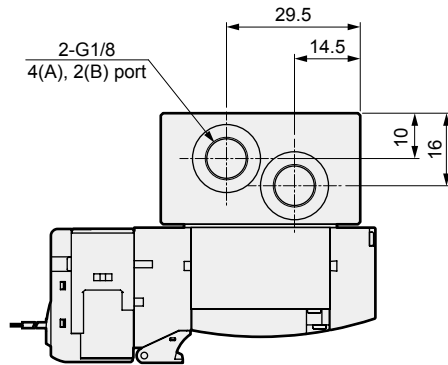
Discrete valve; base piping

Dimensions Port size; G thread

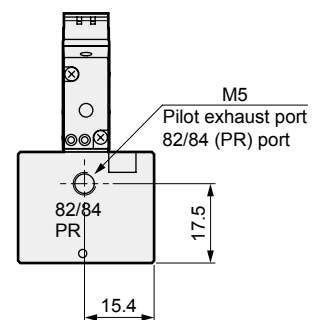
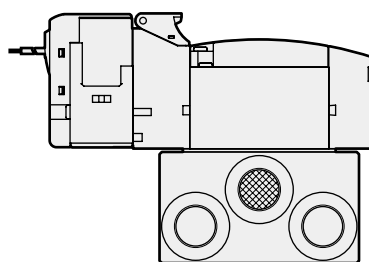
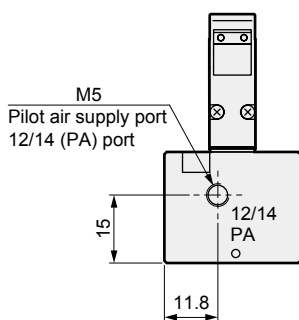
4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
4GD/E
M4GD/E
MN4GD/E
4GA4/B4
MN3E
MN4E
W4GA/B2
W4GB4
MN3S0
MN4S0
4SA/B0
4KA/B
4KA/B (master)
4F
4F (master)
PV5G
GMF
PV5
GMF
PV5S-0
3Q
MV3QR
3MA/B0
3PA/B
P/M/B
NP/NAP
NVP
4G*0EJ
4F*0EX
4F*0E
HMV
HSV
2QV
3QV
SKH
Silencer
TotAirSys (Total Air)
TotAirSys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

3GB1⁶⁶₆₇⁶⁸₇₆ 0R, 4GB1⁶⁶₇₆ 0R

● 2-position single grommet lead wire (blank)

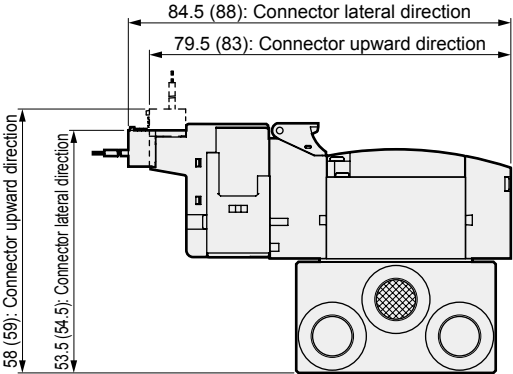


● External pilot (K)



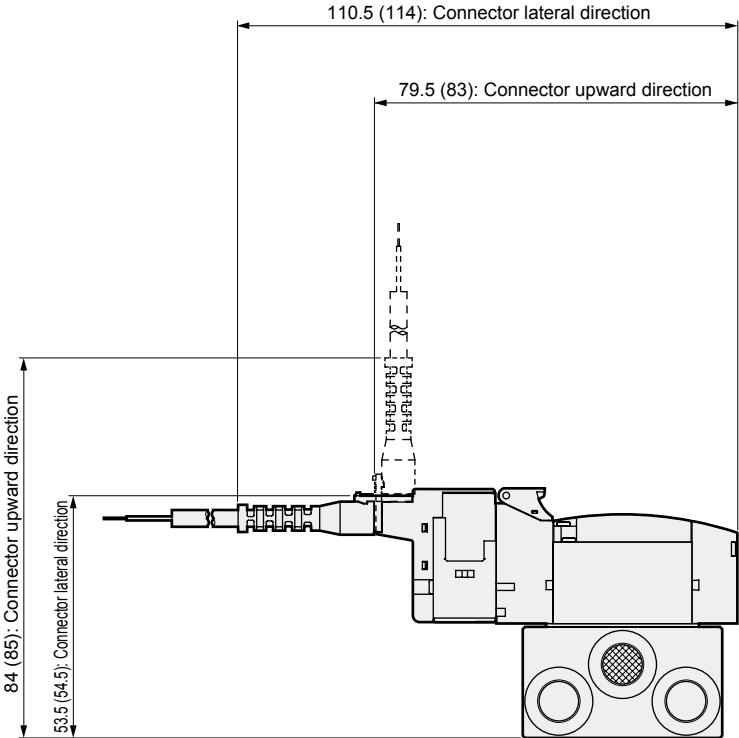
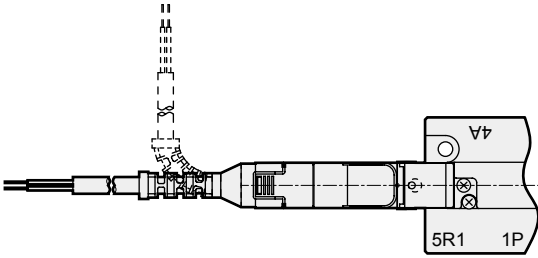
Dimensions Port size; G thread

● E type connector (E)



Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

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

3GB2/4GB2 Series

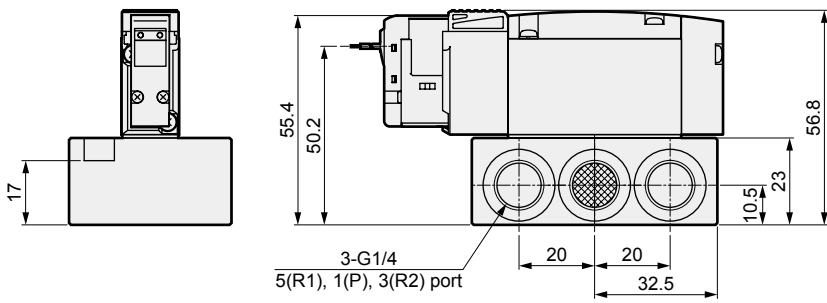
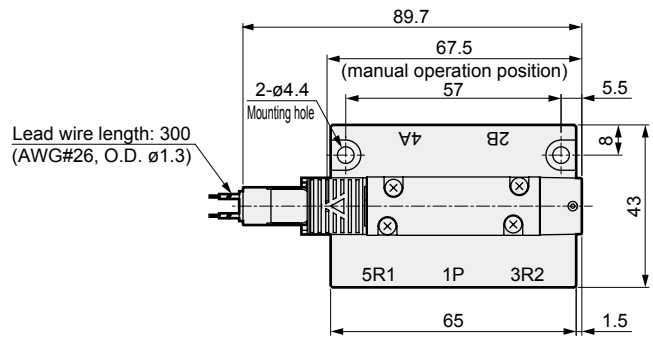
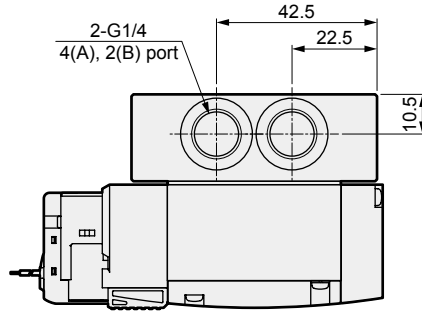
Discrete valve; base piping

Dimensions Port size; G thread

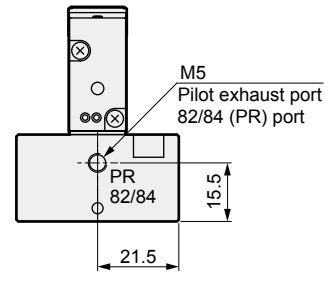
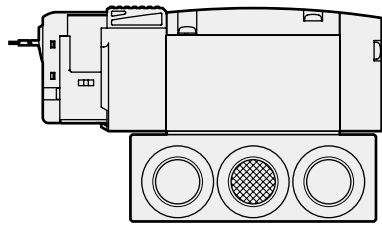
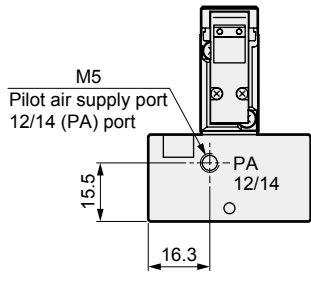
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G*0EJ
- 4F*0EX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

3GB2⁶⁶₆₇⁶⁶₇₆⁶⁶₇₇ 0R, 4GB2¹₂³₄⁵ 0R

● 2-position single, grommet lead wire (blank)

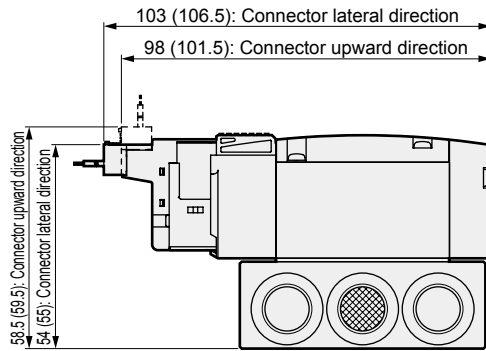


● External pilot (K)



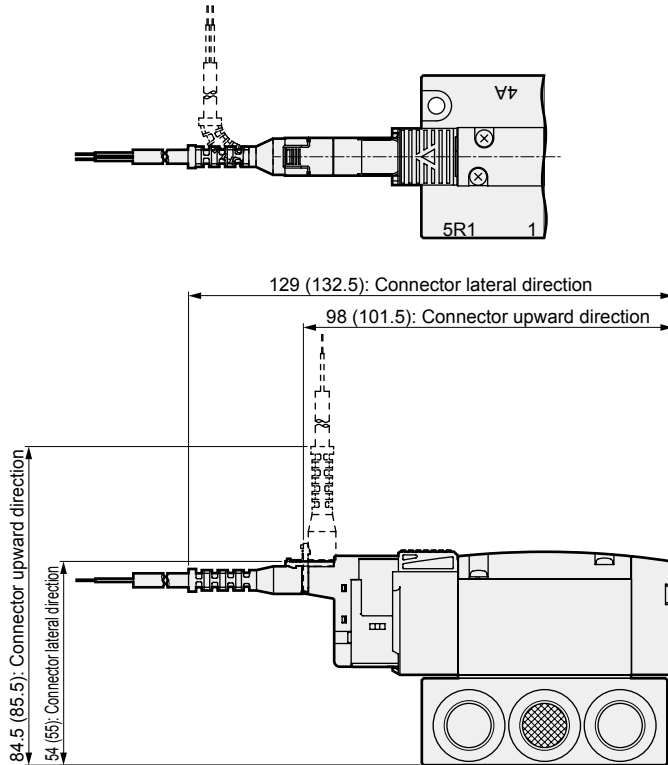
Dimensions Port size; G thread

● E type connector (E)



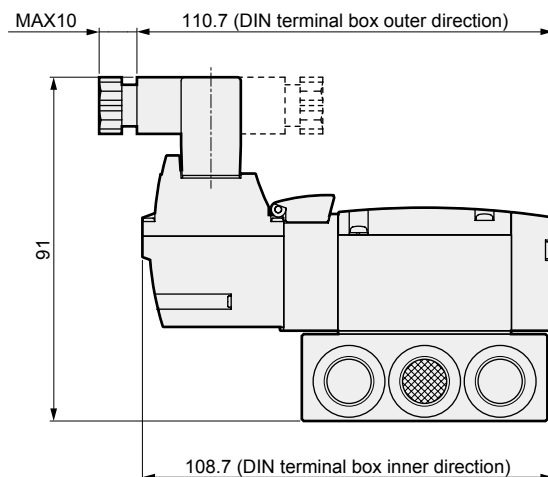
Note: Values in () are for AC voltage.

● EJ type connector (E**J)



Note: Values in () are for AC voltage.

● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

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