

Discrete valve  
Body piping

# 3GD1/2/3 / 4GD1/2/3 Series

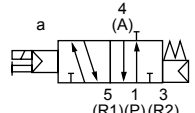
● Cylinder bore size:  $\varnothing 20$  to  $\varnothing 100$



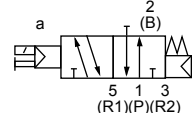
4GA/B  
M4GA/B  
MN4GA/B  
4GA/B (master)  
4GB With sensor  
4GD/E  
M4GD/E  
MN4GD/E  
4GA4/B4  
MN3E  
MN4E  
W4GA/B2  
W4GB4  
MN3S0  
MN4S0  
4SA/B0  
4KA/B  
4KA/B (master)  
4F  
4F (master)  
PV5G  
GMF  
PV5  
GMF  
PV5S-0  
3Q  
MV3QR  
3MA/B0  
3PA/B  
P/M/B  
NP/NAP  
NVP  
4G\*0EJ  
4F\*0EX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

## JIS symbol

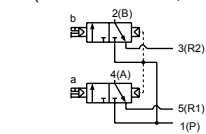
- 3-port valve  
2-position single NC



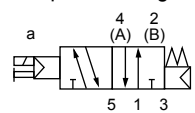
- 2-position single NO



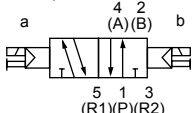
- Two 3-port valves integrated  
(A side valve: NC, B side valve: NC)



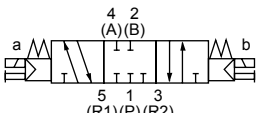
- 5-port valve  
2-position single



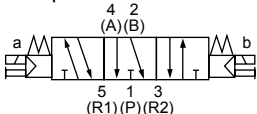
- 2-position double



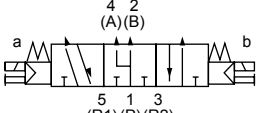
- 3-position all ports closed



- 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 ( $\approx 100$ psi, 7 bar)
Min. working pressure MPa	0.2 ( $\approx 29$ psi, 2 bar)
Proof pressure MPa	1.05 ( $\approx 150$ 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 type
Pilot exhaust method	Main valve/pilot valve common exhaust type
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof
Vibration resistance $\text{m/s}^2$	50 or less
Shock resistance $\text{m/s}^2$	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 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	24 DC	12 DC	100 AC	200 AC
V fluctuation range	$\pm 10\%$			
Holding current A (*3)	0.015 (0.017)	0.030 (0.034)	0.009 (0.009)	0.006 (0.006)
Power consumption W (*3)	0.35(0.40)		-	
Apparent power VA (*3) (*4)	-		0.93 (0.98)	1.40
Thermal class	B			
Surge suppressor	Option			
Indicator	Lamp (option)			

\*3: Values in ( ) apply when lamp is included.

\*4: 200 VAC is the value of DIN terminal box (with lamp).

## Individual specifications

Item		3GD1	3GD2	3GD3	4GD1	4GD2	4GD3
Port size	A/B port	Push-in fitting $\varnothing 4, \varnothing 6$ M5	Push-in fitting $\varnothing 4, \varnothing 6, \varnothing 8$ Rc1/8	Push-in fitting $\varnothing 6, \varnothing 8, \varnothing 10$ Rc1/4	Push-in fitting $\varnothing 4, \varnothing 6$ M5	Push-in fitting $\varnothing 4, \varnothing 6, \varnothing 8$ Rc1/8	Push-in fitting $\varnothing 6, \varnothing 8, \varnothing 10$ Rc1/4
	P/R1/R2 port	M5	Rc1/8	Rc1/4	M5	Rc1/8	Rc1/4

## Performance/characteristics by model

Item		3GD1		3GD2		3GD3		4GD1		4GD2		4GD3		
		ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	ON	OFF	
Response time ms	Two 3-port valves integrated	12	15	15	30	-	-	-	-	-	-	-	-	
	2-position	Single	15	25	20	30	25	40	15	25	20	30	25	40
		Double	-	-	-	-	-	-	15	-	20	-	25	-
3-position	ABR connection	-	-	-	-	-	-	20	30	25	35	35	50	

Values with lamp/surge suppressor are shown. The response time is the value with supply pressure of 0.5 MPa at 20 $^{\circ}\text{C}$  without lubrication. It depends on the pressure and the lubricant quality.

## Weight

Item			3GD1	3GD2	3GD3	4GD1	4GD2	4GD3	
Weight g	Single	Grommet lead wire	48(41)	110(80)	144(102)	48(41)	115(85)	153(111)	
		E type connector	50(43)	112(82)	146(104)	50(43)	117(87)	155(113)	
		DIN terminal box	-	147(117)	178(136)	-	152(122)	187(145)	
	2-position	Double	Grommet lead wire	-	-	-	65(58)	133(103)	175(129)
			E type connector	-	-	-	69(62)	137(107)	179(133)
			DIN terminal box	-	-	-	-	176(146)	215(169)
	3-position	All ports closed	Grommet lead wire	-	-	-	67(60)	145(115)	184(142)
			E type connector	-	-	-	71(64)	149(119)	188(146)
			DIN terminal box	-	-	-	-	188(158)	224(182)

- Values in ( ) do not include the pipe adaptor. 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 <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b	
3GD1 4GD1	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
3GD2 4GD2	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
3GD3 4GD3	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

Note: 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 444.

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

# 3GD1/2/3 / 4GD1/2/3 Series

Discrete valve; body piping

## How to order

4GA/B  
4GD1 1 0 R - C6 - E2 - 1

MN4GA/B  
3GD1 1 0 R - C6 - E2 - 1

● Discrete valve for mounting base

4GA/B (master)  
4GB With sensor  
4GD1 1 9R - C6 - E2 H - 3

● Discrete 3-port valve for mounting base

4GD/E  
4M4GD/E  
MN4GD/E  
3GD1 1 9 R - C6 - E2 H C - 3

Ⓐ Model No.

Ⓑ Solenoid position

Ⓒ Port size

Ⓓ Electrical connections  
Refer to page 441 for the circuit diagram with surge suppressor/lamp.

Ⓔ Option

Ⓕ Pilot exhaust method

Ⓖ Voltage

Ⓐ Model No.

3GD1

3GD2

3GD3

4GD1

4GD2

4GD3

Code	Description	3GD1	3GD2	3GD3	4GD1	4GD2	4GD3
<b>Ⓑ Solenoid position</b>							
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 A side valve: Normally closed integrated (*2) B side valve: Normally closed	●	●				

<b>Ⓒ Port size</b>							
Port	4(A)/2(B) port	P/R1/R2 port (1) = M5, (2) = Rc1/8, (3) = Rc1/4					
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)

<b>Ⓓ Electrical connections</b>							
Refer to the electrical connection list on next page.							

<b>Ⓔ Option</b>							
Blank	Non-locking/locking common manual override	●	●	●	●	●	●
H	With exhaust check valve (*3)	●	●	●	●	●	●
P	With mounting plate	●	●	●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●	●
F	A/B-port filter built in (*4)	●	●	●	●	●	●

<b>Ⓕ Pilot exhaust method</b>							
Blank	Common exhaust (pilot exhaust check valve built-in)	●	●	●	●	●	●
C	Atmosphere release	○	○	○	○	○	○

<b>Ⓖ Voltage</b>							
1	100 VAC (rectifier integrated)	●	●	●	●	●	●
2	200 VAC (rectifier integrated) (*5)		●	●		●	●
3	24 VDC	●	●	●	●	●	●
4	12 VDC	●	●	●	●	●	●

■ is not available.

○ indicates a custom order.

## ⚠ Precautions for model No. selection

\*1: For the 3GD normally closed, the piping connection 2 (B) and 3 (R2) ports are plugged.

For 3GD 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: 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: A filter is built into the P-port as standard.

\*5: DIN terminal box only is supported.

# 3GD1/2/3 / 4GD1/2/3 Series

Discrete valve; body piping

## [Electrical connections list]

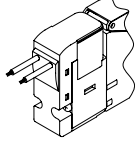
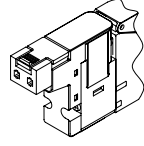
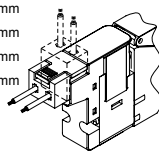
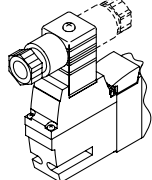
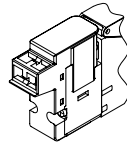
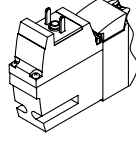
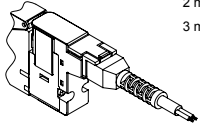
		A Model No.					
		3GD1	3GD2	3GD3	4GD1	4GD2	4GD3
<b>D Electrical connections</b>							
Blank	Grommet lead wire (300 mm) (*6)	●	●	●	●	●	●
B	DIN terminal box (Pg7) with surge suppressor/lamp (*7) (*9)		●	●		●	●
BN	DIN terminal box (Pg7) (without terminal box) with surge suppressor (*7) (*9)		●	●		●	●
<b>E type connector (upward/lateral common)</b>							
E0	Lead wire (300 mm) (*8)	●	●	●	●	●	●
E00	Lead wire (500 mm) (*8)	●	●	●	●	●	●
E01	Lead wire (1000 mm) (*8)	●	●	●	●	●	●
E02	Lead wire (2000 mm) (*8)	●	●	●	●	●	●
E03	Lead wire (3000 mm) (*8)	●	●	●	●	●	●
E0N	Without lead wire (without socket) (*8)	●	●	●	●	●	●
E1	Without lead wire (socket/terminal attached) (*8)	●	●	●	●	●	●
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	●	●	●	●	●	●
<b>EJ type connector (socket with cover, upward/lateral common)</b>							
E01J	Lead wire (1000 mm) (*8)	●	●	●	●	●	●
E02J	Lead wire (2000 mm) (*8)	●	●	●	●	●	●
E03J	Lead wire (3000 mm) (*8)	●	●	●	●	●	●
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	●	●	●	●	●	●

\*6: Grommet lead wire specifications are compatible with DC voltage only.

\*7: A lamp comes with the terminal box.

\*8: AC voltage is with a rectifier circuit.

\*9: The terminal box conforms to EN175301-803 Type C (former DIN 43650-C). Refer to pages 856 and 857 for details.

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

- 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

# 3GD1 Series

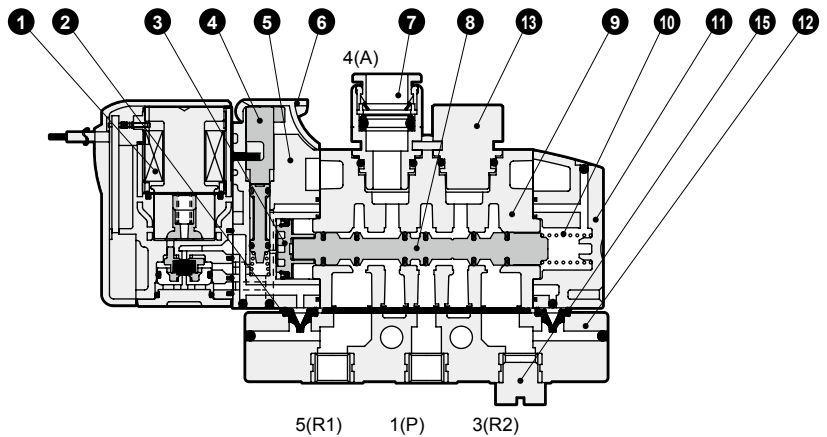
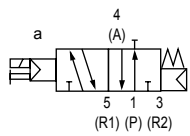
Discrete valve; body piping

## Internal structure and parts list

4GA/B  
M4GA/B  
MN4GA/B  
4GA/B (master)  
4GB With sensor  
4GD/E

### 3GD110R

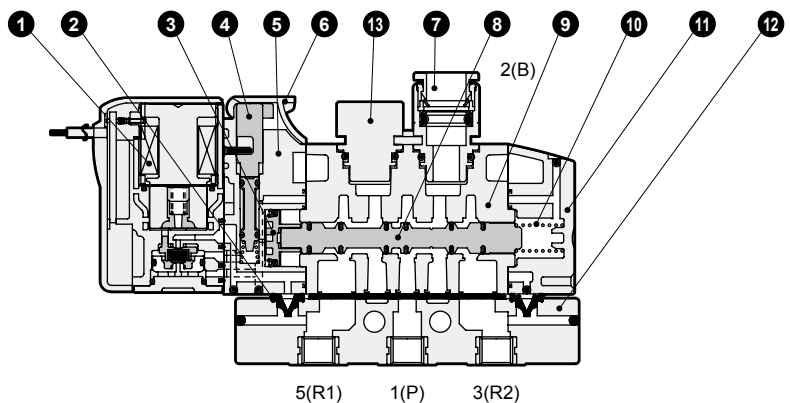
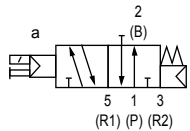
● 2-position single: Normally closed  
Grommet lead wire (blank)



M4GD/E  
MN4GD/E  
4GA4/B4  
MN3E  
MN4E

### 3GD1110R

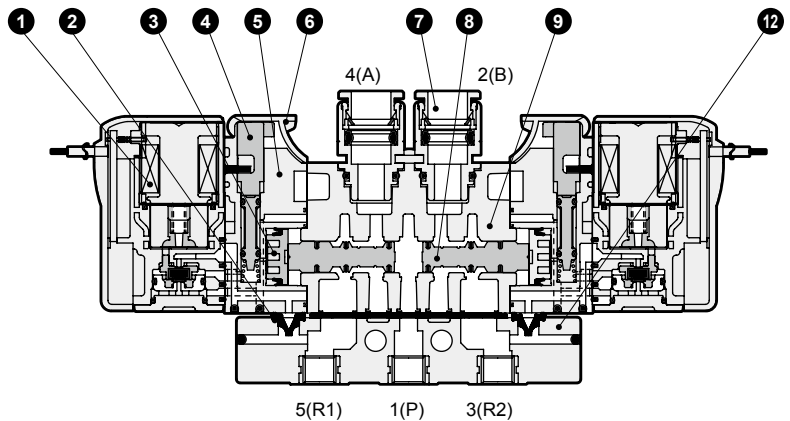
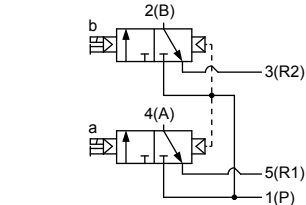
● 2-position single: Normally open  
Grommet lead wire (blank)



W4GA/B2  
W4GB4  
MN3S0  
MN4S0  
4SA/B0  
4KA/B  
4KA/B (master)  
4F

### 3GD1660R

● Two 3-port valves integrated  
Grommet lead wire (blank)  
A side valve: Normally closed,  
B side valve: Normally closed



4F (master)  
PV5G  
GMF  
PV5  
GMF  
PV5S-0  
3Q  
MV3QR  
3MA/B0  
3PA/B  
P/M/B  
NP/NAP  
NVP  
4G\*0EJ  
4F\*0EX

## 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	Body	Aluminum alloy die-casting
10	Spool spring	Stainless steel
11	Cap	Resin
12	Pipe adaptor	Resin
13	Plug cartridge	Aluminum
15	M5 plug	Copper alloy + nickel plating

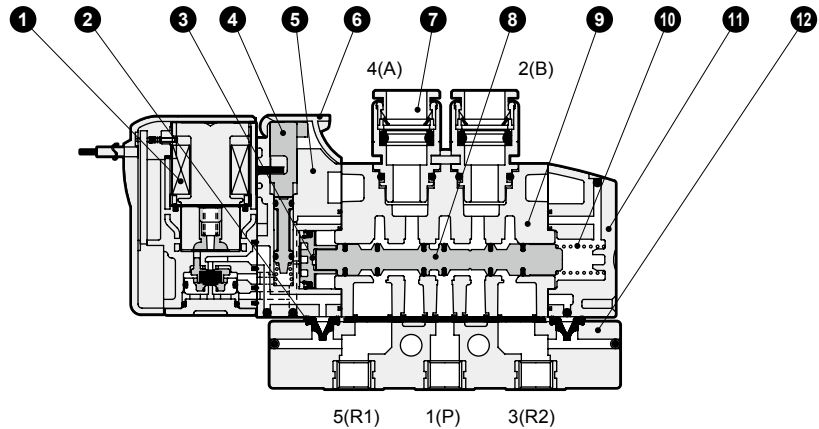
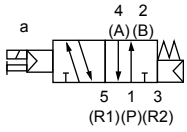
## Parts list

No.	Part name	Model No.
1	Coil assembly	4GR - [electrical connections] - [ ] - COIL - [voltage]
		Blank: Standard A: Ozone specifications Blank: Grommet lead wire
7	Cartridge push-in fitting and related parts	ø4 straight 4G1R-JOINT-C4
		ø6 straight 4G1R-JOINT-C6
		Plug cartridge 4G1R-JOINT-CPG

## Internal structure and parts list

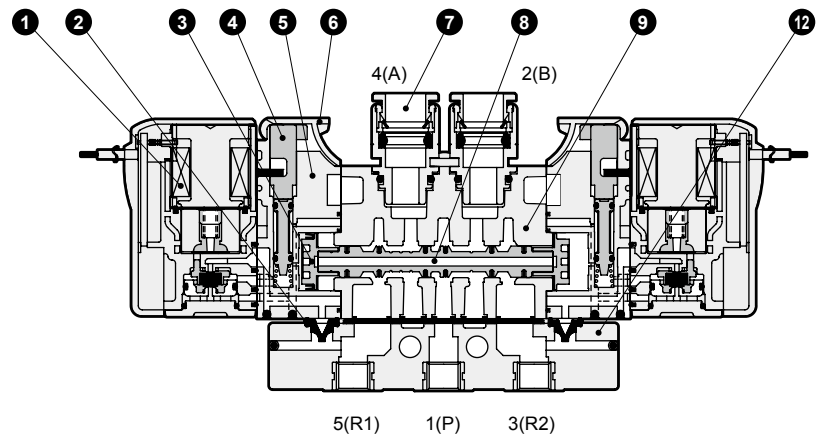
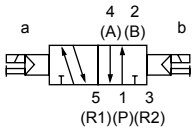
### 4GD110R

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



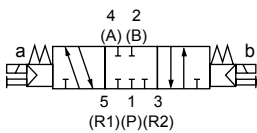
### 4GD120R

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

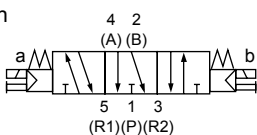


### 4GD1<sup>3</sup>/<sub>4</sub>/<sub>5</sub>0R

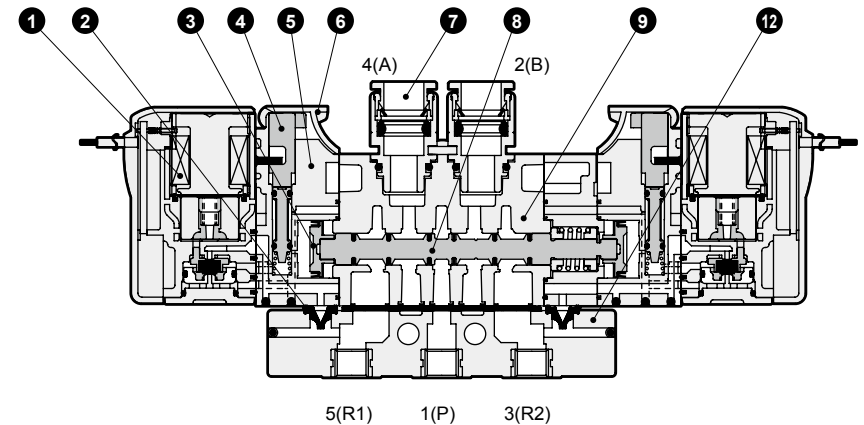
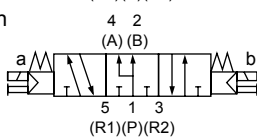
- 3-position
- Grommet lead wire (blank)
- All ports closed



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	Body	Aluminum alloy die-casting
10	Spool spring	Stainless steel
11	Cap	Resin
12	Pipe adaptor	Resin

## Parts list

No.	Part name	Model No.
1	Coil assembly	4GR - [electrical connections] - □ - COIL - [voltage]
		Blank: Standard A: Ozone specifications Blank: Grommet lead wire
7	Cartridge	ø4 straight 4G1R-JOINT-C4
	push-in fitting	ø6 straight 4G1R-JOINT-C6
	and related parts	Plug cartridge 4G1R-JOINT-CPG

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

# 3GD2/3 Series

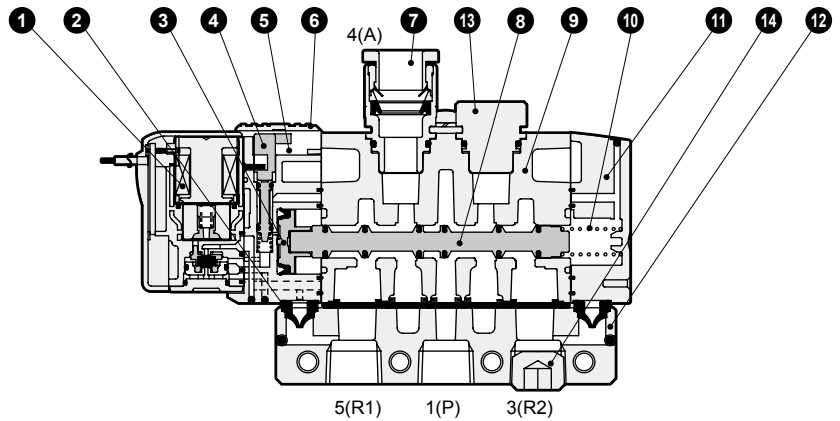
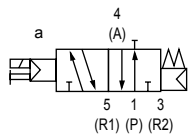
Discrete valve; body piping

## 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
- PV5
- GMF
- 3GD2660R
- 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

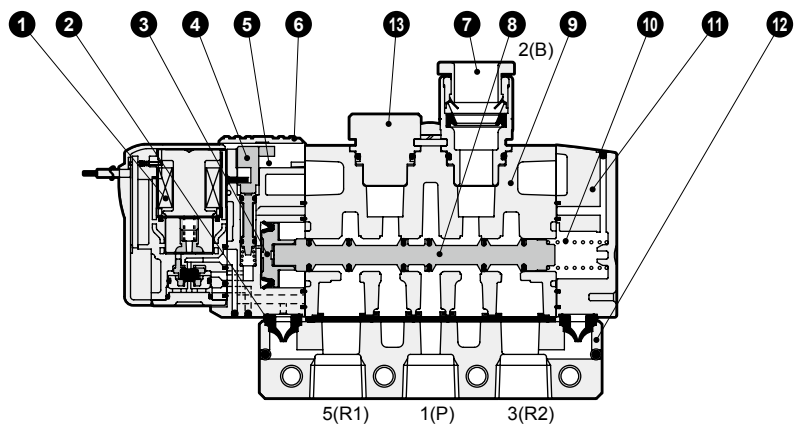
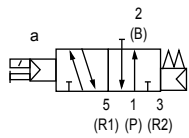
### 3GD210R/3GD310R

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



### 3GD2110R/3GD3110R

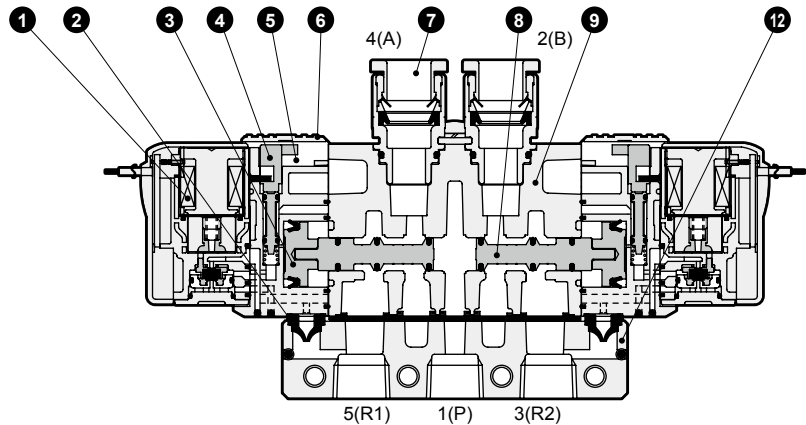
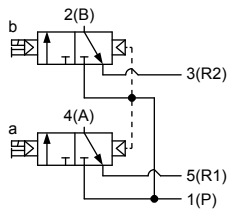
● 2-position single: Normally open  
Grommet lead wire (blank)



### 3GD2660R

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

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



## 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	Cartridge push-in fitting	-
8	Spool assembly	-
9	Body	Aluminum alloy die-casting
10	Spool spring	Stainless steel
11	Cap	Resin
12	Pipe adaptor	Aluminum alloy die-casting
13	Plug cartridge	Aluminum
14	Hexagon socket plug	Steel

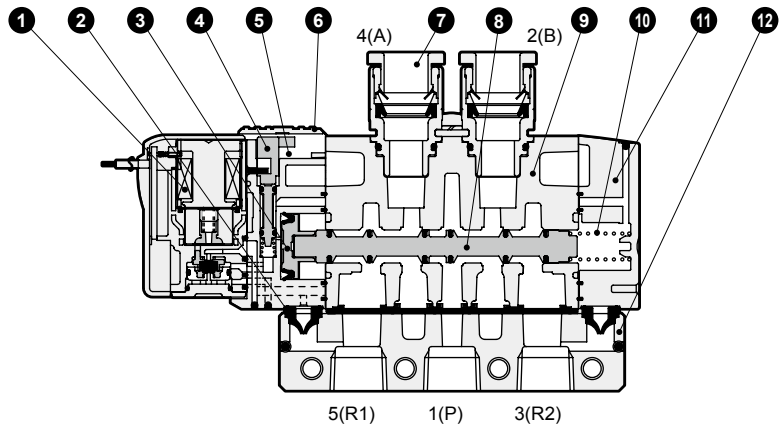
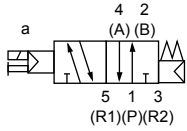
## Parts list

No.	Part name	Model No.		
1	Coil assembly	4GR - electrical connections - <input type="checkbox"/> - COIL - voltage Blank: Standard A: Ozone specifications Blank: Grommet lead wire		
7	Cartridge push-in fitting and related parts	3G2	ø4 straight	4G2R-JOINT-C4
			ø6 straight	4G2R-JOINT-C6
			ø8 straight	4G2R-JOINT-C8
		3G3	Plug cartridge	4G2R-JOINT-CPG
			ø6 straight	4G3R-JOINT-C6
			ø8 straight	4G3R-JOINT-C8
		ø10 straight	4G3R-JOINT-C10	
		Plug cartridge	4G3R-JOINT-CPG	

## Internal structure and parts list

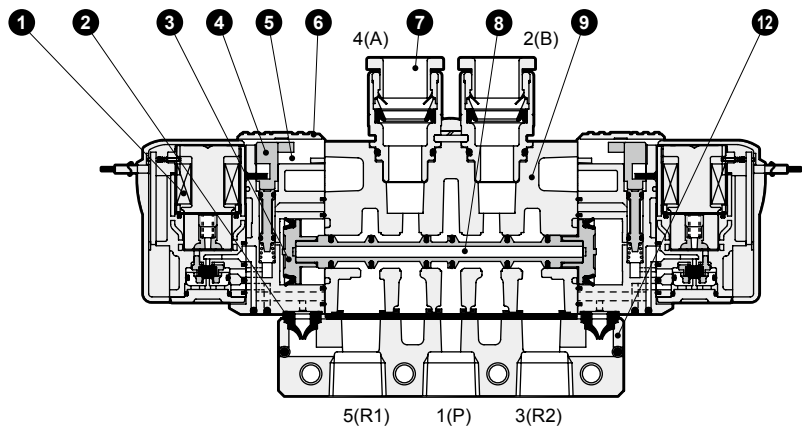
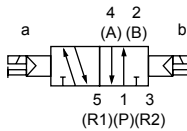
### 4GD210R/4GD310R

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



### 4GD220R/4GD320R

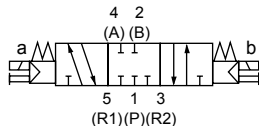
- 2-position double
- Grommet lead wire (blank)



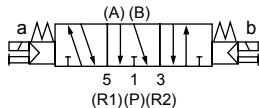
### 4GD2<sub>3</sub>0R/4GD3<sub>3</sub>0R

- 3-position
- Grommet lead wire (blank)

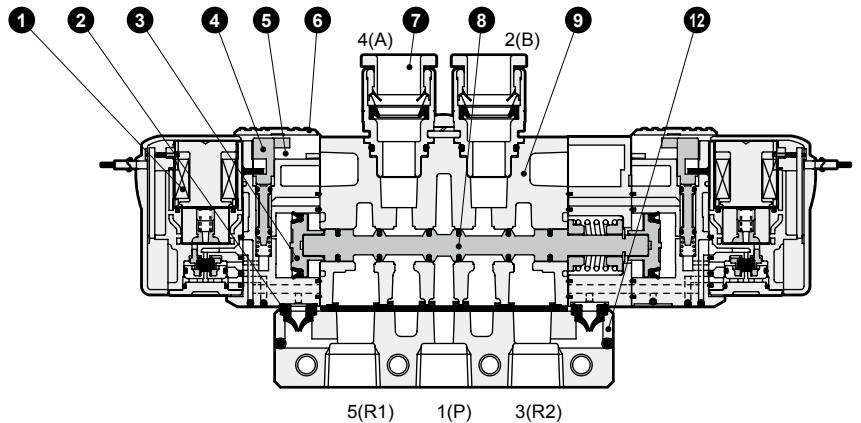
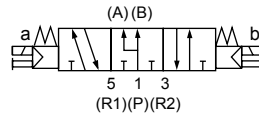
All ports closed



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	Body	Aluminum alloy die-casting
10	Spool spring	Stainless steel
11	Cap	Resin
12	Pipe adaptor	Aluminum alloy die-casting

## Parts list

No.	Part name	Model No.	
1	Coil assembly	4GR -electrical connections- □ - COIL -voltage Blank: Standard A: Ozone specifications	
		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
		4G3	
ø6 straight	4G3R-JOINT-C6		
ø8 straight	4G3R-JOINT-C8		
ø10 straight	4G3R-JOINT-C10		

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



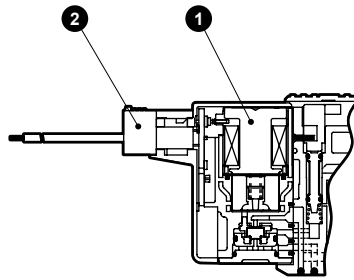
# 3GD1/2/3 / 4GD1/2/3 Series

Discrete valve; body piping

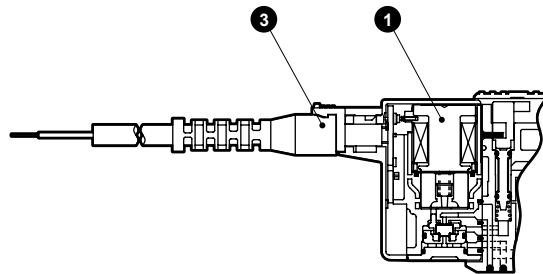
## Internal structure and parts list (electrical connections section)

- 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

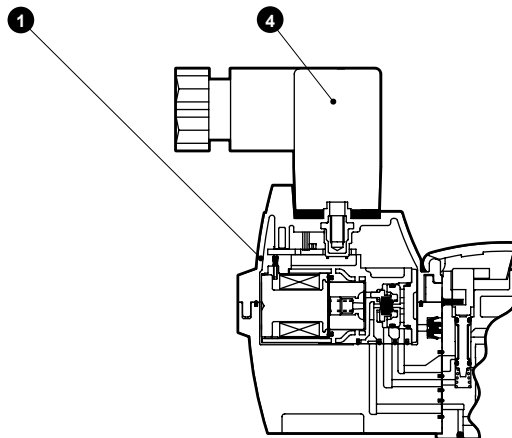
● E type connector E □□



● 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 proof 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]

---

# MEMO

---

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
<b>4GD/E</b>
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

# 3GD1 Series

Discrete valve; body piping

## Dimensions

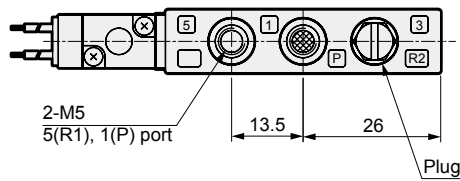
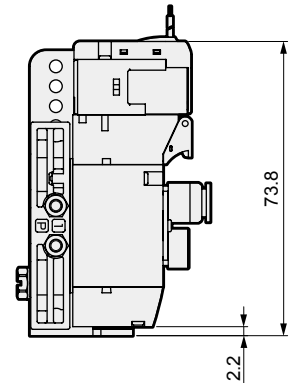
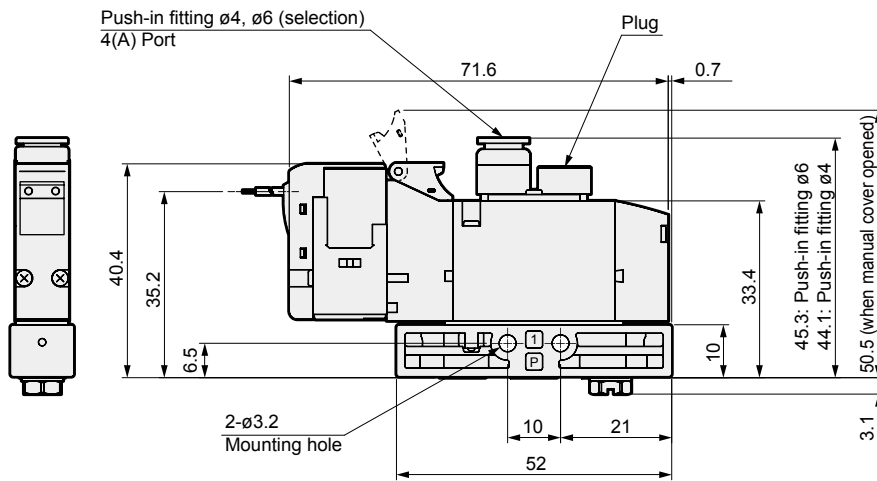
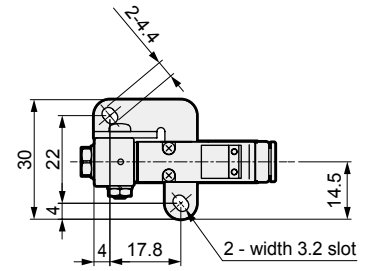
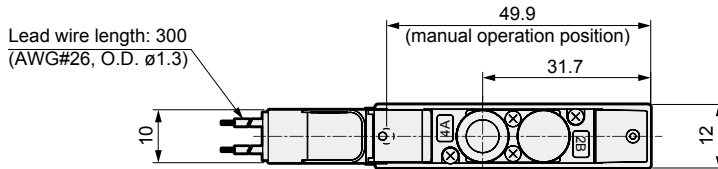
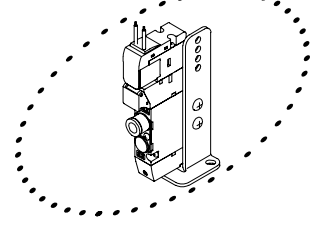
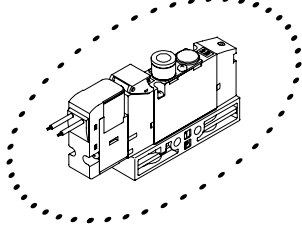


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E MN4E
- W4GA/B2
- W4GB4
- MN3S0 MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G GMF
- PV5 GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP NVP
- 4G\*0EJ
- 4F\*0EX
- 4F\*0E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

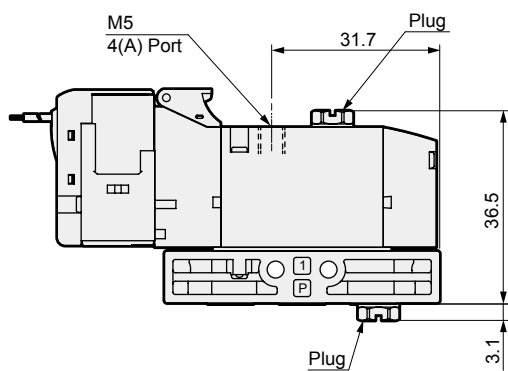
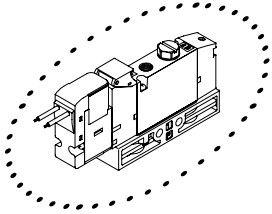
### 3GD110R

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

● Mounting plate (P)

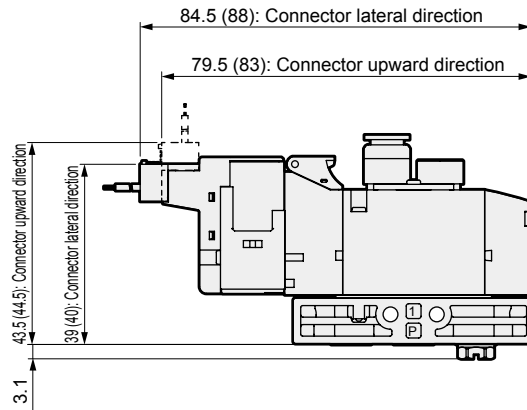
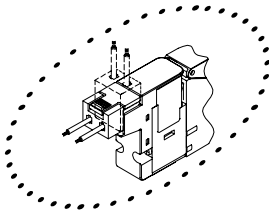


● M5 female thread (M5)



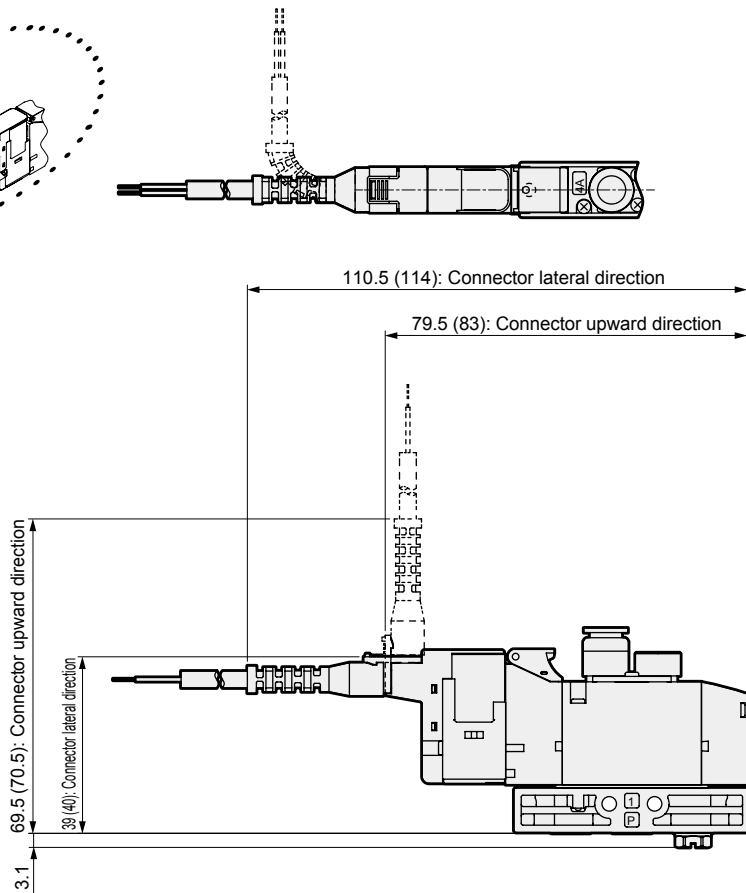
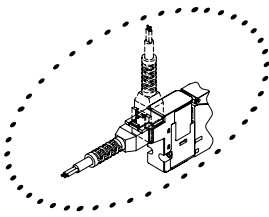
## Dimensions

● 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
<b>4GD/E</b>
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

# 3GD1 Series

Discrete valve; body piping

## Dimensions

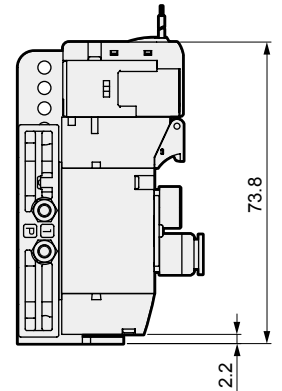
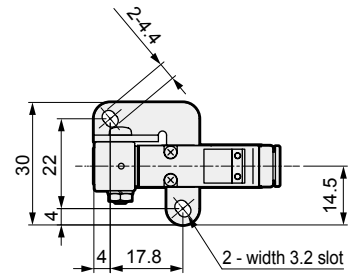
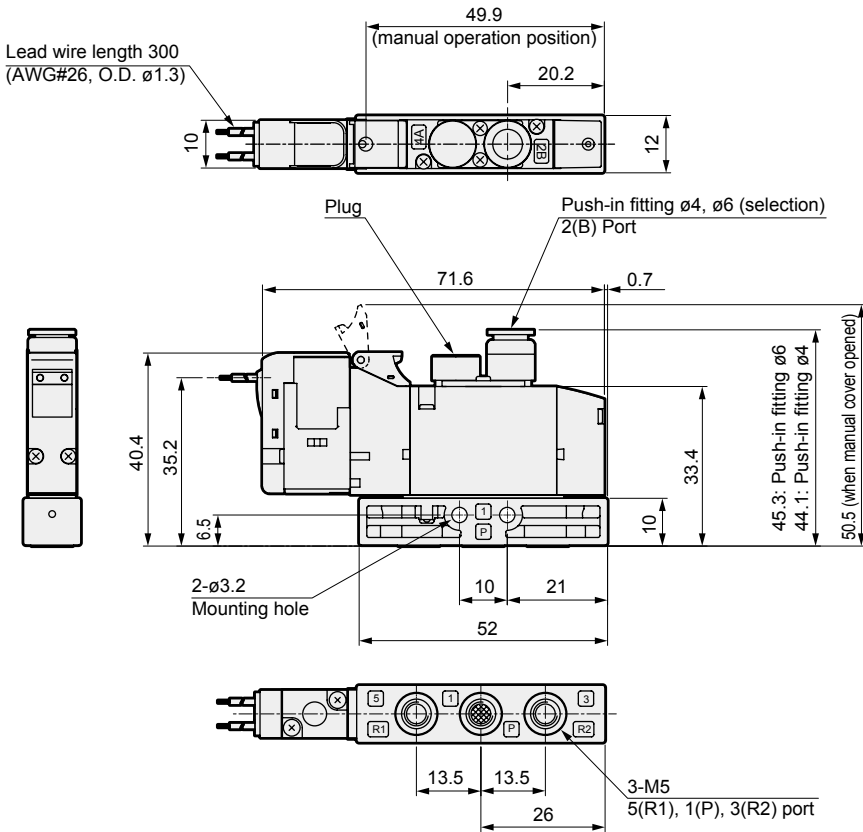
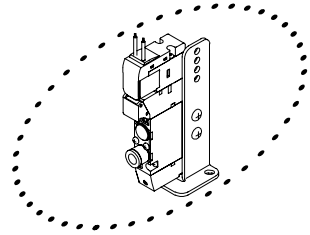
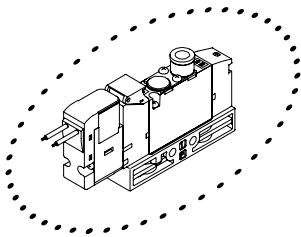


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E**
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
-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

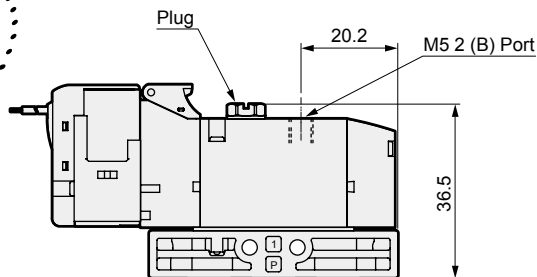
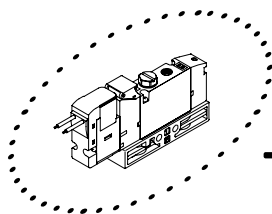
### 3GD1110R

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

● Mounting plate (P)

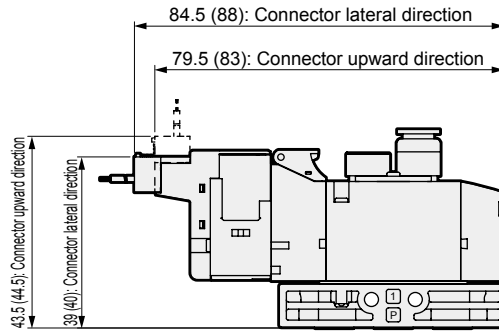
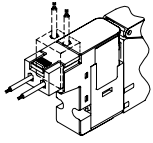


● M5 female thread (M5)



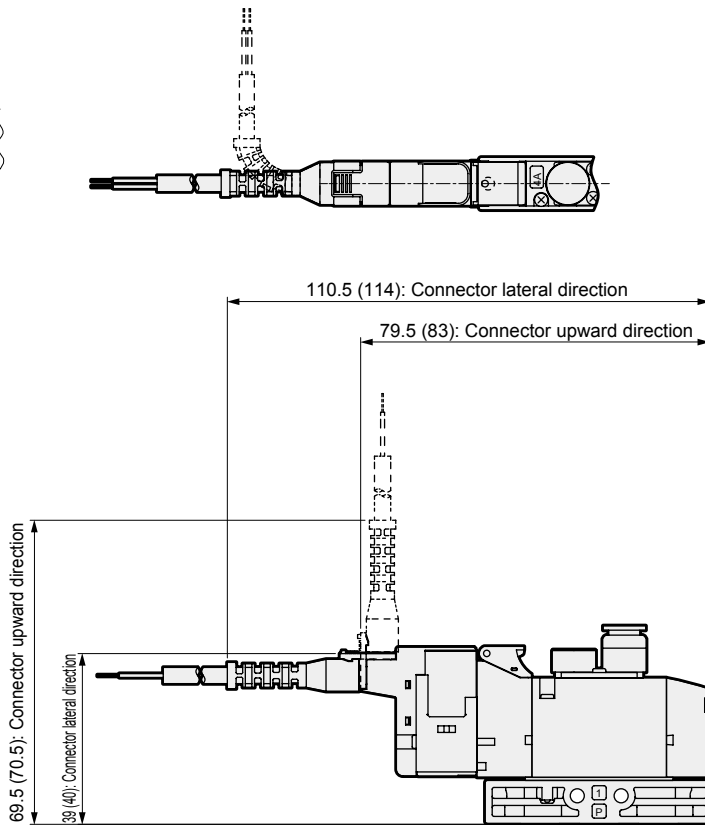
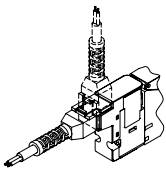
## Dimensions

● 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
<b>4GD/E</b>
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

# 3GD2 Series

Discrete valve; body piping

## Dimensions

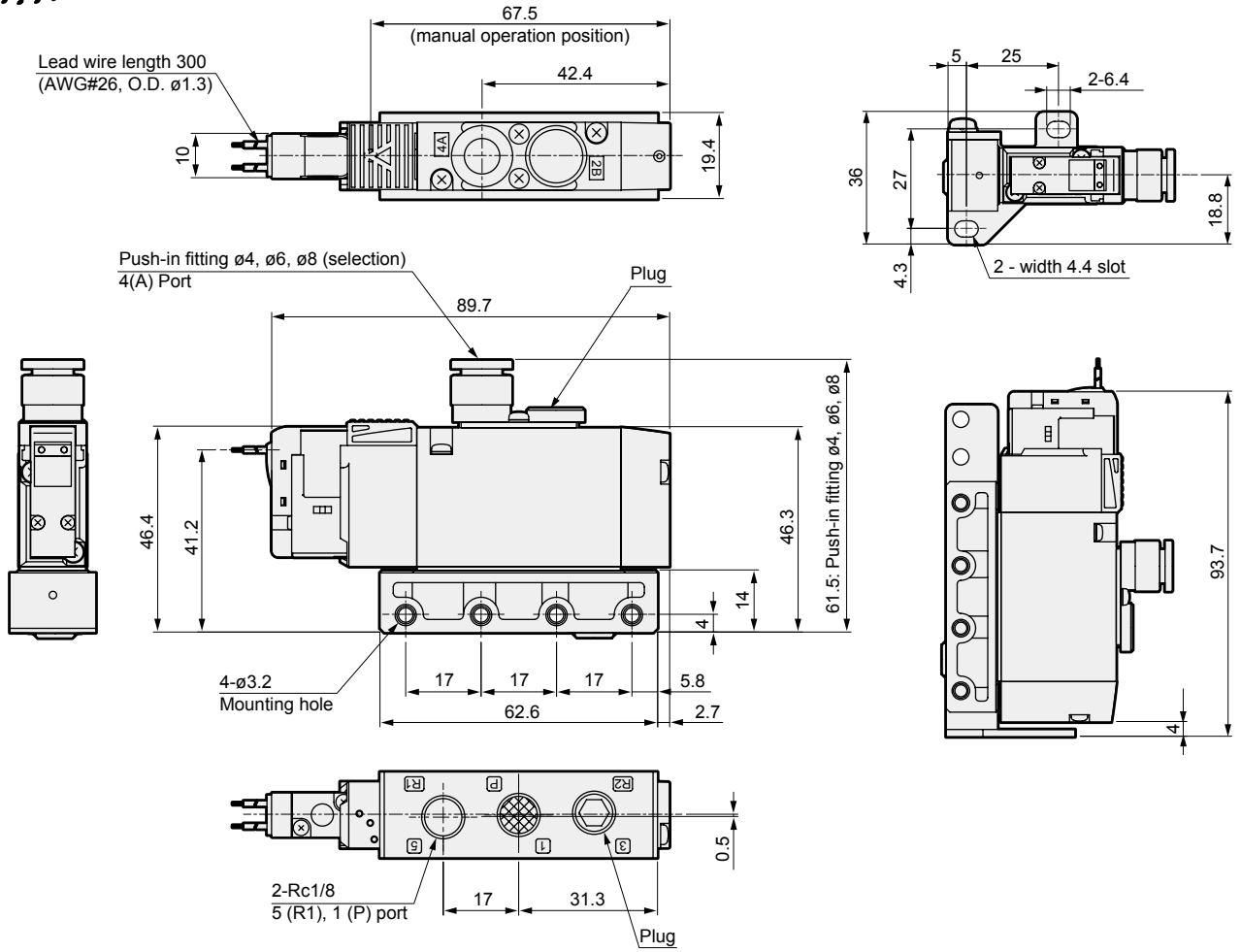
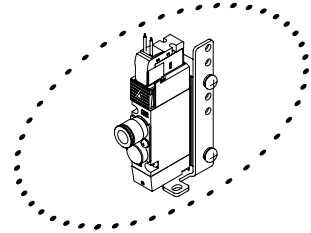
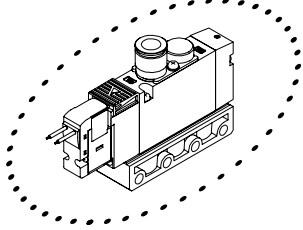


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E MN4E
- W4GA/B2
- W4GB4
- MN3S0 MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G GMF
- PV5 GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP NVP
- 4G\*0EJ
- 4F\*0EX
- 4F\*0E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

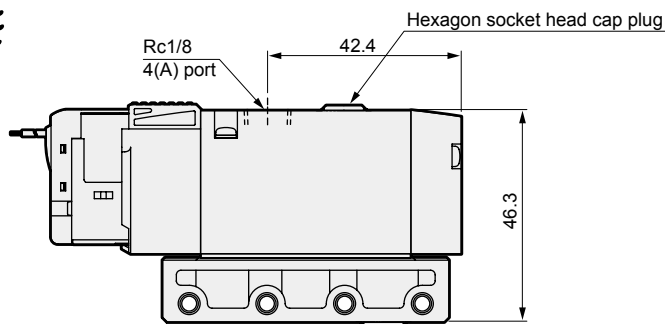
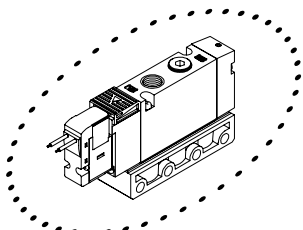
### 3GD210R

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

● Mounting plate (P)

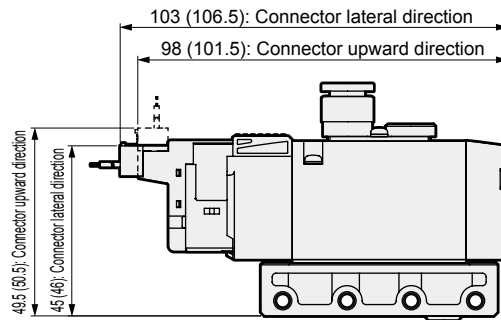
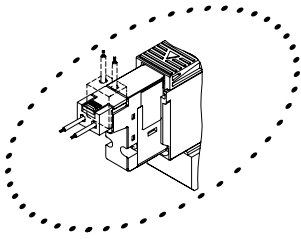


● Rc1/8 female thread (06)



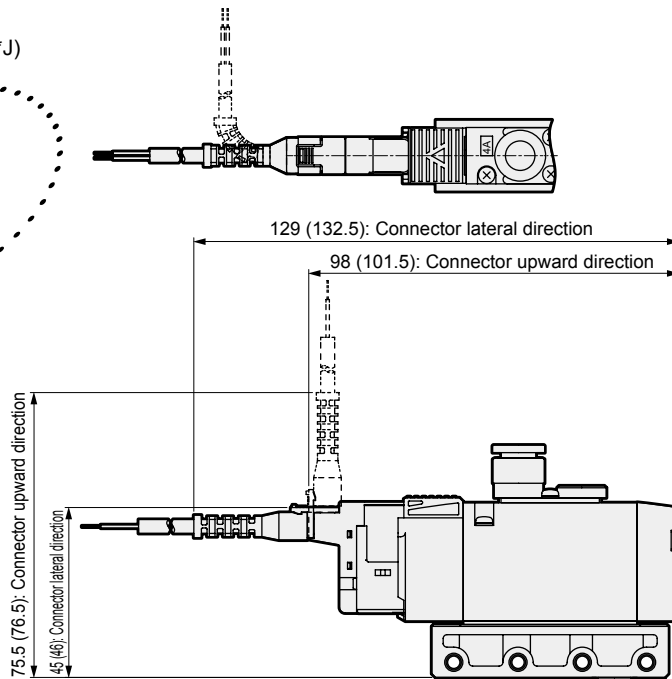
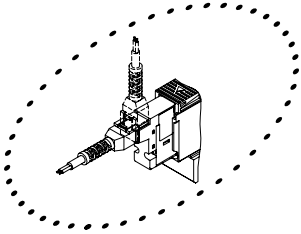
## Dimensions

● E type connector (E)



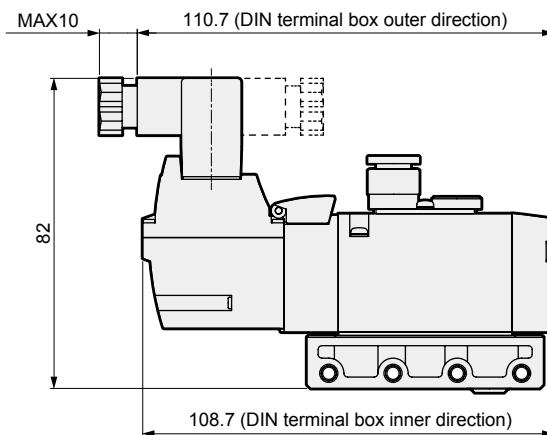
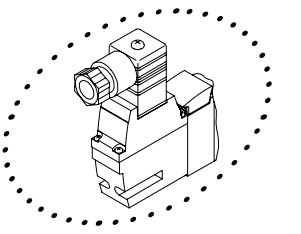
Note: Values in ( ) are for AC voltage.

● 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
<b>4GD/E</b>
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



# 3GD2 Series

Discrete valve; body piping

## Dimensions

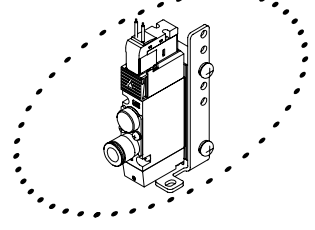
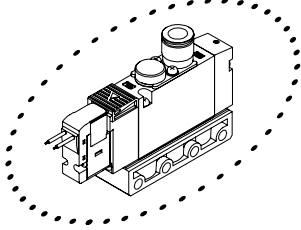


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

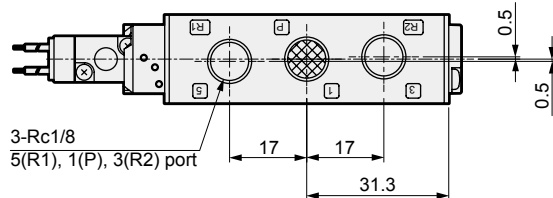
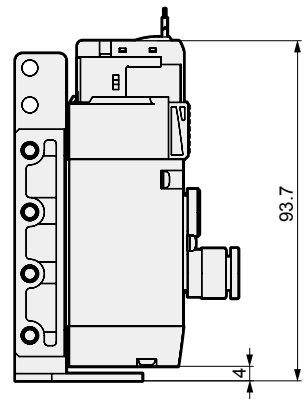
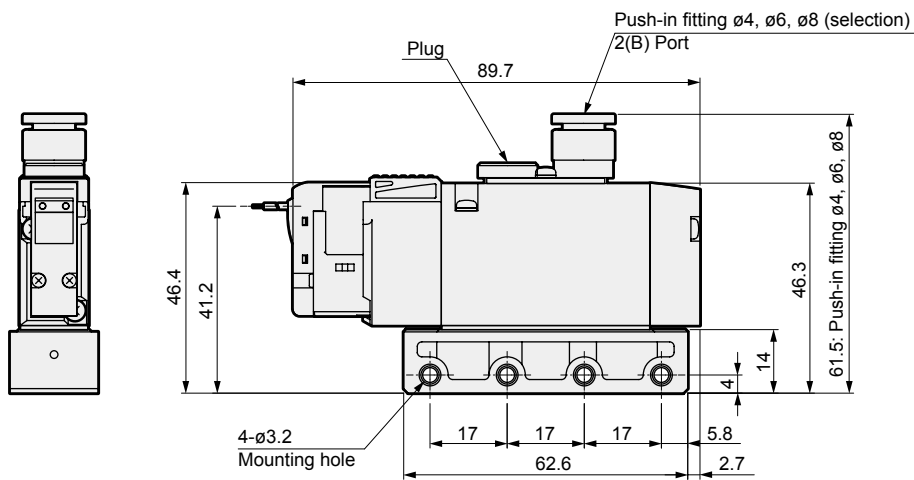
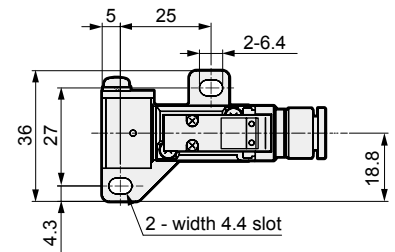
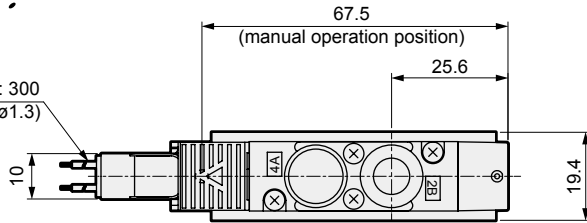
### 3GD2110R

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

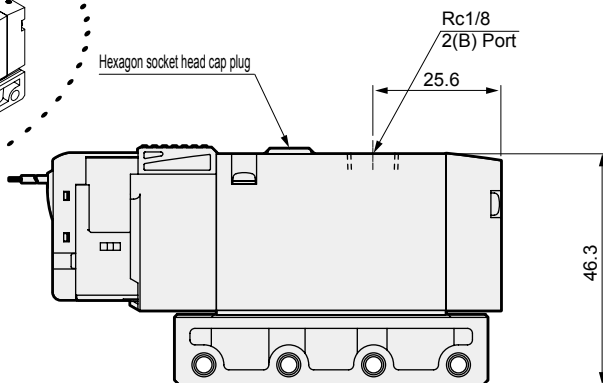
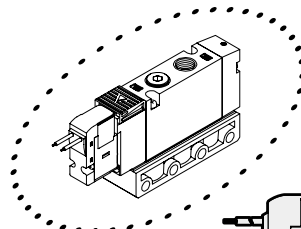
● Mounting plate (P)



Lead wire length: 300  
(AWG#26, O.D.  $\phi$ 1.3)

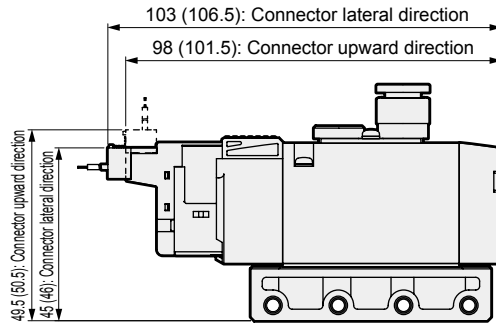
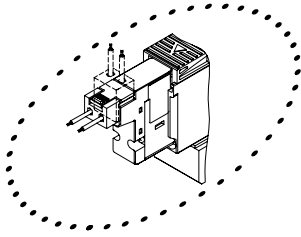


● Rc1/8 female thread (06)



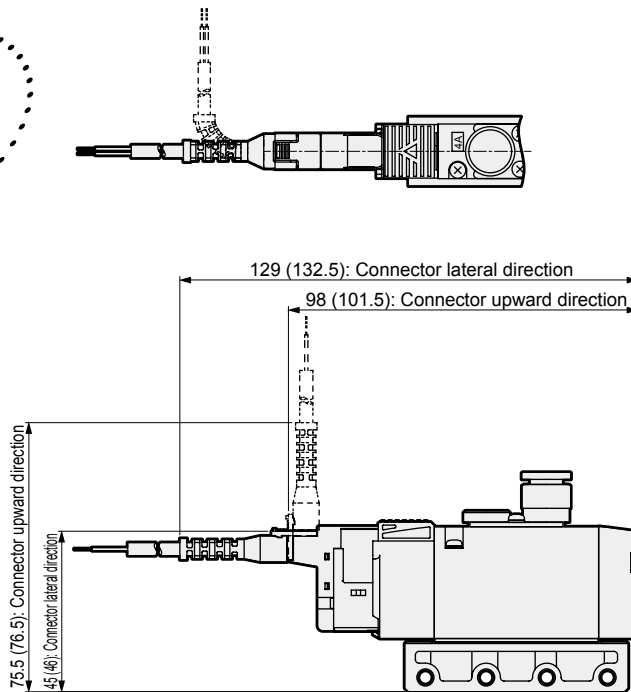
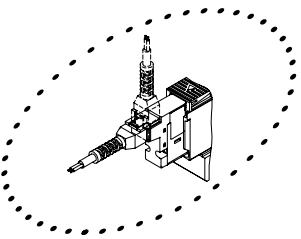
## Dimensions

● E type connector (E)



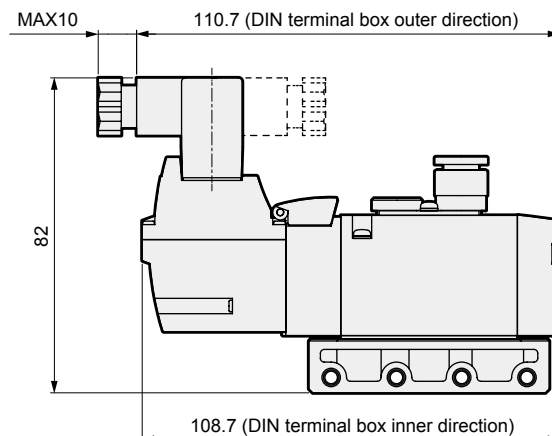
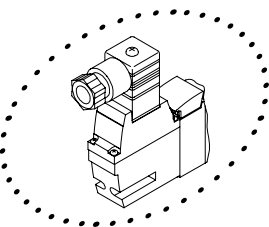
Note: Values in ( ) are for AC voltage.

● 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
<b>4GD/E</b>
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

# 3GD3 Series

Discrete valve; body piping

## Dimensions

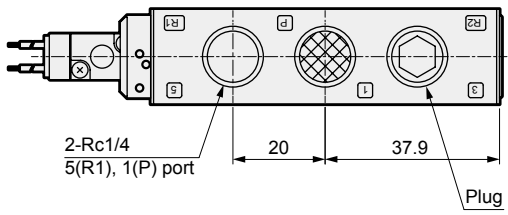
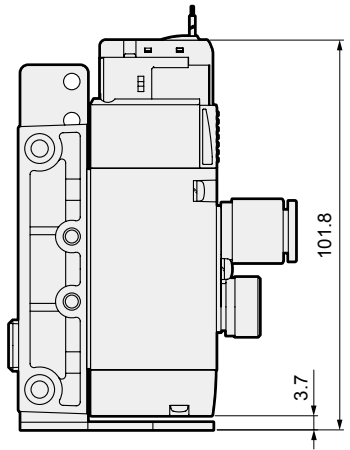
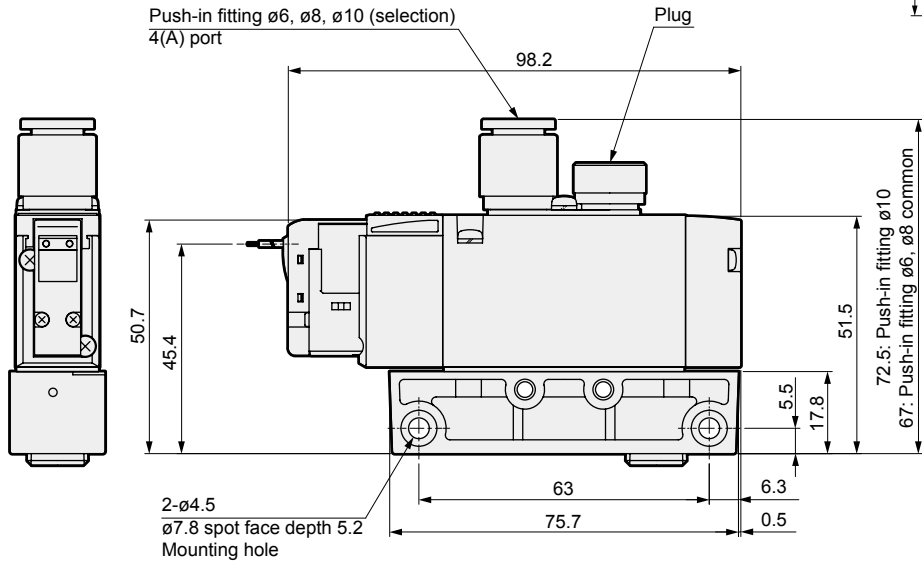
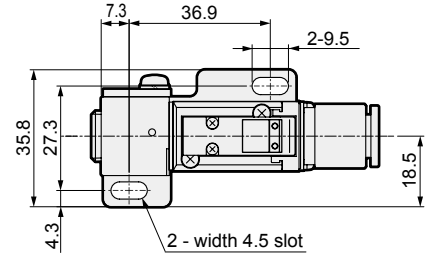
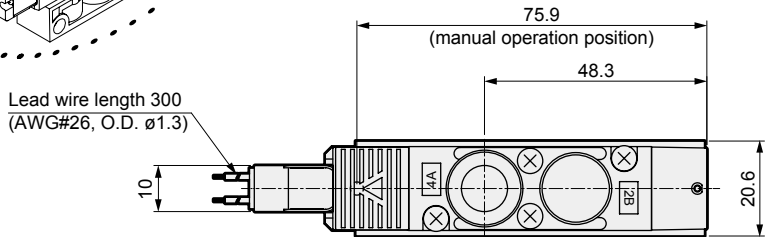
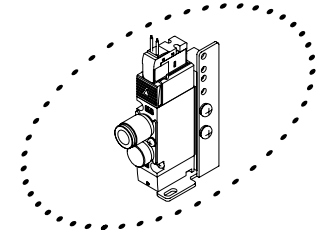
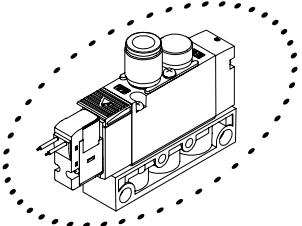


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

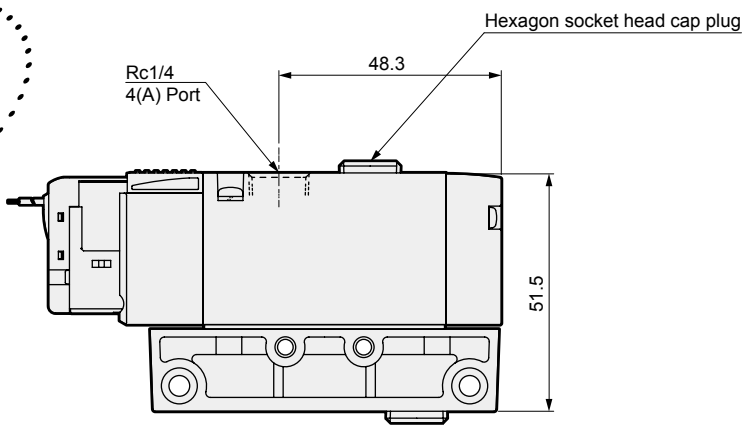
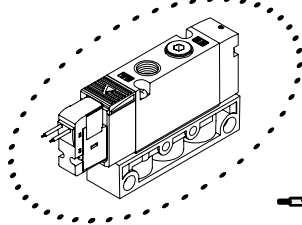
### 3GD310R

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

● Mounting plate (P)

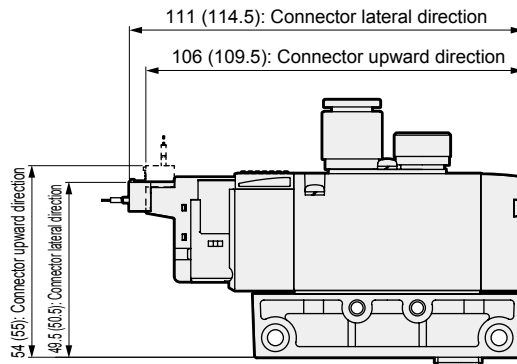
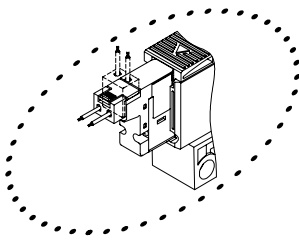


● Rc1/4 female thread (08)



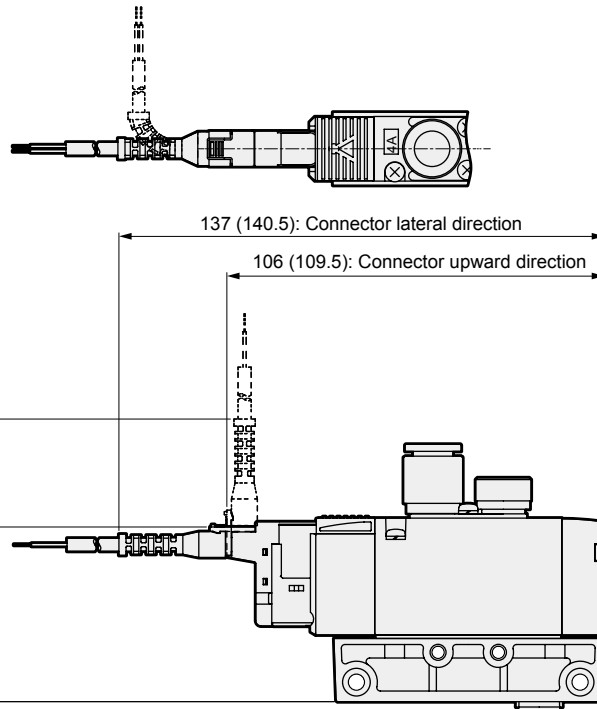
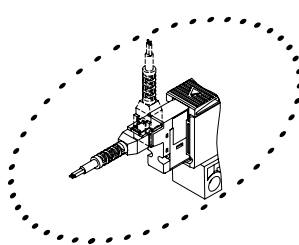
## Dimensions

● E type connector (E)



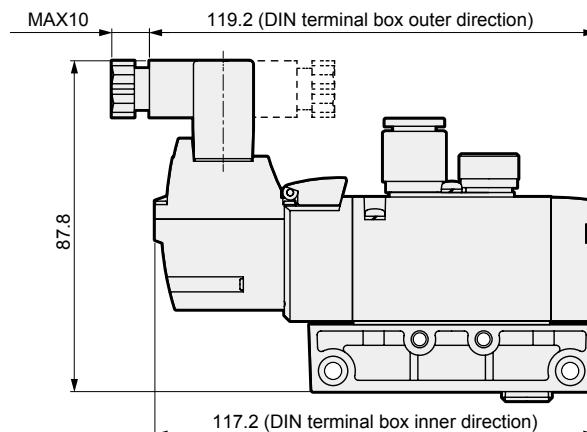
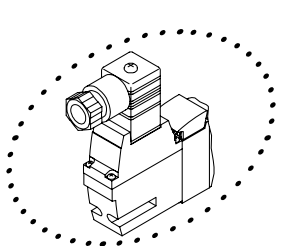
Note: Values in ( ) are for AC voltage.

● 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
<b>4GD/E</b>
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

# 3GD3 Series

Discrete valve; body piping

## Dimensions

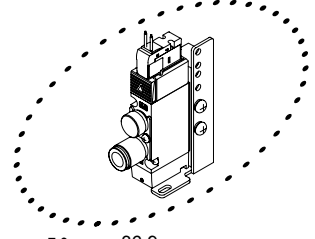
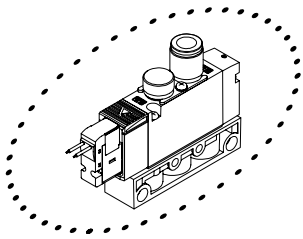


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

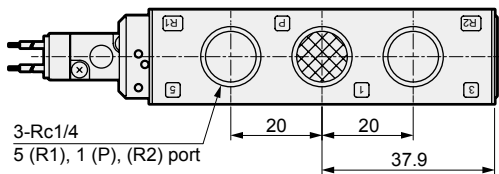
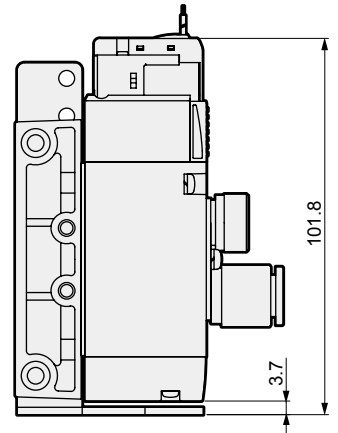
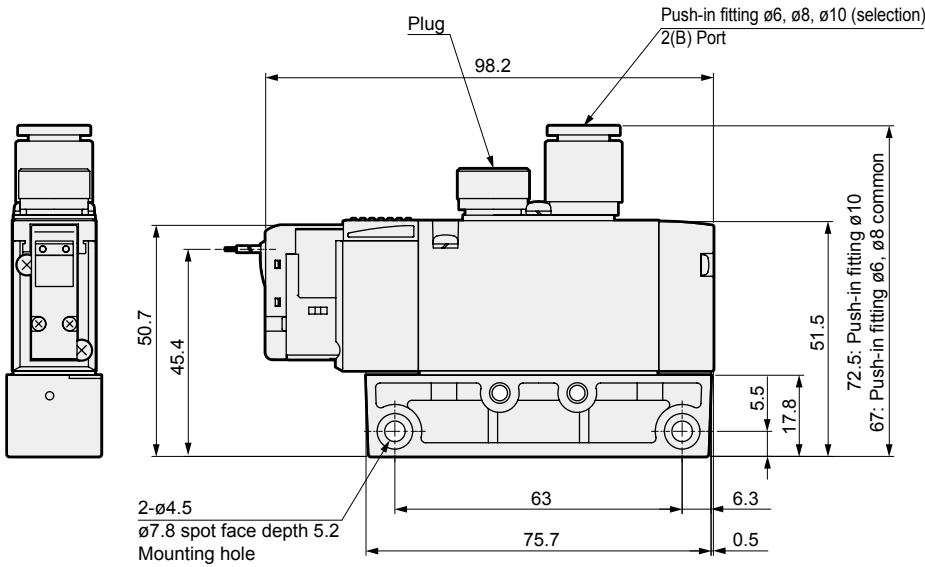
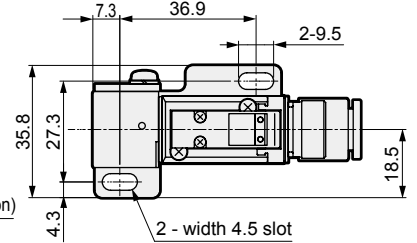
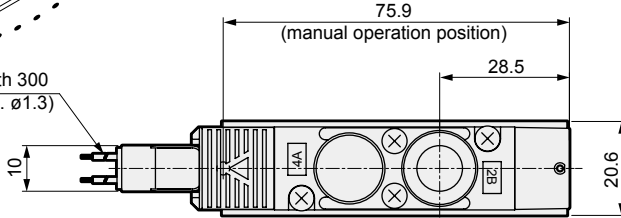
### 3GD3110R

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

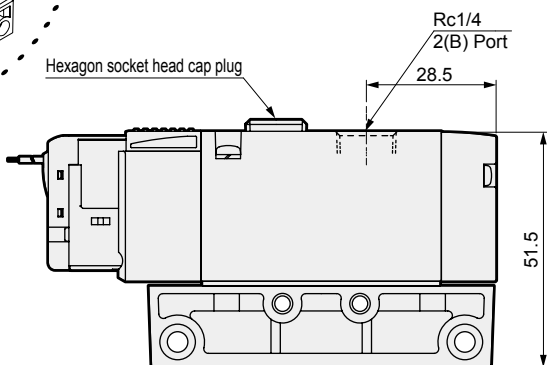
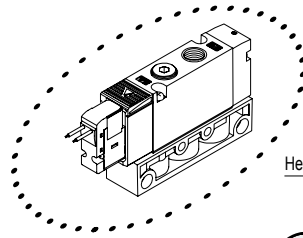
● Mounting plate (P)



Lead wire length 300  
(AWG#26, O.D.  $\phi$ 1.3)

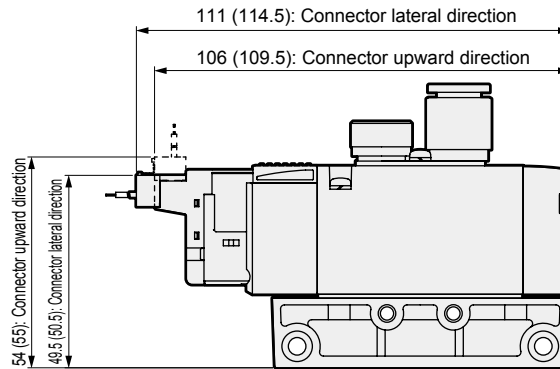
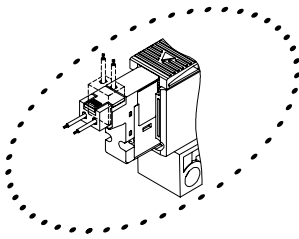


● Rc1/4 female thread (08)



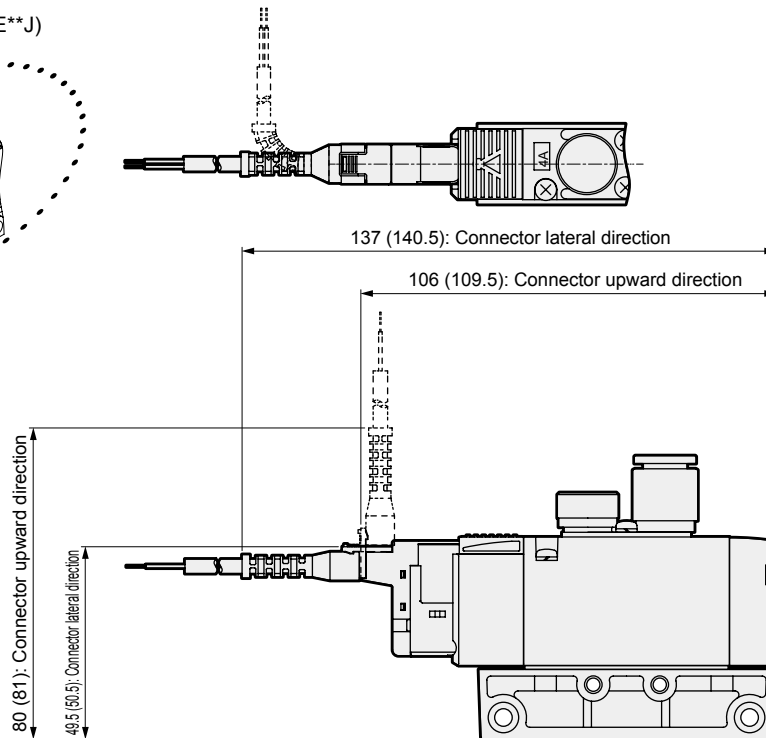
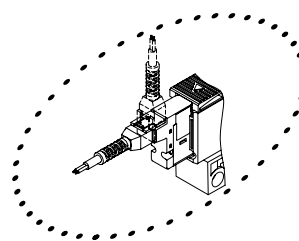
## Dimensions

● E type connector (E)



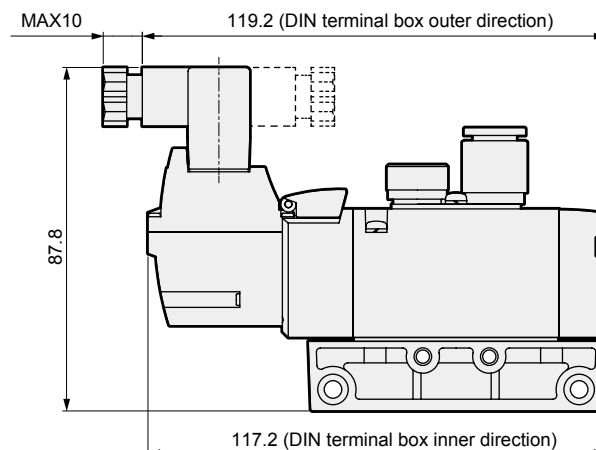
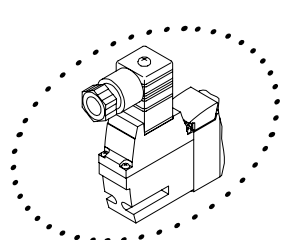
Note: Values in ( ) are for AC voltage.

● 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
<b>4GD/E</b>
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

# 4GD1 Series

Discrete valve; body piping

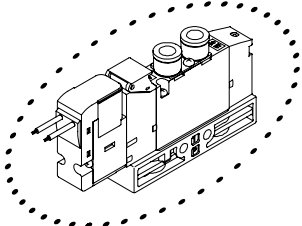
## Dimensions



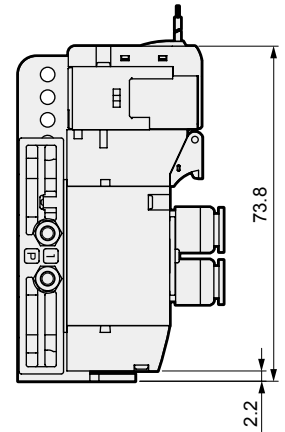
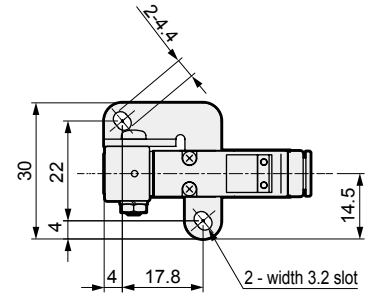
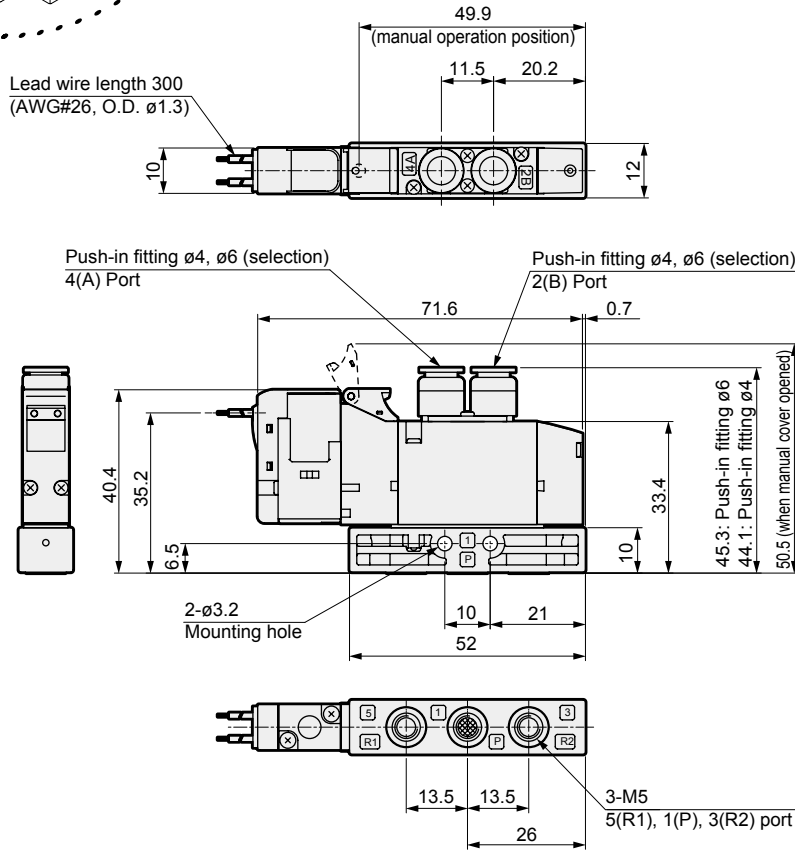
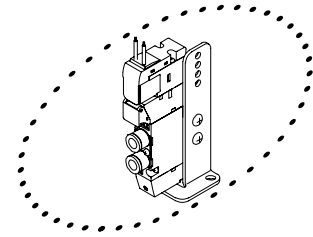
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E**
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E MN4E
- W4GA/B2
- W4GB4
- MN3S0 MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G GMF
- PV5 GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP NVP
- 4G\*0EJ
- 4F\*0EX
-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

### 4GD110R

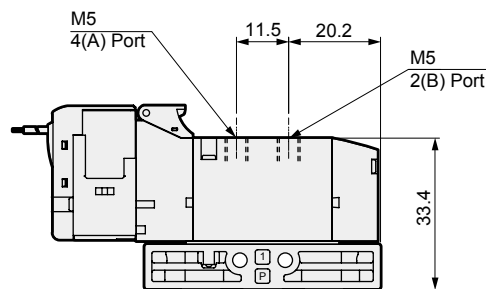
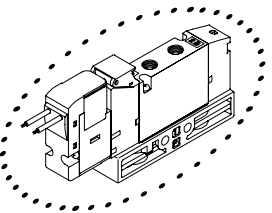
● 2-position single grommet lead wire (blank)



● Mounting plate (P)

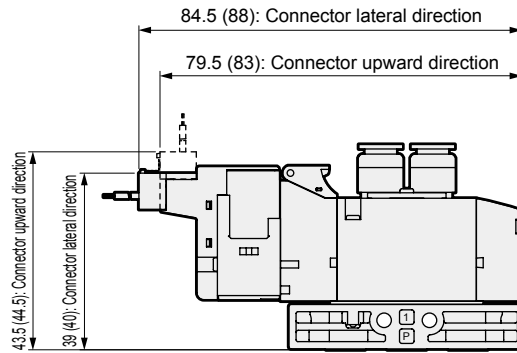
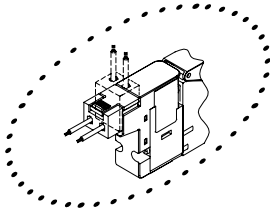


● M5 female thread (M5)



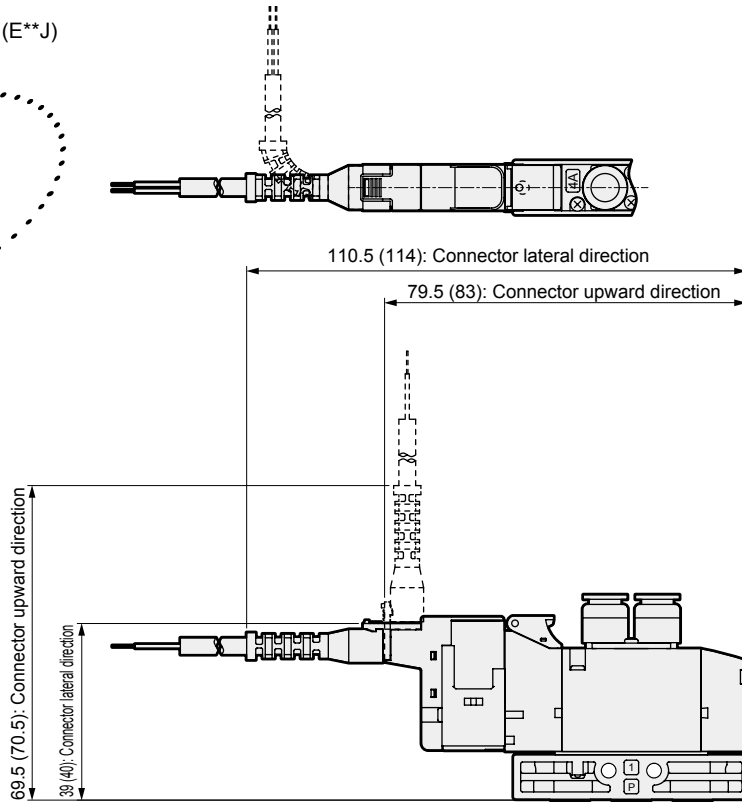
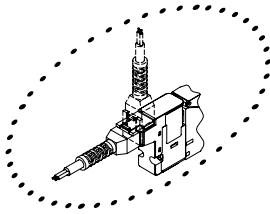
## Dimensions

● 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
<b>4GD/E</b>
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



# 4GD1 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

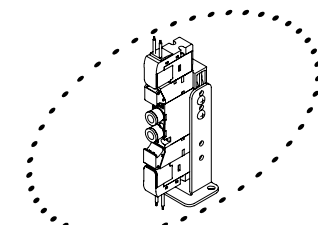
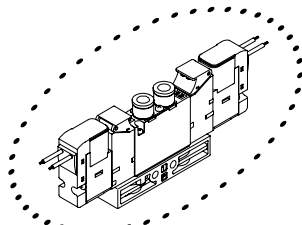
### 4GD120R

- 2-position double grommet lead wire (blank)

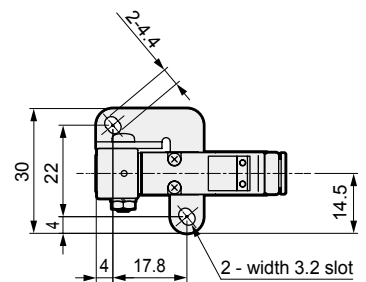
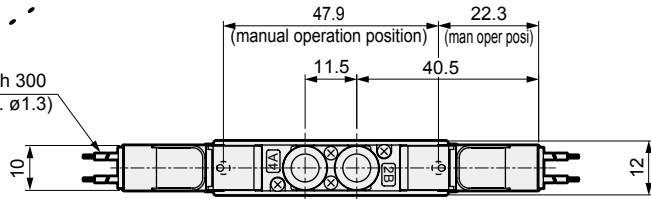
### 3GD1660R

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

- Mounting plate (P)

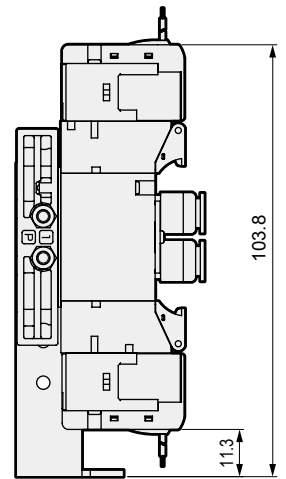
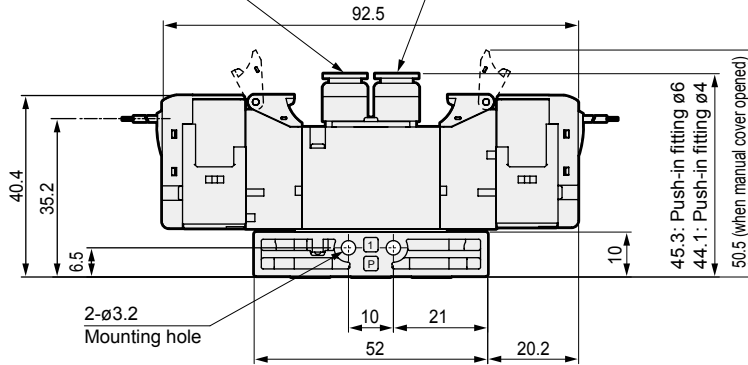
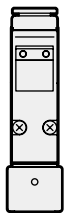


Lead wire length 300  
(AWG#26, O.D. ø1.3)

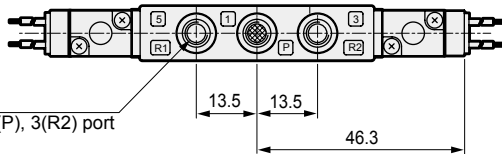


Push-in fitting ø4, ø6 (selection)  
4(A) Port

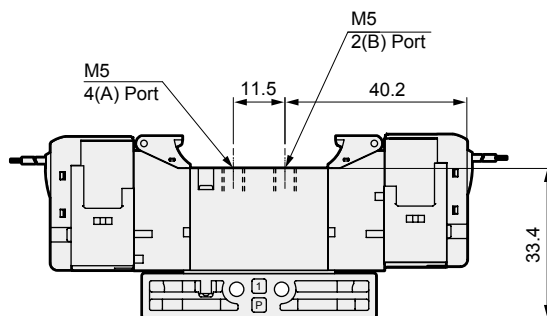
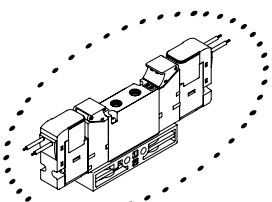
Push-in fitting ø4, ø6 (selection)  
2(B) Port



3-M5  
5(R1), 1(P), 3(R2) port

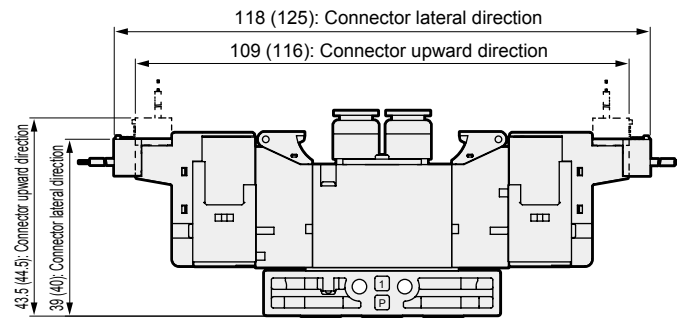
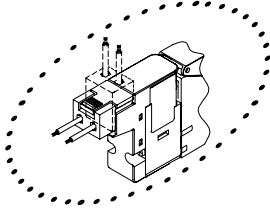


- M5 female thread (M5)



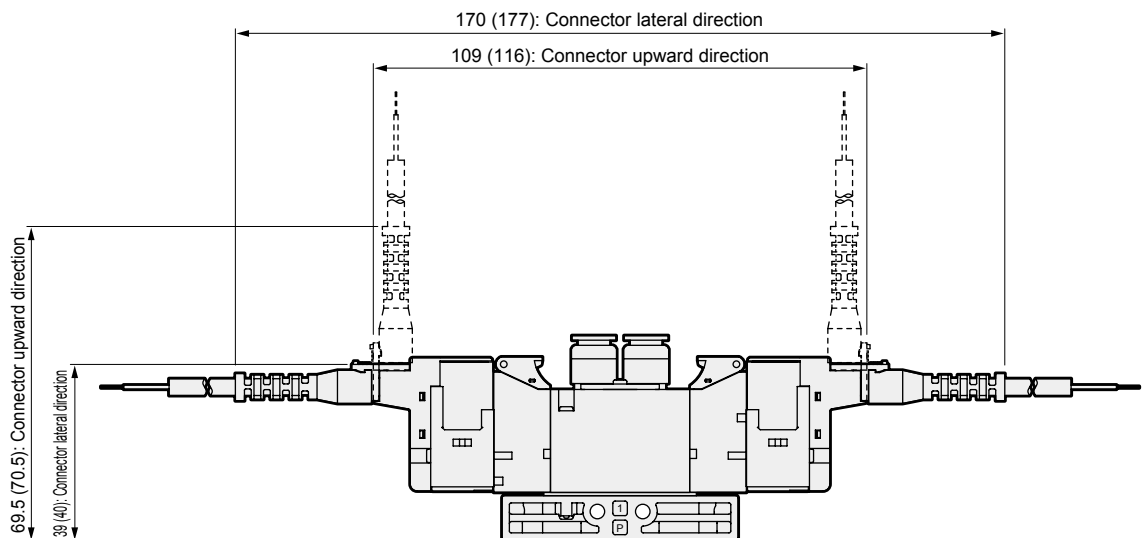
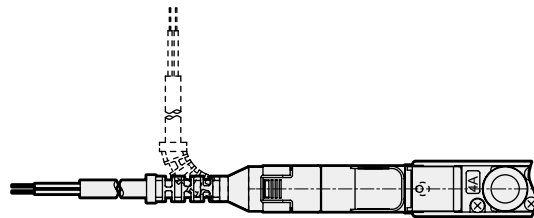
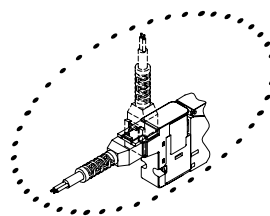
## Dimensions

● 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
<b>4GD/E</b>
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

# 4GD1 Series

Discrete valve; body piping

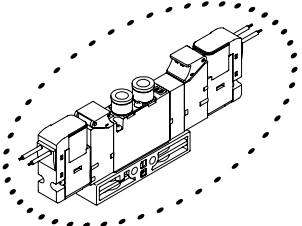
## Dimensions



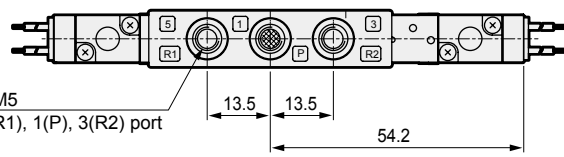
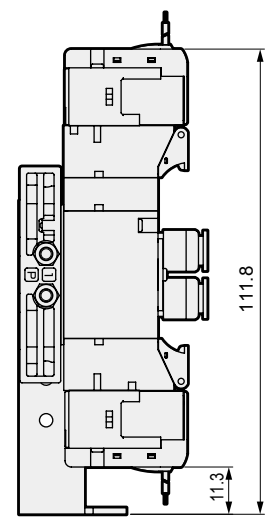
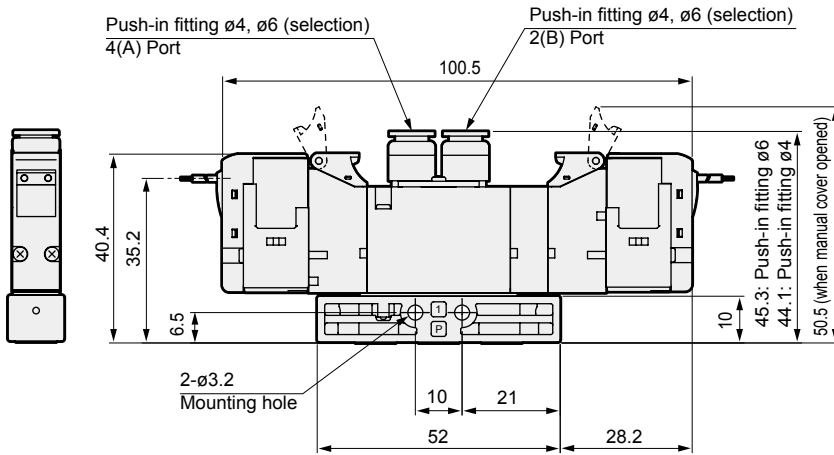
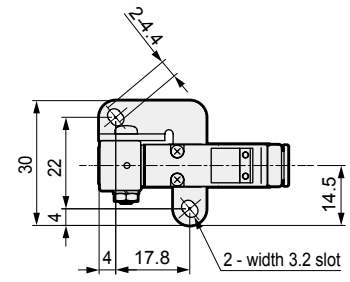
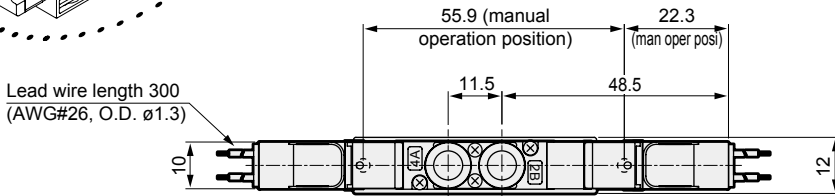
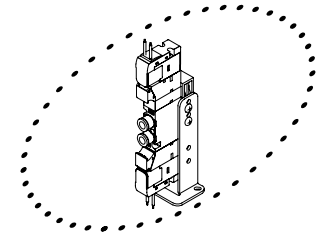
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E**
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E MN4E
- W4GA/B2
- W4GB4
- MN3S0 MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G GMF
- PV5 GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP NVP
- 4G\*0EJ
- 4F\*0EX
-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

### 4GD1<sup>3</sup>0R

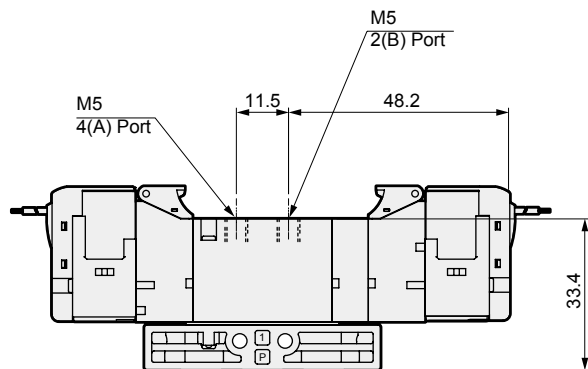
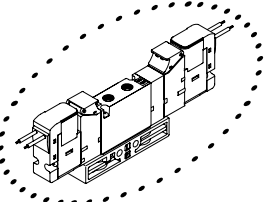
● 3-position grommet lead wire (blank)



● Mounting plate (P)

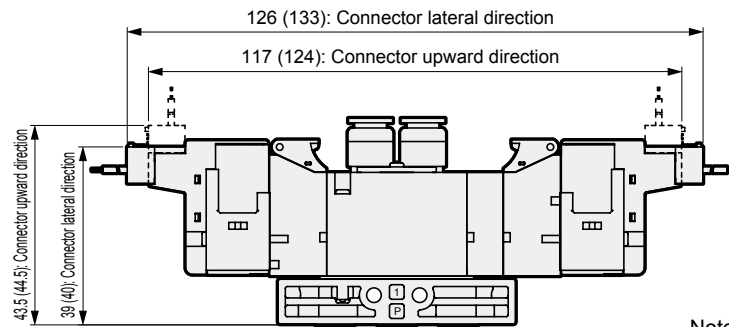
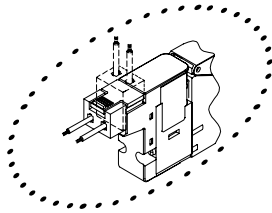


● M5 female thread (M5)



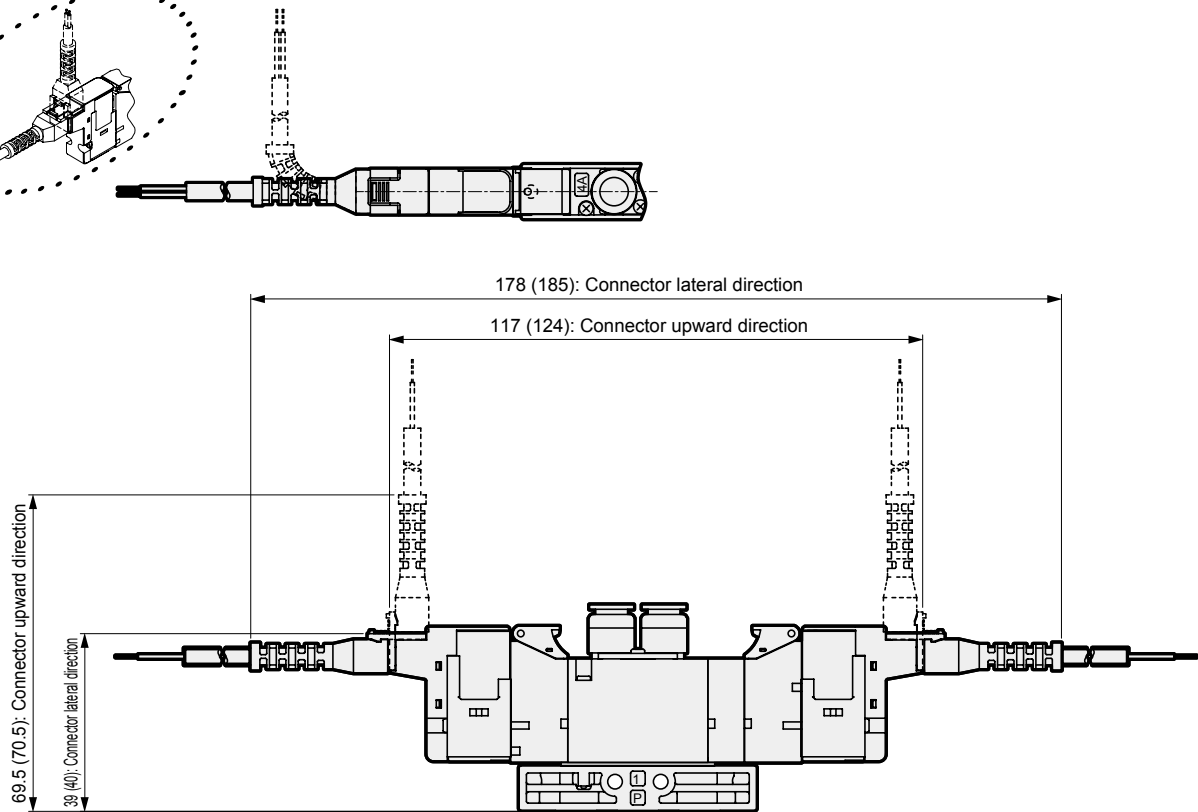
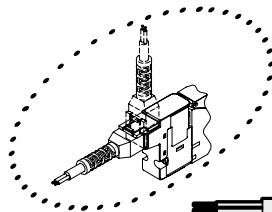
## Dimensions

● 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
<b>4GD/E</b>
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

# 4GD2 Series

Discrete valve; body piping

## Dimensions

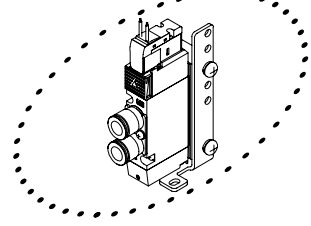
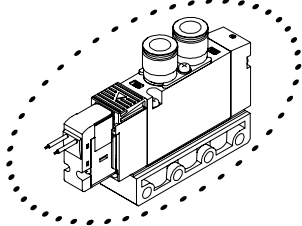


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E**
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G GMF
- PV5 GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

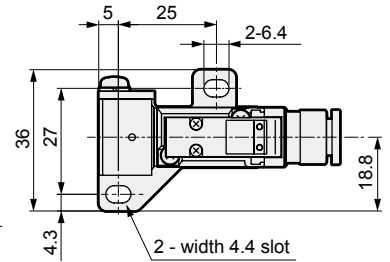
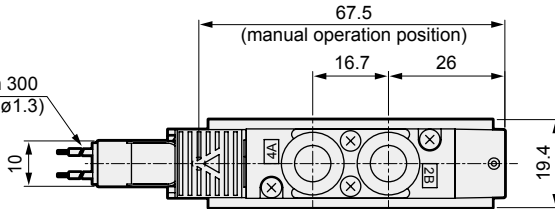
### 4GD210R

● 2-position single grommet lead wire (blank)

● Mounting plate (P)

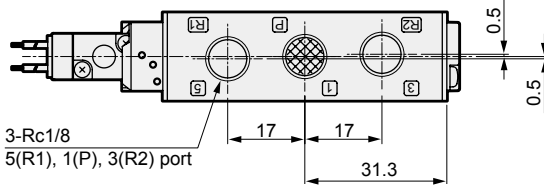
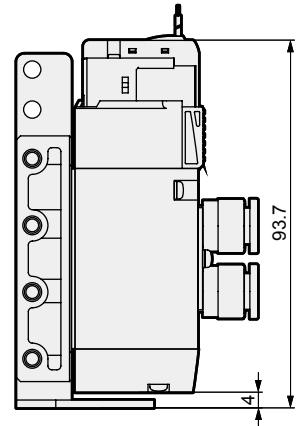
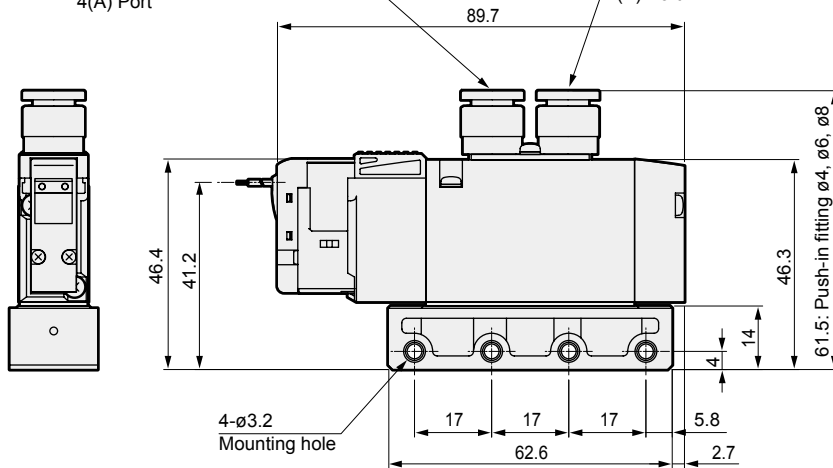


Lead wire length 300 (AWG#26, O.D.  $\phi$ 1.3)

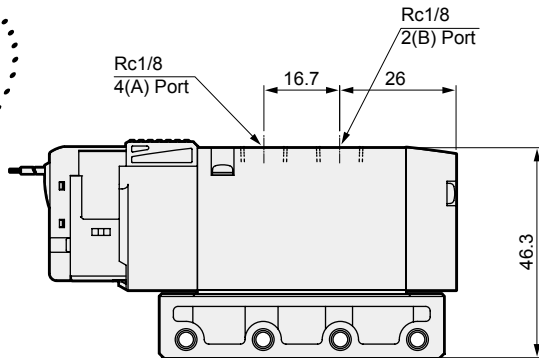
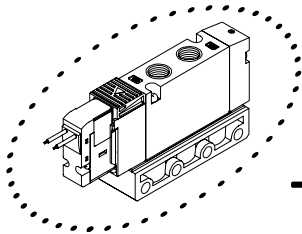


Push-in fitting  $\phi$ 4,  $\phi$ 6,  $\phi$ 8 (selection)  
4(A) Port

Push-in fitting  $\phi$ 4,  $\phi$ 6,  $\phi$ 8 (selection)  
2(B) Port

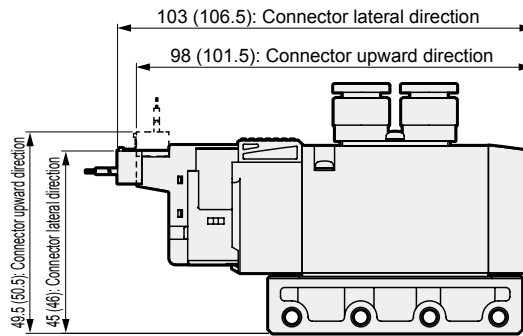
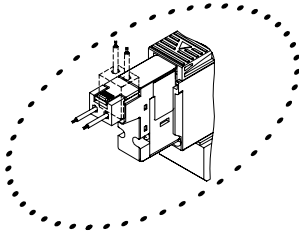


● Rc1/8 female thread (06)



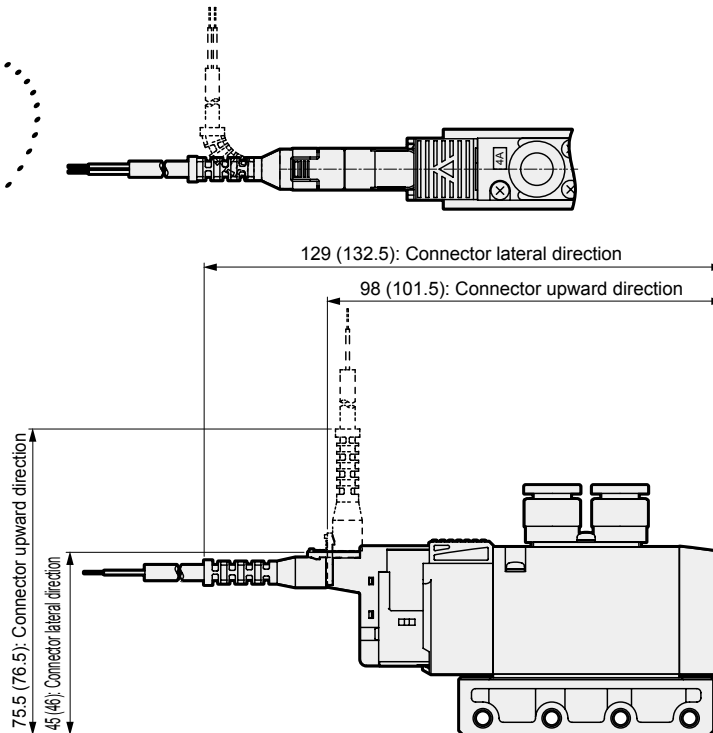
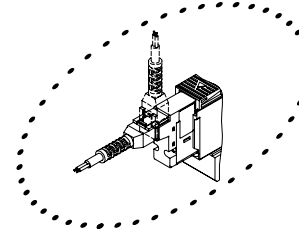
## Dimensions

● E type connector (E)



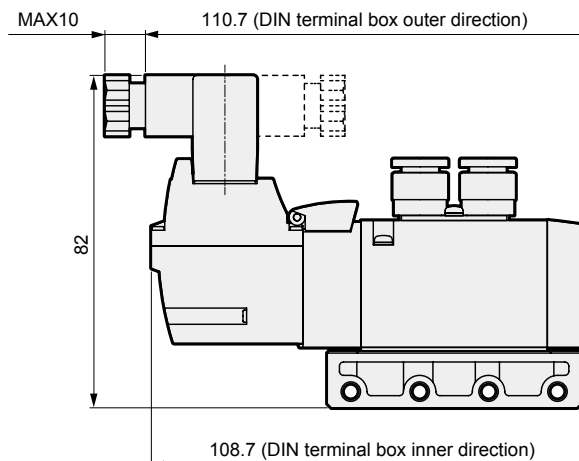
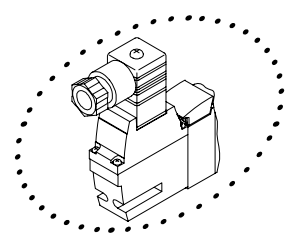
Note: Values in ( ) are for AC voltage.

● 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
<b>4GD/E</b>
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

# 4GD2 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

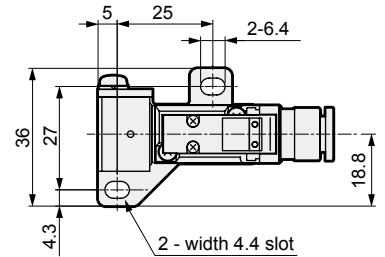
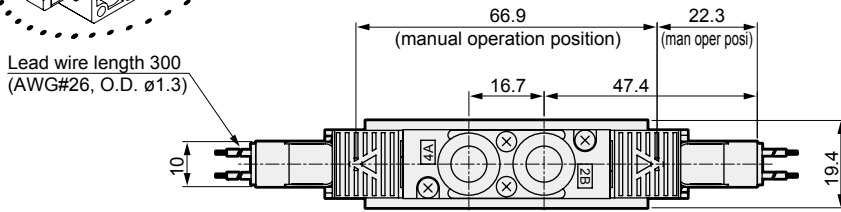
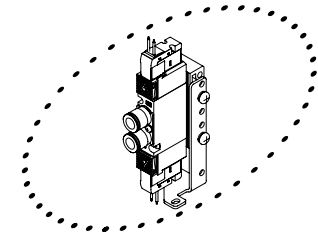
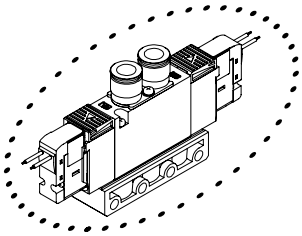
### 4GD220R

- 2-position double grommet lead wire (blank)

- Mounting plate (P)

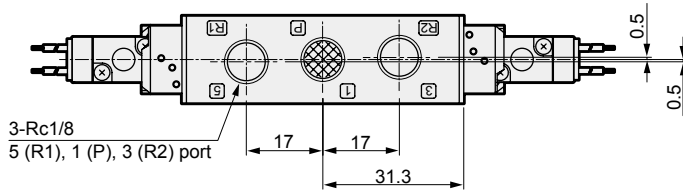
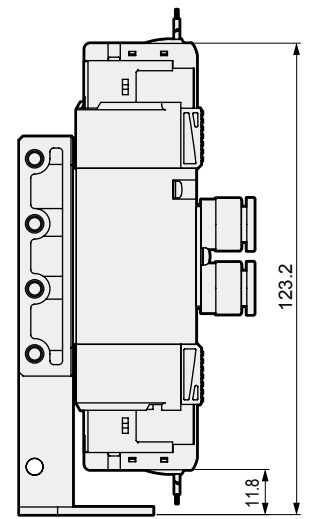
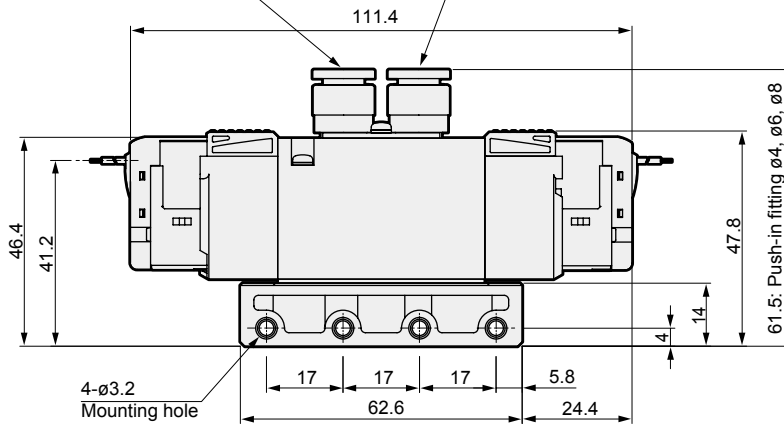
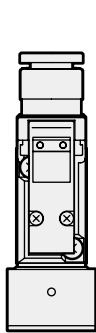
### 3GD2660R

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

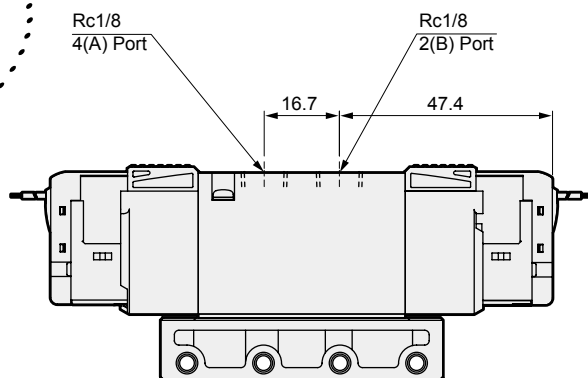
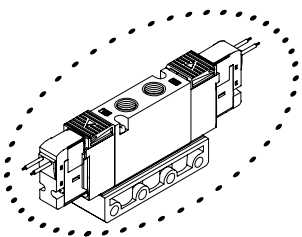


Push-in fitting ø4, ø6, ø8 (selection)  
4(A) Port

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

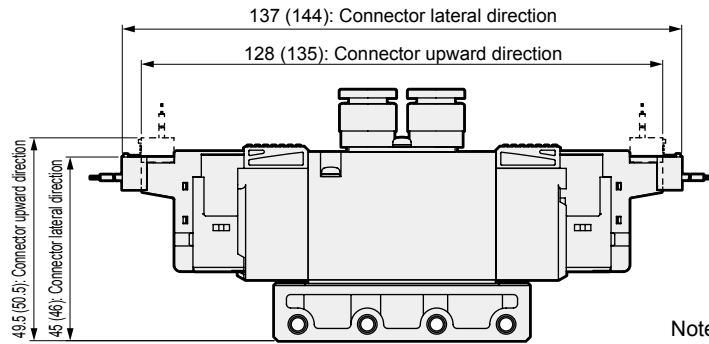
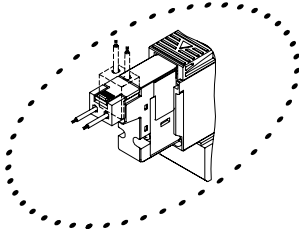


- Rc1/8 female thread (06)



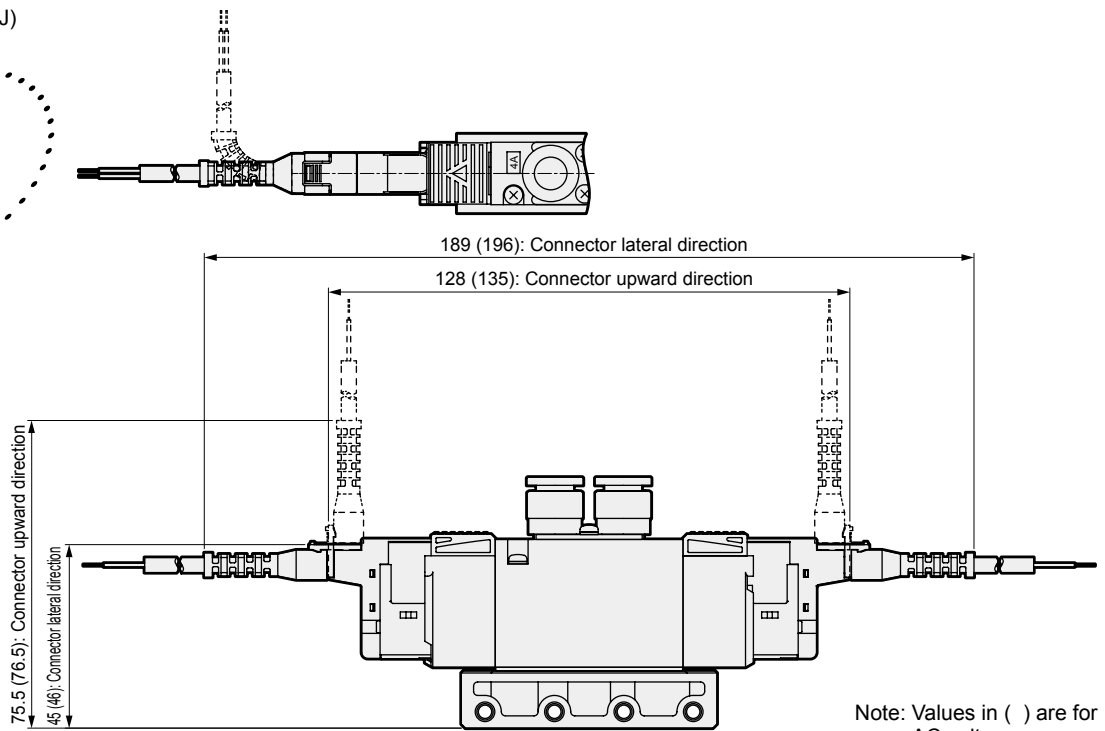
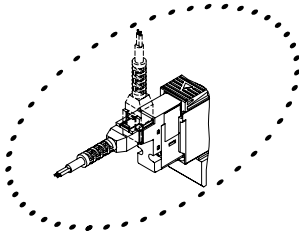
## Dimensions

● E type connector (E)



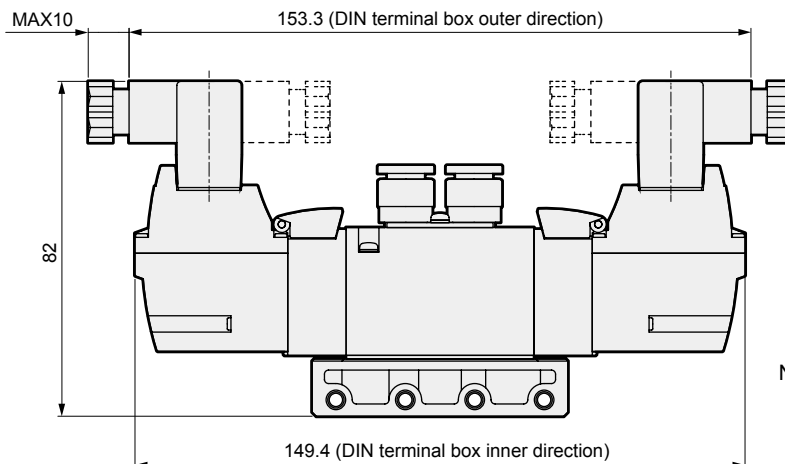
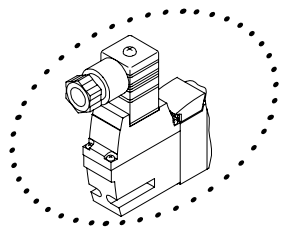
Note: Values in ( ) are for AC voltage.

● 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
<b>4GD/E</b>
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



# 4GD2 Series

Discrete valve; body piping

## Dimensions

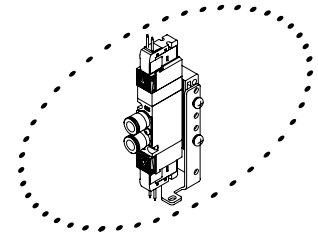
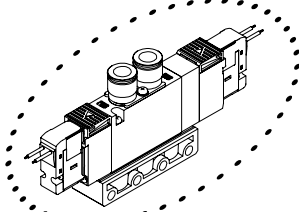


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E**
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G GMF
- PV5 GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

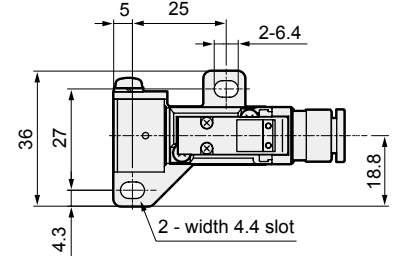
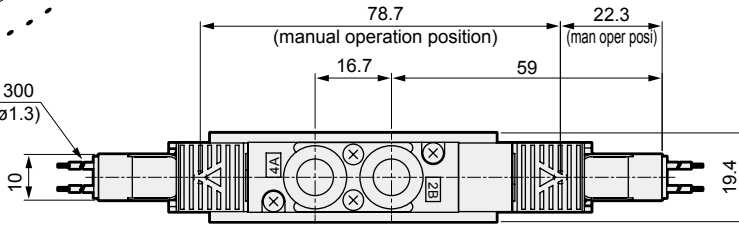
### 4GD2<sup>3</sup>/<sub>0</sub>R

● 3-position grommet lead wire (blank)

● Mounting plate (P)

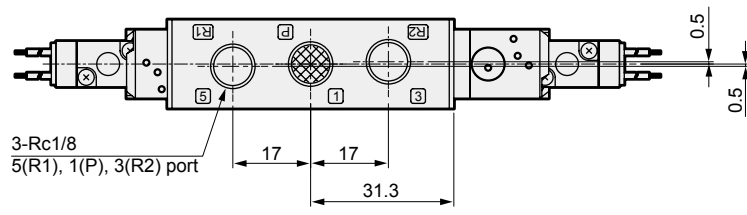
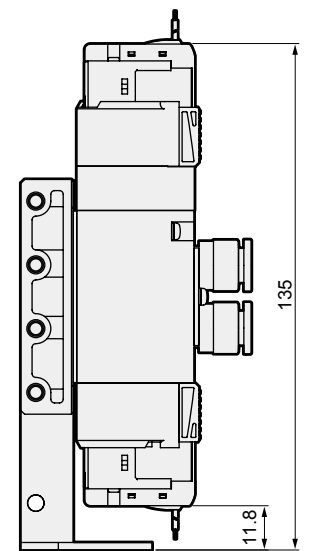
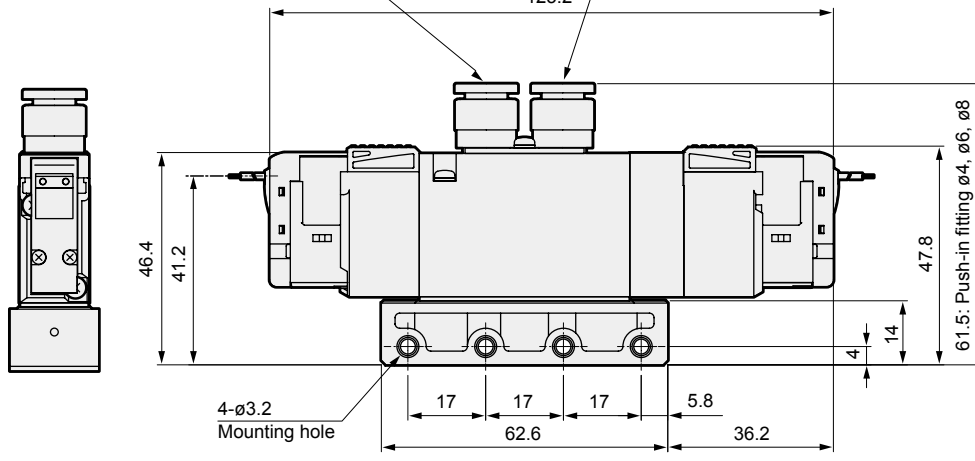


Lead wire length 300 (AWG#26, O.D. ø1.3)

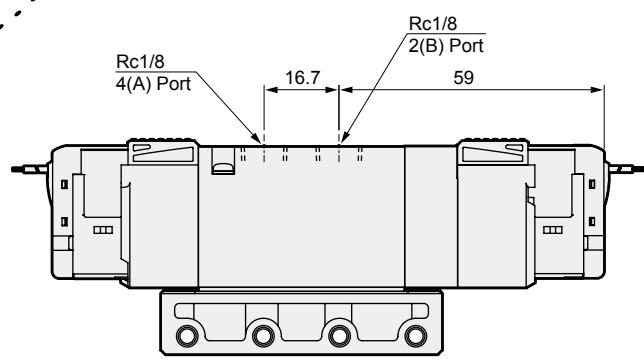
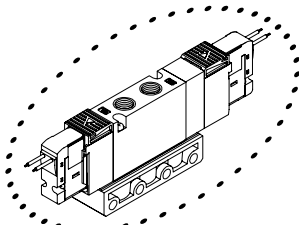


Push-in fitting ø4, ø6, ø8 (selection) 4(A) port

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

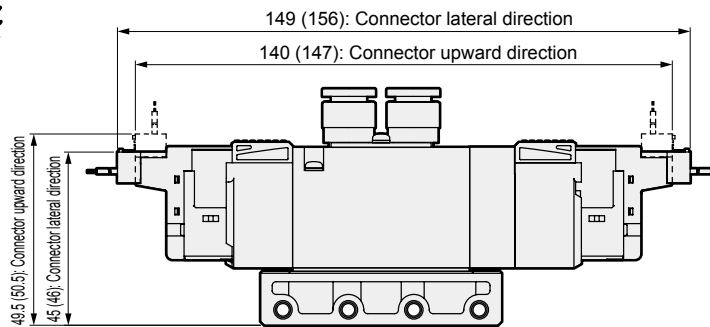
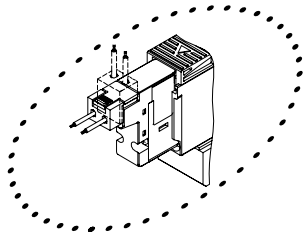


● Rc1/8 female thread (06)



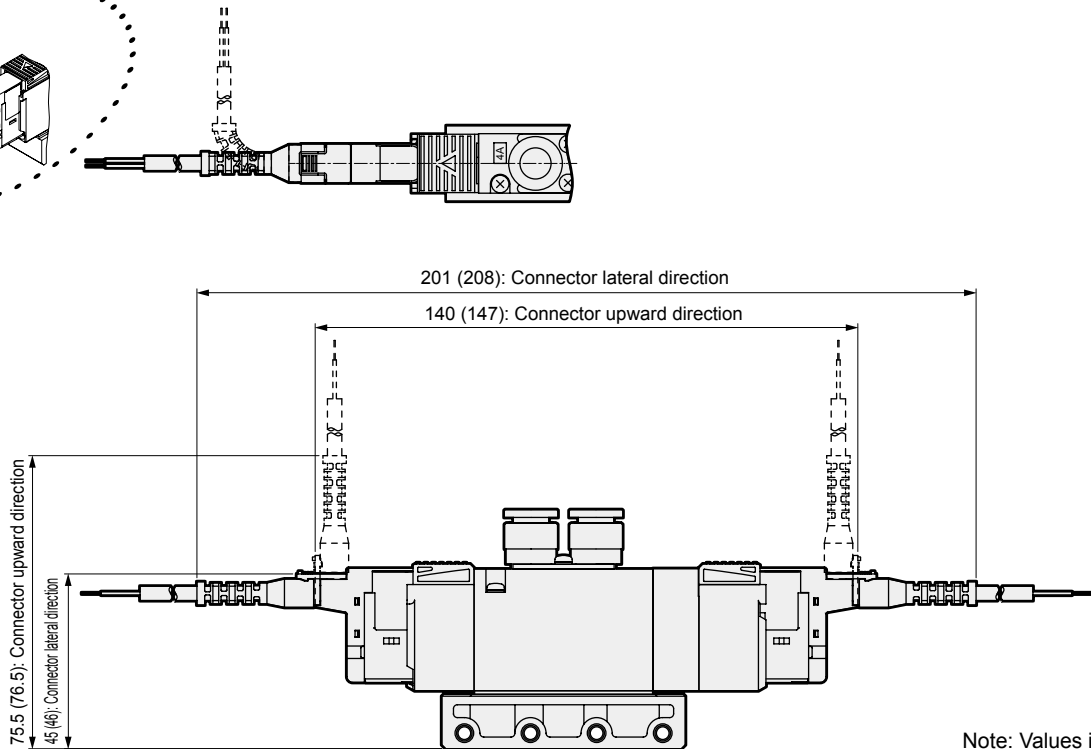
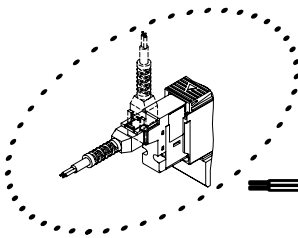
## Dimensions

### ● E type connector (E)



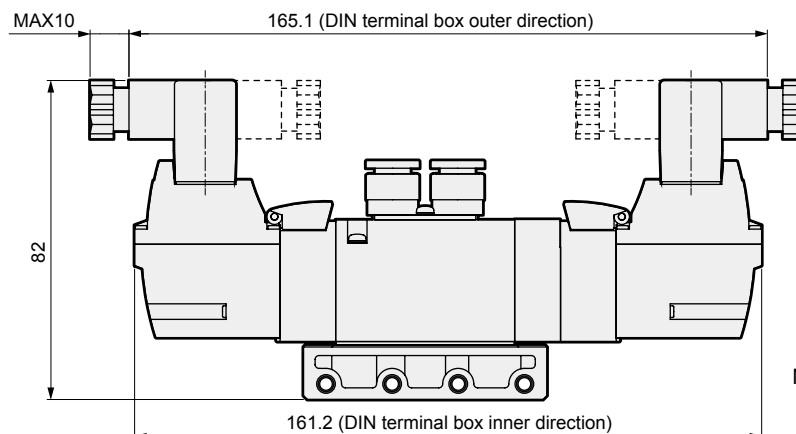
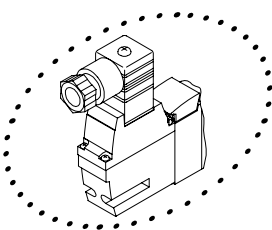
Note: Values in ( ) are for AC voltage.

### ● 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
<b>4GD/E</b>
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

# 4GD3 Series

Discrete valve; body piping

## Dimensions

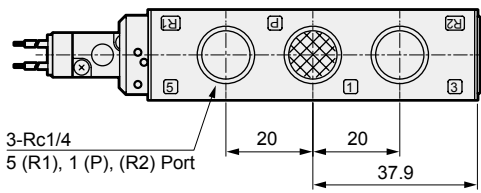
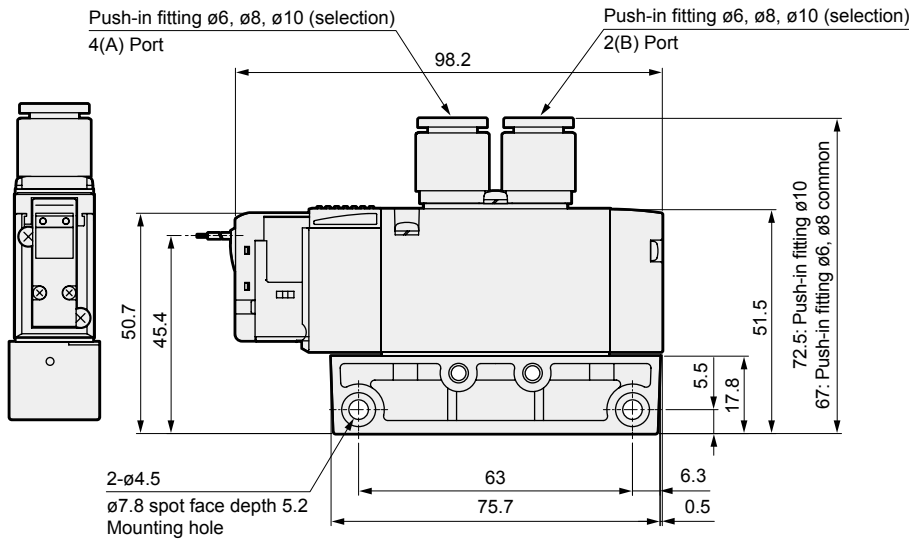
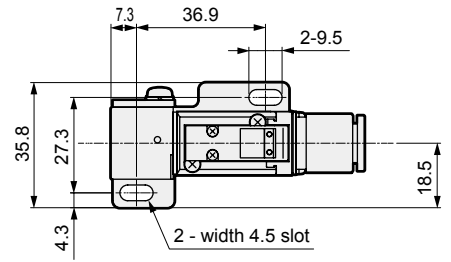
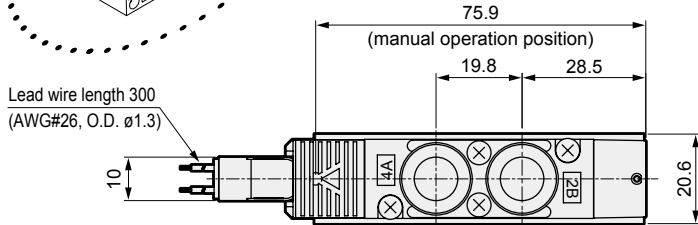
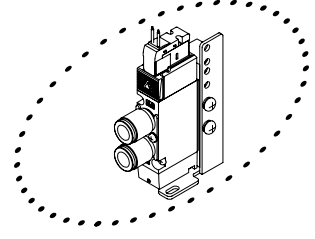
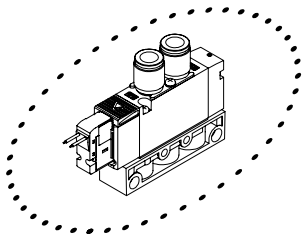


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

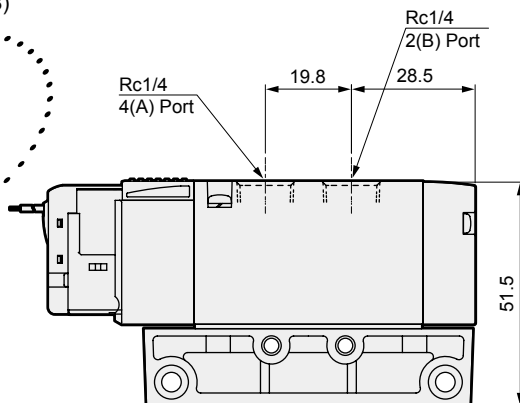
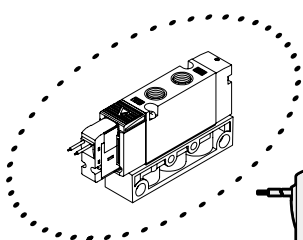
### 4GD310R

● 2-position single grommet lead wire (blank)

● Mounting plate (P)

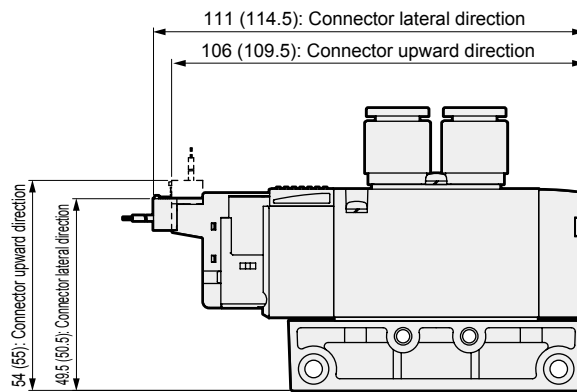
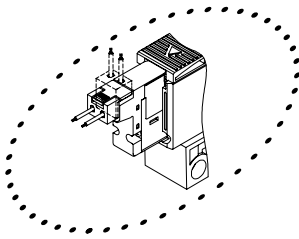


● Rc1/4 female thread (08)



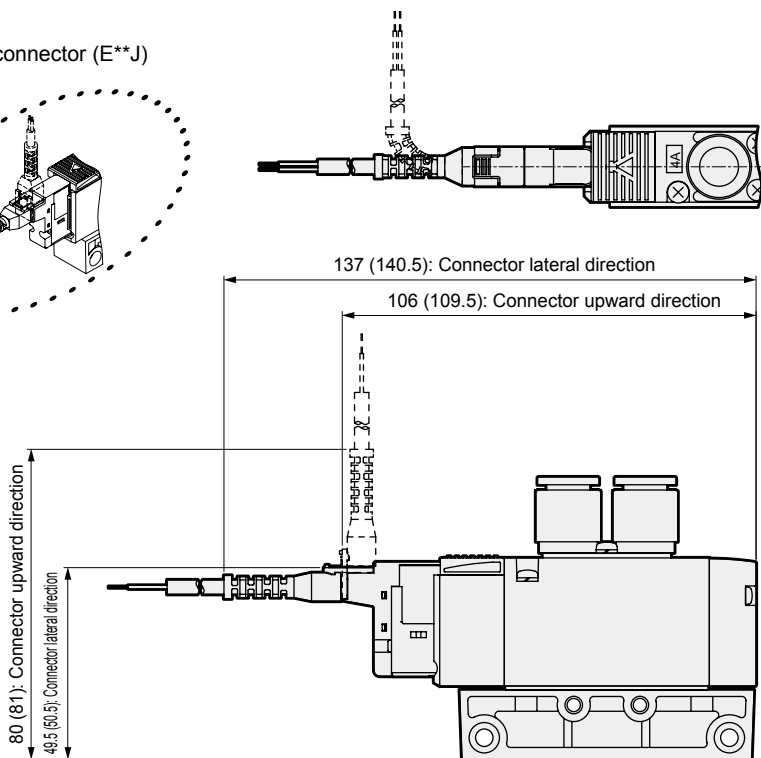
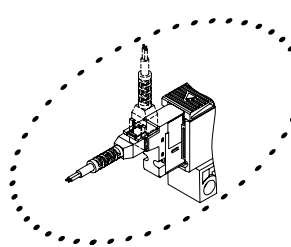
## Dimensions

### ● E type connector (E)



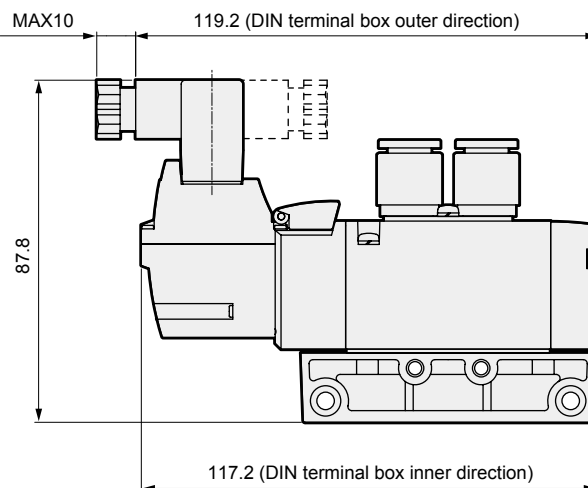
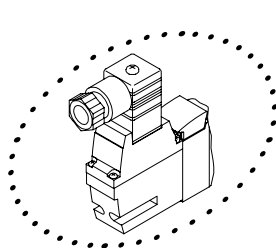
Note: Values in ( ) are for AC voltage.

### ● 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
<b>4GD/E</b>
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

# 4GD3 Series

Discrete valve; body piping

## Dimensions

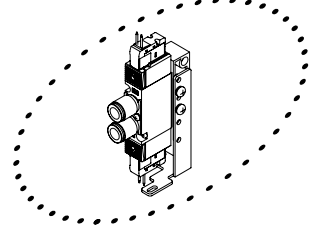
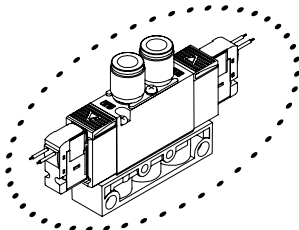


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

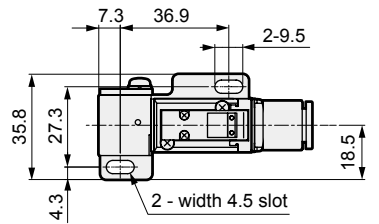
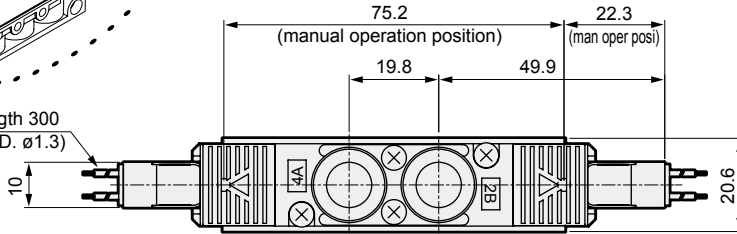
### 4GD320R

● 2-position double grommet lead wire (blank)

● Mounting plate (P)

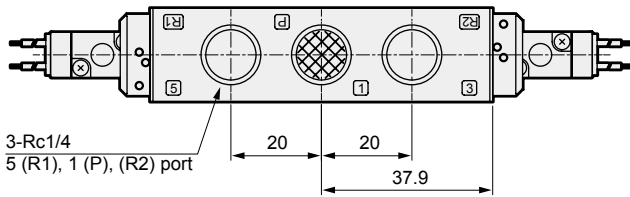
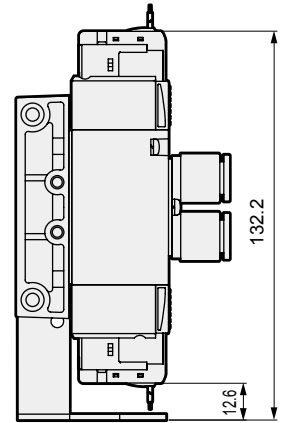
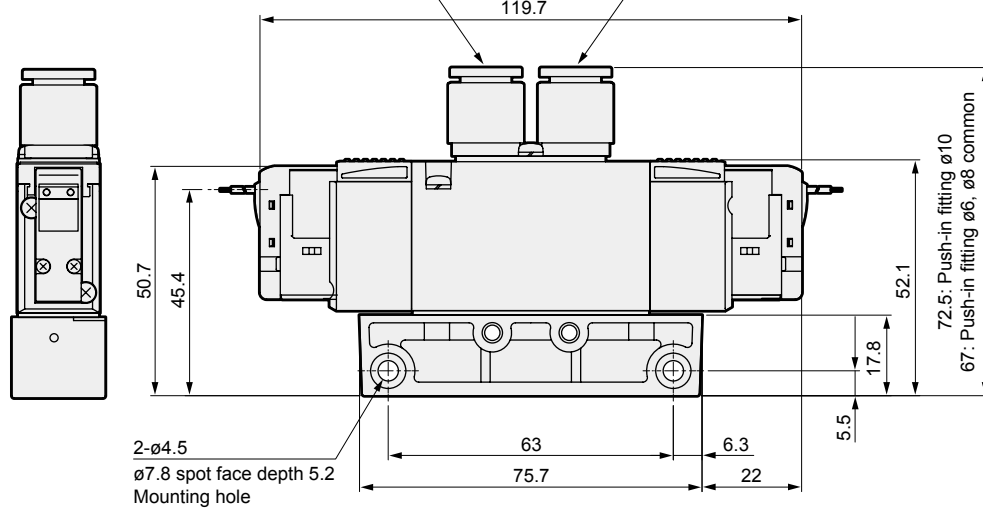


Lead wire length 300 (AWG#26, O.D.  $\phi$ 1.3)

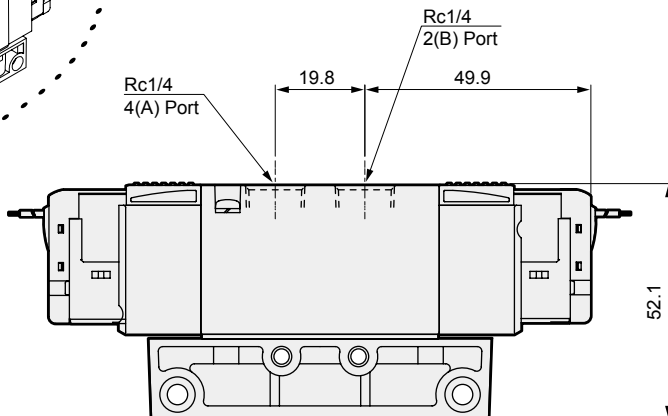
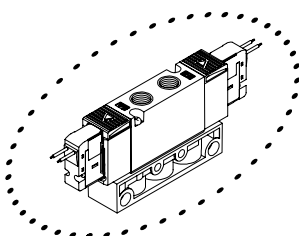


Push-in fitting  $\phi$ 6,  $\phi$ 8,  $\phi$ 10 (selection)  
4(A) Port

Push-in fitting  $\phi$ 6,  $\phi$ 8,  $\phi$ 10 (selection)  
2(B) Port

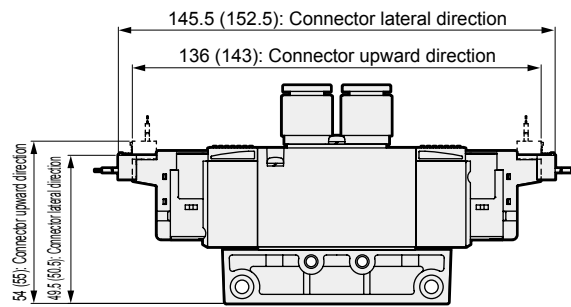
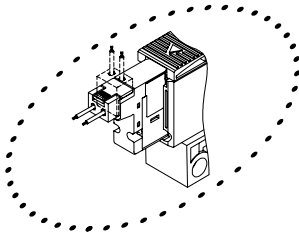


● Rc1/4 female thread (08)



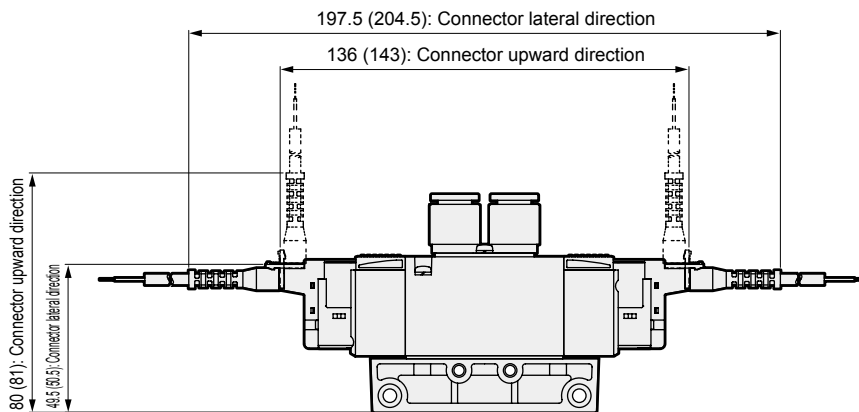
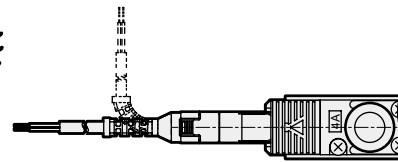
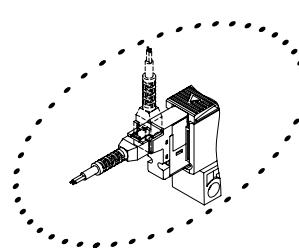
## Dimensions

### ● E type connector (E)



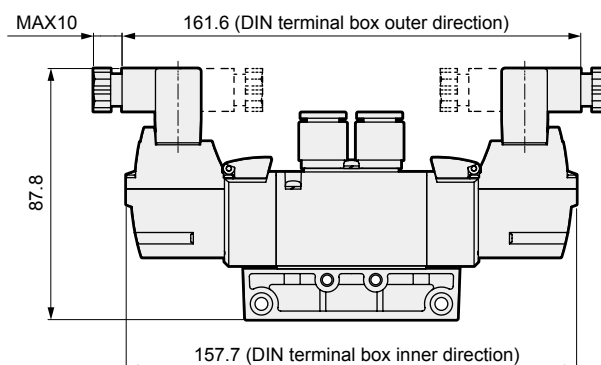
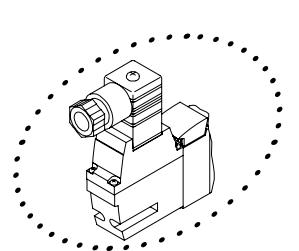
Note: Values in ( ) are for AC voltage.

### ● 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
<b>4GD/E</b>
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

# 4GD3 Series

Discrete valve; body piping

## Dimensions

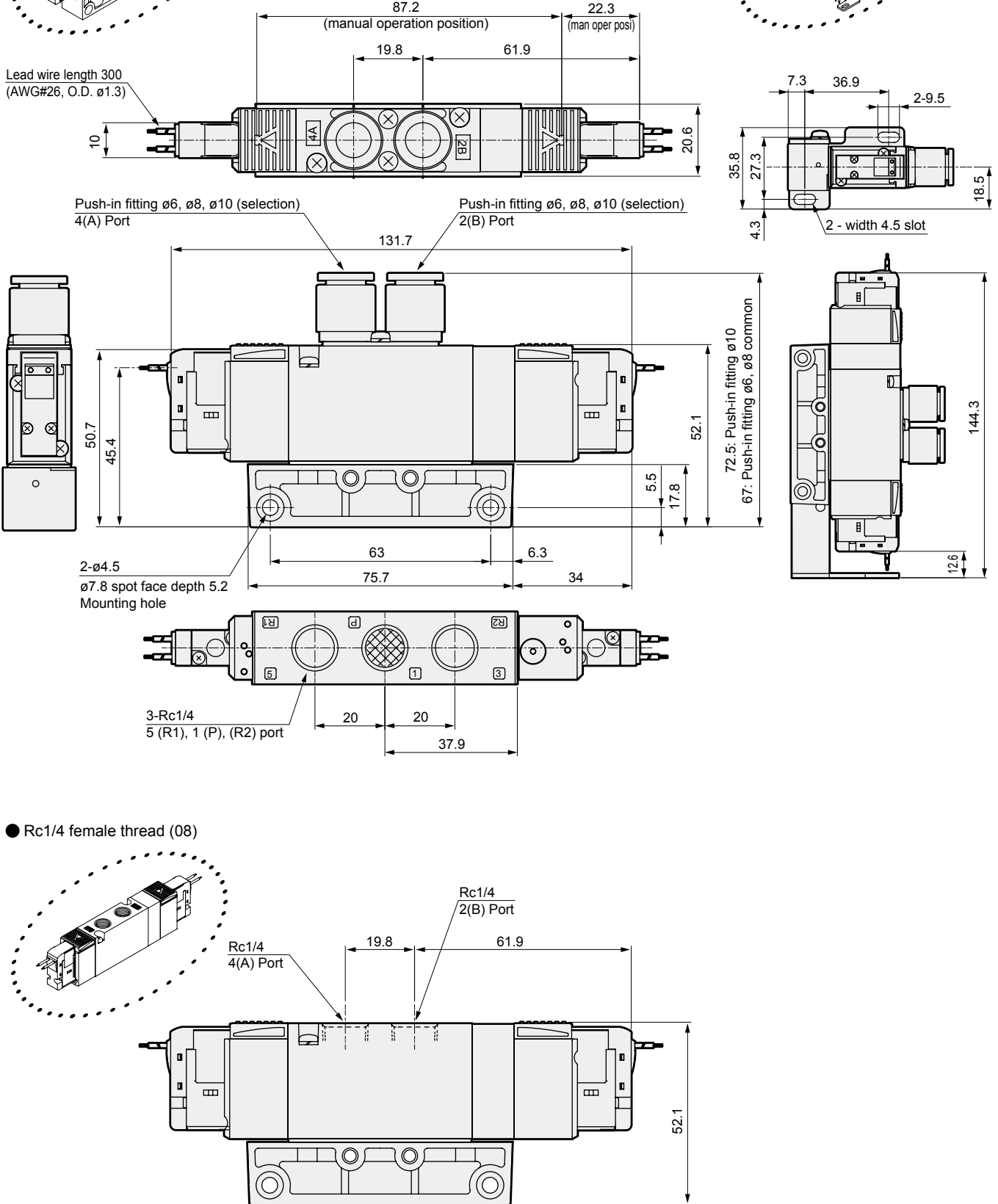
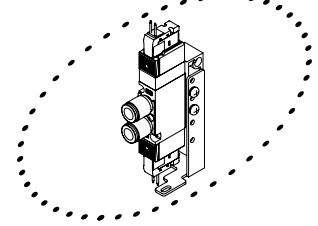
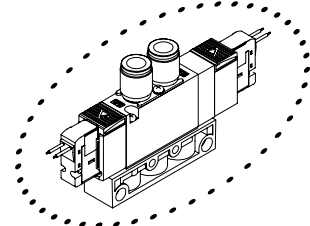


- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

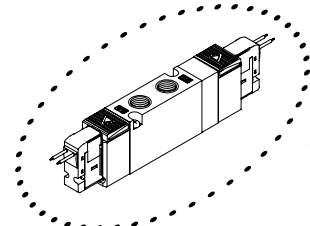
### 4GD3<sup>3</sup> 0R

● 3-position grommet lead wire (blank)

● Mounting plate (P)

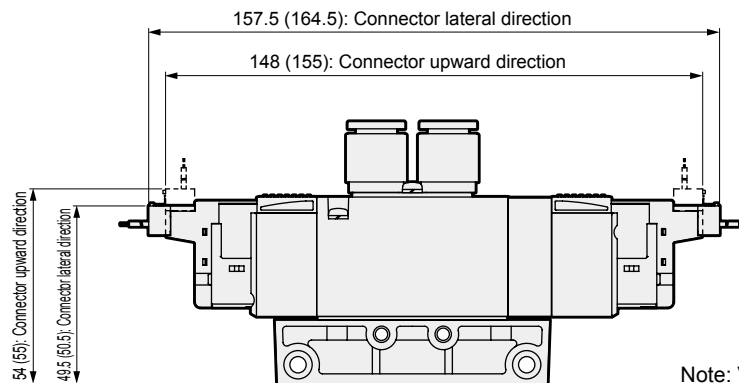
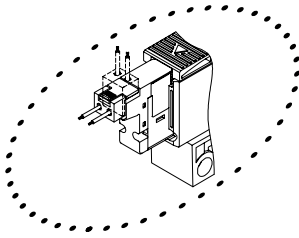


● Rc1/4 female thread (08)



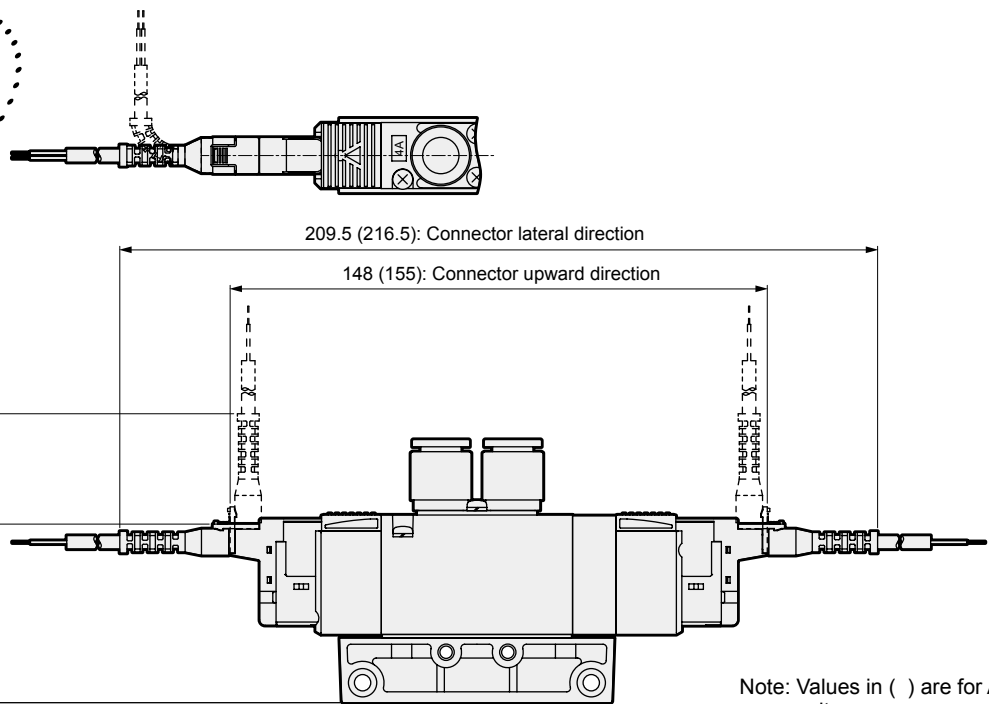
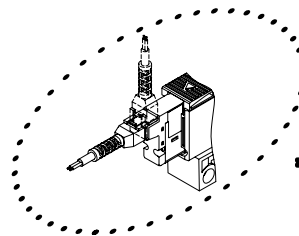
## Dimensions

### ● E type connector (E)



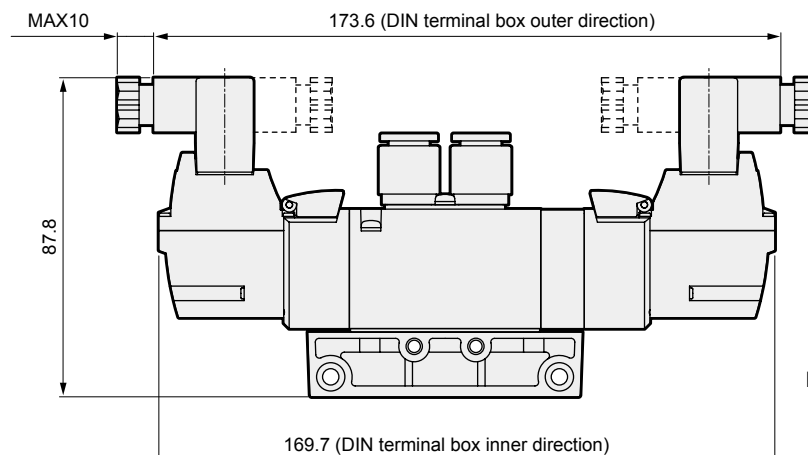
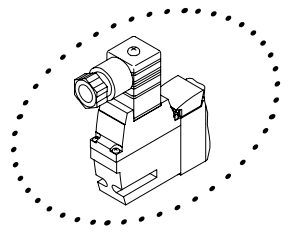
Note: Values in ( ) are for AC voltage.

### ● EJ type connector (E\*\*J)



Note: Values in ( ) are for AC voltage.

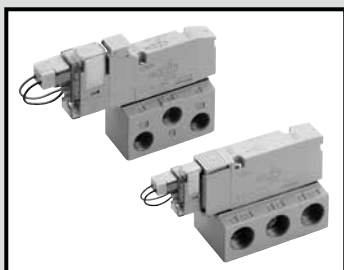
### ● DIN terminal box (B)



Note: DIN terminal box assembly is shipped facing inward.

4GA/B
M4GA/B
MN4GA/B
4GA/B (master)
4GB With sensor
<b>4GD/E</b>
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

# 3GE1/2 / 4GE1/2/3 Series

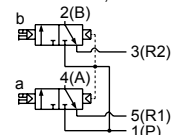
● Cylinder bore size:  $\varnothing 20$  to  $\varnothing 100$



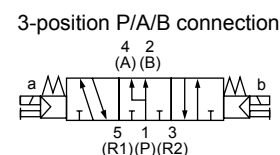
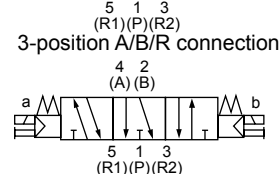
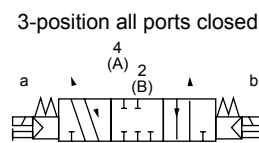
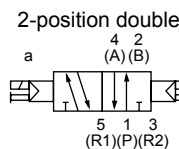
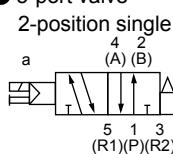
4GA/B  
M4GA/B  
MN4GA/B  
4GA/B (master)  
4GB With sensor  
4GD/E  
M4GD/E  
MN4GD/E  
4GA4/B4  
MN3E  
MN4E  
W4GA/B2  
W4GB4  
MN3S0  
MN4S0  
4SA/B0  
4KA/B  
4KA/B (master)  
4F  
4F (master)  
PV5G  
GMF  
PV5  
GMF  
PV5S-0  
3Q  
MV3QR  
3MA/B0  
3PA/B  
P/M/B  
NP/NAP  
NVP  
4G\*0EJ  
4F\*0EX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

## JIS symbol

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



- 5-port valve



## Common specifications

Item	Description
Valve and operation	Pilot operated soft spool valve
Working fluid	Compressed air
Max. working pressure MPa	0.7 ( $\approx 100$ psi, 7 bar)
Min. working pressure MPa	0.2 ( $\approx 29$ psi, 2 bar)
Proof pressure MPa	1.05 ( $\approx 150$ 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
Lubrication (*1)	Not required
Degree of protection (*2)	Dust-proof
Vibration resistance $\text{m/s}^2$	50 or less
Shock resistance $\text{m/s}^2$	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.

## Electrical specifications

Item	Description			
Rated voltage V	24 DC	12 DC	100 AC	200 AC
Voltage fluctuation range	$\pm 10\%$			
Holding current A (*3)	0.015 (0.017)	0.030 (0.034)	0.009 (0.009)	0.006 (0.006)
Power consumption W (*3)	0.35(0.40)		-	
Apparent power VA (*3) (*4)	-		0.93 (0.98)	1.40
Thermal class	B			
Surge suppressor	Option			
Indicator	Lamp (option)			

\*3 Values in ( ) apply when lamp is included.

\*4 200 VAC is the value of DIN terminal box (with lamp).

## Individual specifications

Item	3GE1/4GE1	3GE2/4GE2	4GE3
Port size	A/B port	Rc1/8	Rc1/4, Rc3/8
	P/R1/R2 port	Rc1/8	Rc1/4, Rc3/8

## Performance/characteristics by model

Item		3GE1/4GE1		3GE2/4GE2		4GE3		
		ON	OFF	ON	OFF	ON	OFF	
Response time ms	Two 3-port valves integrated	12	15	15	30	-	-	
		2-position	Single	15	25	20	30	25
	Double		15	-	20	-	25	-
	3-position	ABR connection	20	30	25	35	35	50

Values with a lamp/surge suppressor are shown. The response time is the value with supply pressure of 0.5 MPa at 20 $^{\circ}\text{C}$  and without lubrication. It depends on the pressure and the lubricant quality.

## Weight

Item			3GE1/4GE1	3GE2/4GE2	4GE3	
Weight g	2-position	Single	Grommet lead wire	80(38)	158(76)	221(102)
			E type connector	82(40)	160(78)	223(104)
			DIN terminal box	-	195(113)	255(136)
		Double	Grommet lead wire	97(55)	175(93)	240(121)
			E type connector	101(59)	179(97)	244(125)
			DIN terminal box	-	218(136)	280(161)
	3-position	All ports closed	Grommet lead wire	98(56)	186(104)	249(130)
			E type connector	102(60)	190(108)	253(134)
			DIN terminal box	-	229(147)	289(170)

· Values in ( ) do not include the pipe adaptor. 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 <sup>3</sup> /(s·bar)]	b	C[dm <sup>3</sup> /(s·bar)]	b
3GE1 4GE1	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
3GE2 4GE2	Two 3-port valves integrated		1.7	0.42	2.1	0.26
	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
4GE3	2-position		4.3	0.24	4.2	0.24
	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 484.

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  
H MV  
HSV  
2QV  
3QV  
SKH  
Silencer  
TotAirSys (Total Air)  
TotAirSys (Gamma)  
Ending

# 3GE1/2 / 4GE1/2/3 Series

Discrete valve; base piping

## How to order

● Discrete valve

4GE1 1 0 R - 06 - E2 - 3

3GE1 66 0 R - 06 - E2 - 3

● Discrete valve for mounting base

4GE1 1 9 R - 00 - E2 H - 3

3GE1 66 9 R - 00 - E2 H C - 3



**D** Electrical connections  
Refer to page 441 for the circuit diagram with surge suppressor/lamp.

**E** Option

**F** Pilot exhaust method

**G** Voltage

## ⚠ Precautions for model No. selection

\*1 : Dimensions are the same as the respective 2-position double solenoid.

\*2 : 3-position all-port blocks and PAB connections are not provided with the exhaust check valve. Refer to page 851 for details on the exhaust check valve.

\*3 : A filter is built into the P-port as standard.

\*4 : DIN terminal box only is supported.

\*5 : Grommet lead wire specifications are compatible with DC voltage only.

\*6 : A lamp comes with the terminal box.

\*7 : AC voltage is with a rectifier circuit.

\*8 : The terminal box conforms to EN175301-803 Type C (former DIN 43650-C). Refer to pages 856 and 857 for details.

## A Model No.

3GE1	3GE2	4GE1	4GE2	4GE3
------	------	------	------	------

Code	Description	3GE1	3GE2	4GE1	4GE2	4GE3
<b>B Solenoid position</b>						
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) A side valve: Normally closed B side valve: Normally closed	●	●			

C Port size		P/R1/R2 port				
Port	4(A)/2(B) 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
00	Discrete valve for mounting base	●	●	●	●	●

D Electrical connections						
Blank	Grommet lead wire (300 mm) (*5)	●	●	●	●	●
B	DIN terminal box (Pg7) With surge suppressor/lamp (*6) (*8)		●		●	●
BN	DIN term. box (Pg7) (no terminal box) + surge suppressor (*6) (*8)		●		●	●
E type connector (upward/lateral common)						
E0	Lead wire (300 mm) (*7)	●	●	●	●	●
E00	Lead wire (500 mm) (*7)	●	●	●	●	●
E01	Lead wire (1000 mm) (*7)	●	●	●	●	●
E02	Lead wire (2000 mm) (*7)	●	●	●	●	●
E03	Lead wire (3000 mm) (*7)	●	●	●	●	●
E0N	Without lead wire (without socket) (*7)	●	●	●	●	●
E1	Without lead wire (socket/terminal attached) (*7)	●	●	●	●	●
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) (*7)	●	●	●	●	●
E02J	Lead wire (2000 mm) (*7)	●	●	●	●	●
E03J	Lead wire (3000 mm) (*7)	●	●	●	●	●
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						
Blank	Non-locking/locking common manual override	●	●	●	●	●
H	With exhaust check valve (*2)	●	●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●
F	A/B-port filter built in (*3)	●	●	●	●	●

F Pilot exhaust method						
Blank	Common exhaust (pilot exhaust check valve built-in)	●	●	●	●	●
C	Atmosphere release	○	○	○	○	○

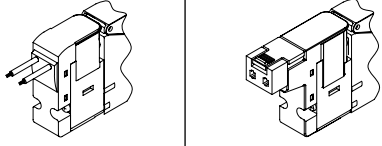
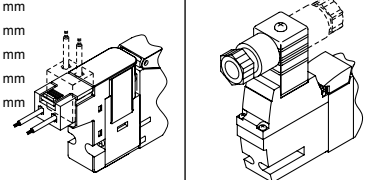
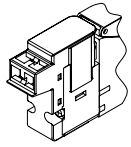
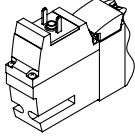
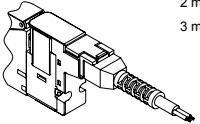
G Voltage						
1	100 VAC (rectifier integrated)	●	●	●	●	●
2	200 VAC (rectifier integrated) (*4)		●		●	●
3	24 VDC	●	●	●	●	●
4	12 VDC	●	●	●	●	●

is not available.

○ indicates a custom order.

# 3GE1/2 / 4GE1/2/3 Series

Discrete valve; base piping

Electrical connections	
Discrete valve/individual wiring manifold	
<b>Blank</b> Grommet lead wire	<b>E1</b> <b>E3</b> E type connector with socket/terminal
<p>● Lead wire length 300 mm</p> 	
<b>E0</b> <b>E2</b> E type connector	<b>B</b> DIN terminal box
<p>● Lead wire length 300 mm 500 mm 1000 mm 2000 mm 3000 mm</p> 	
<b>E0N</b> <b>E2N</b> E type connector without socket	<b>BN</b> DIN terminal box without terminal box
	
<b>E0*J</b> <b>E2*J</b> 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
<b>4GD/E</b>
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

# 3GE1/4GE1 Series

Discrete valve; base 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

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

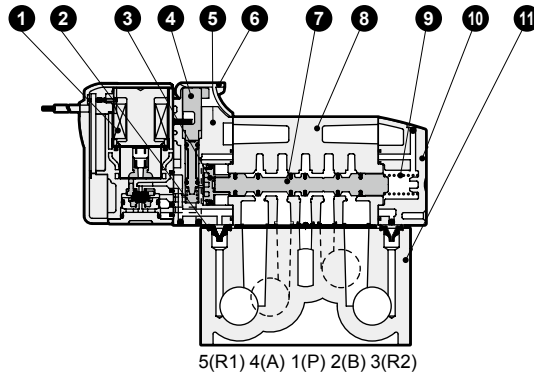
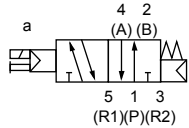
### 3GE1660R

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

Refer to page 488.

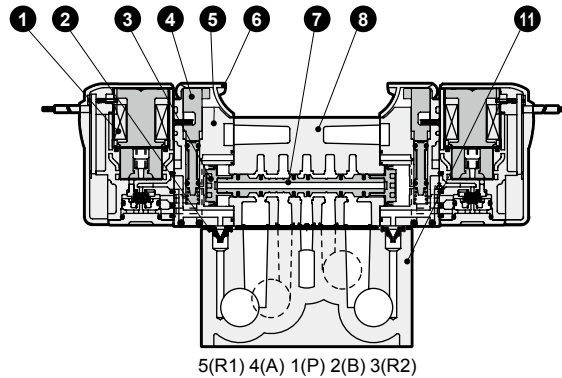
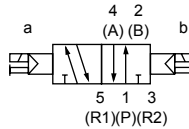
### 4GE110R

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



### 4GE120R

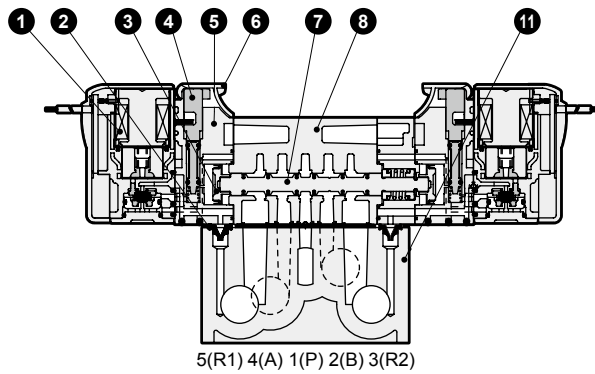
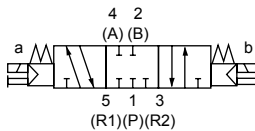
- 2-position double
- Grommet lead wire (blank)



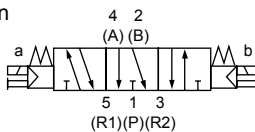
### 4GE130R

- 3-position
- Grommet lead wire (blank)

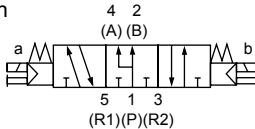
All ports closed



A/B/R connection



P/A/B connection



## Main parts list

## Parts list

No.	Part name	Material	No.	Part name	Material
1	Coil assembly	-	1	Coil assembly	4GR -electrical connections- □ - COIL -voltage
2	Pilot exhaust check valve	Hydrogenated nitrile rubber			Blank: Standard
3	Piston D assembly	-			A: Ozone specifications
4	Manual override	Resin			Blank: Grommet lead wire
5	Piston chamber	Resin			
6	Manual protection cover	Resin			
7	Spool assembly	-			
8	Body	Aluminum alloy die-casting			
9	Spool spring	Stainless steel			
10	Cap	Resin			
11	Sub-plate	Aluminum alloy die-casting			

## Internal structure and parts list

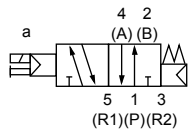
### 3GE2660R

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

Refer to page 488.

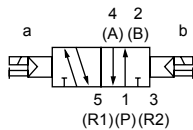
### 4GE210R/4GE310R

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



### 4GE220R/4GE320R

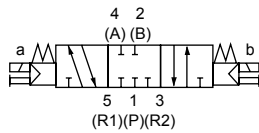
- 2-position double
- Grommet lead wire (blank)



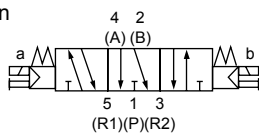
### 4GE2<sup>3</sup><sub>4</sub>0R/4GE3<sup>3</sup><sub>4</sub>0R

- 3-position
- Grommet lead wire (blank)

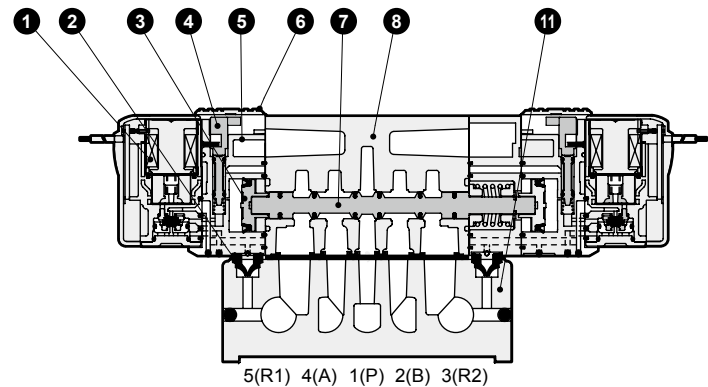
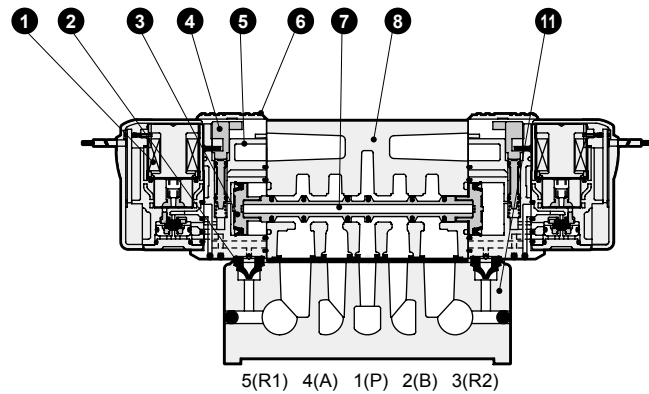
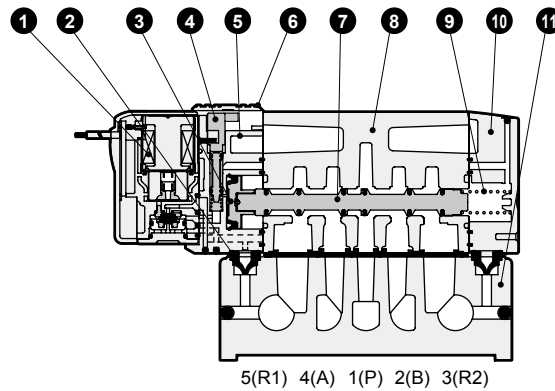
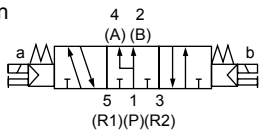
All ports closed



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	Body	Aluminum alloy die-casting
9	Spool spring	Stainless steel
10	Cap	Resin
11	Sub-plate	Aluminum alloy die-casting

## Parts list

No.	Part name	Material
1	Coil assembly	4GR - [electrical connections] - [COIL] - [voltage] Blank: Standard A: Ozone specifications 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

# 3GE1/2 Series

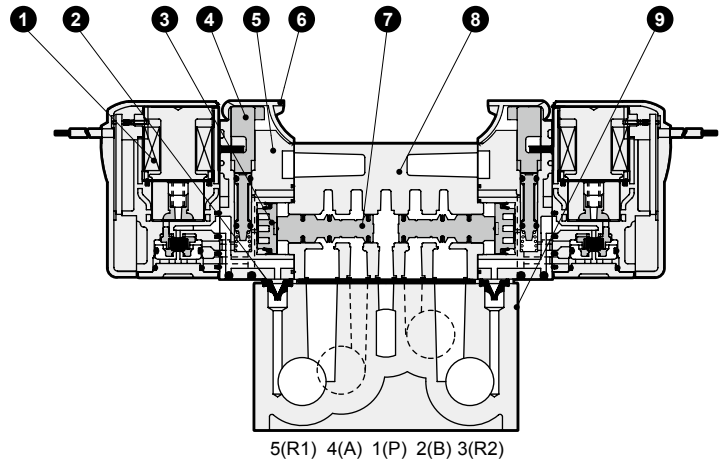
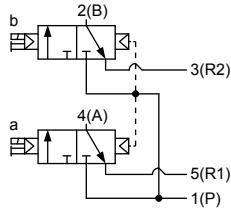
Discrete valve; base piping

## 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
- 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

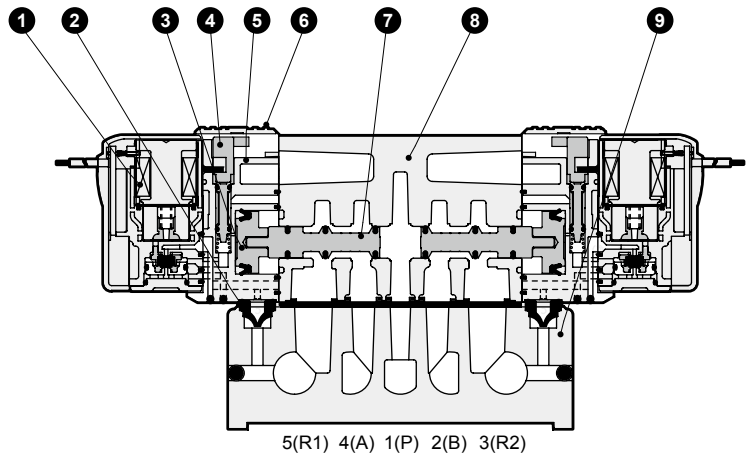
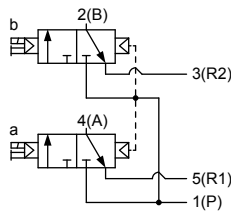
### 3GE1660R

- Two 3-port valves integrated
- Grommet lead wire (blank)
- A side valve: normally closed,
- B side valve: normally closed
- NC/NC



### 3GE2660R

- Two 3-port valves integrated
- Grommet lead wire (blank)
- A side valve: normally closed,
- B side valve: normally closed
- NC/NC



### Main parts list

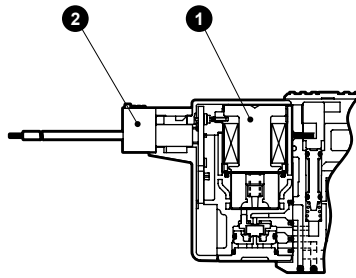
No.	Part name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Hydrogenated nitrile rubber
3	Piston assembly	-
4	Manual override	Resin
5	Piston chamber	Resin
6	Manual protection cover	Resin
7	Spool assembly	-
8	Body	Aluminum alloy die-casting
9	Sub-plate	Aluminum alloy die-casting

### Parts list

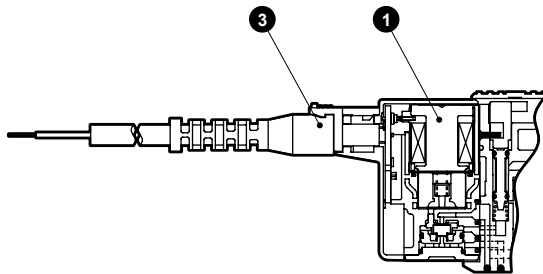
No.	Part name	Material
1	Coil assembly	4GR -electrical connections- □ - COIL - voltage Blank: Standard A: Ozone specs Blank: Grommet lead wire

## Electrical connections internal structure and parts list

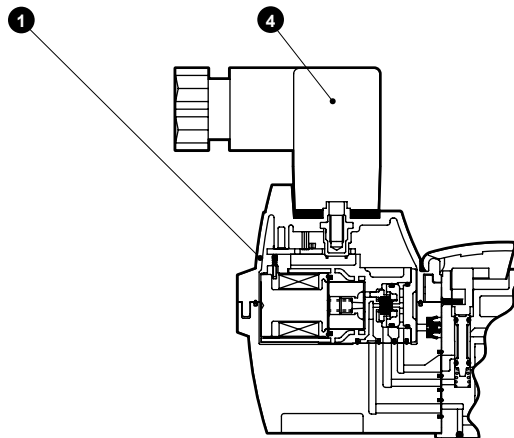
● E type connector E □□



● 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	Material
1	Coil assembly	4GR-[electrical connections]-□-COIL-[voltage] Blank: Standard A: Ozone specifications 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
<b>4GD/E</b>
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



# 4GE1 Series

Discrete valve; base piping

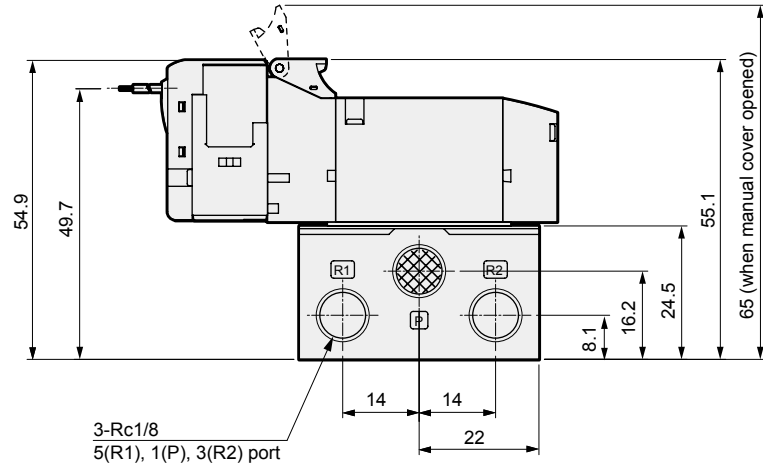
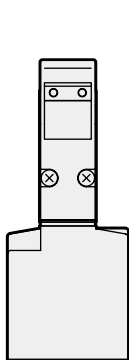
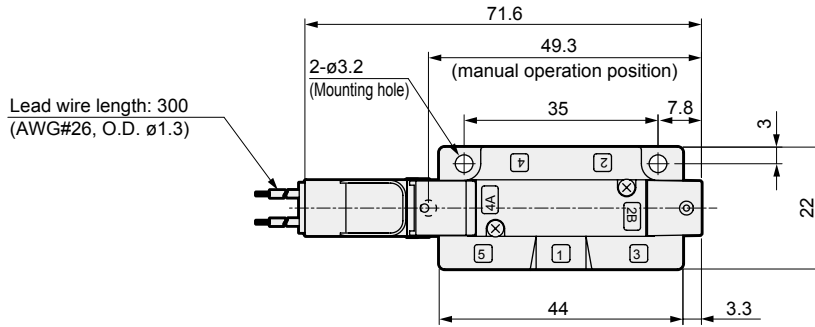
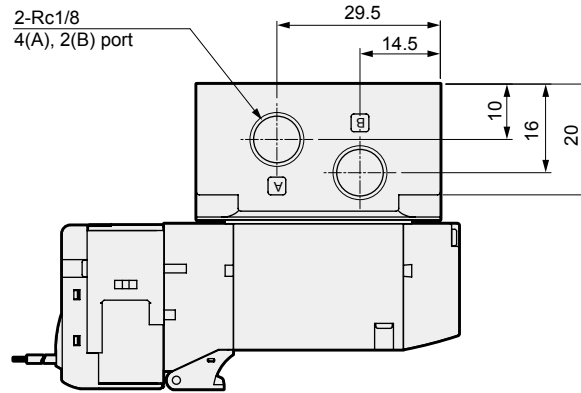
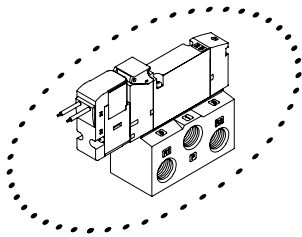
## Dimensions



- 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

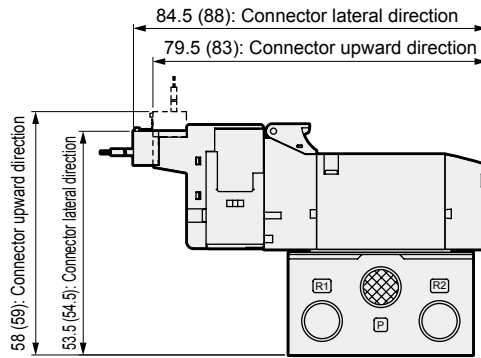
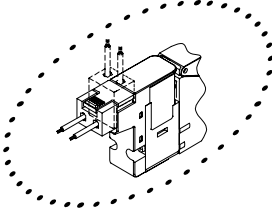
### 4GE110R

● 2-position single grommet lead wire (blank)



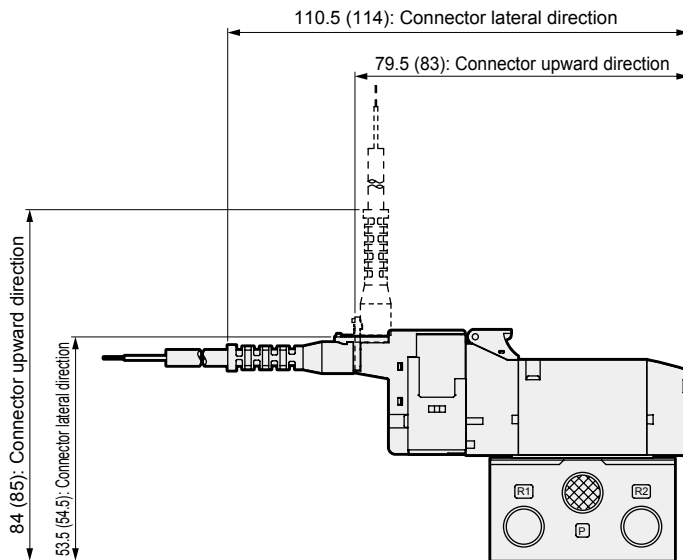
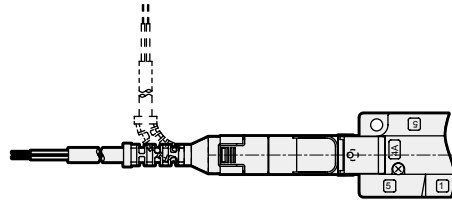
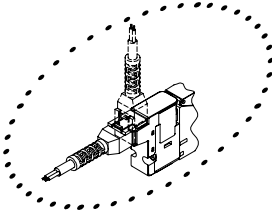
## Dimensions

● 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
<b>4GD/E</b>
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

# 4GE1 Series

Discrete valve; base piping

## Dimensions



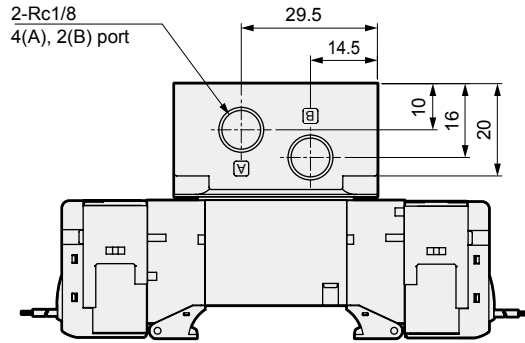
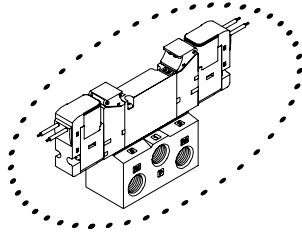
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB
- With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
-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

### 4GE120R

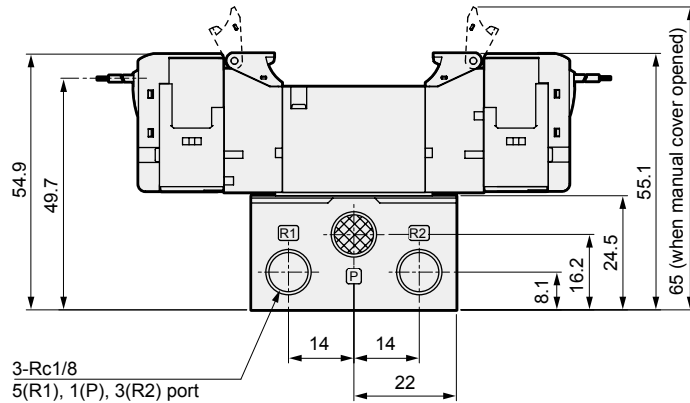
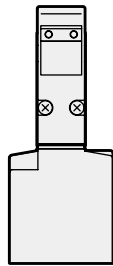
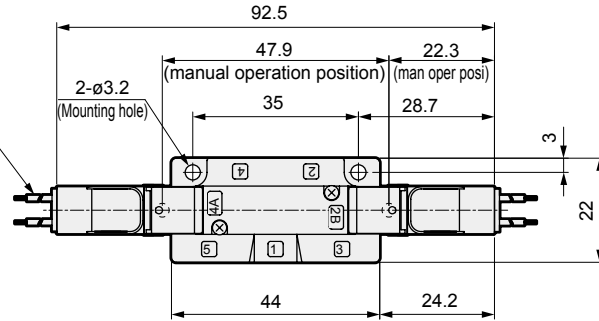
- 2-position double grommet lead wire (blank)

### 3GE1660R

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

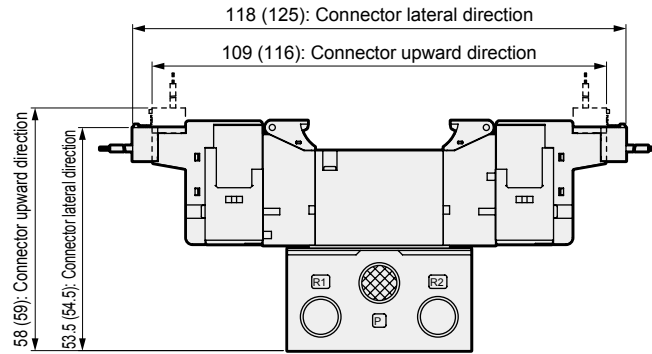
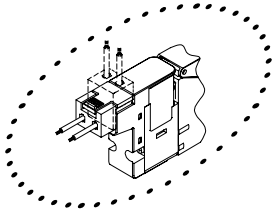


Lead wire length: 300  
(AWG#26, O.D. ø1.3)



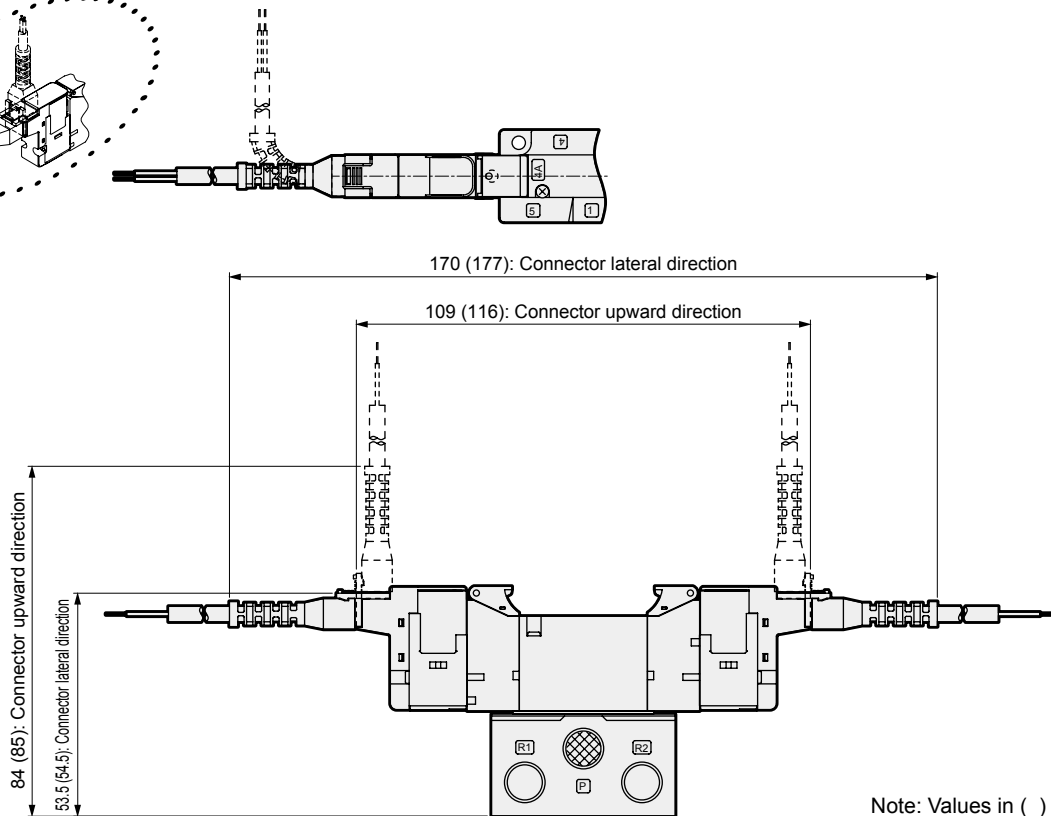
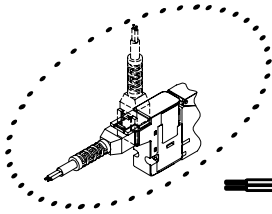
## Dimensions

● 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
<b>4GD/E</b>
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

# 4GE1 Series

Discrete valve; base piping

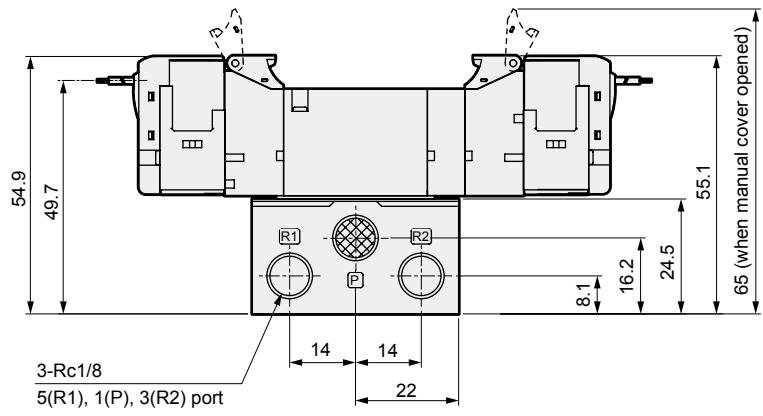
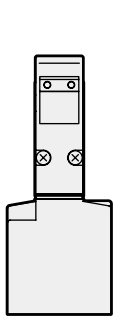
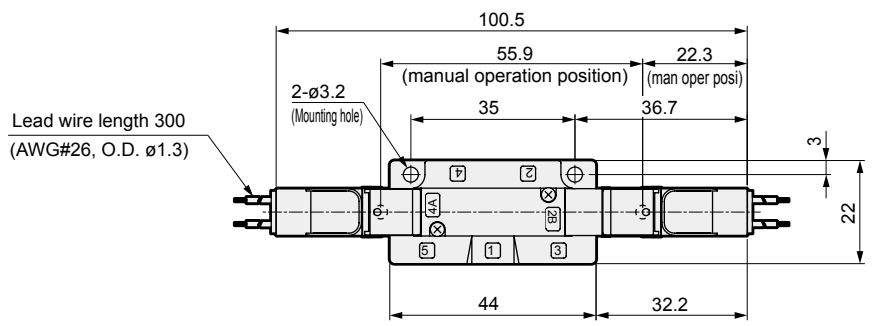
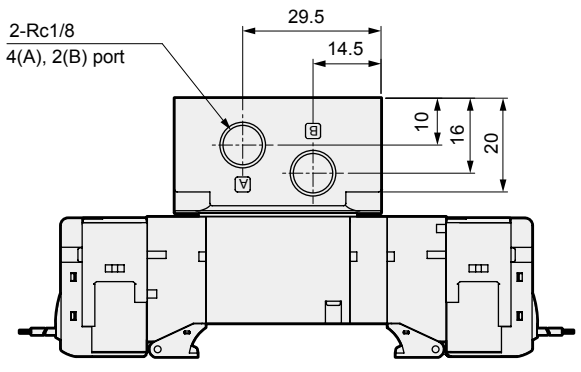
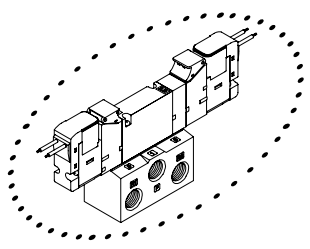
## Dimensions



- 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

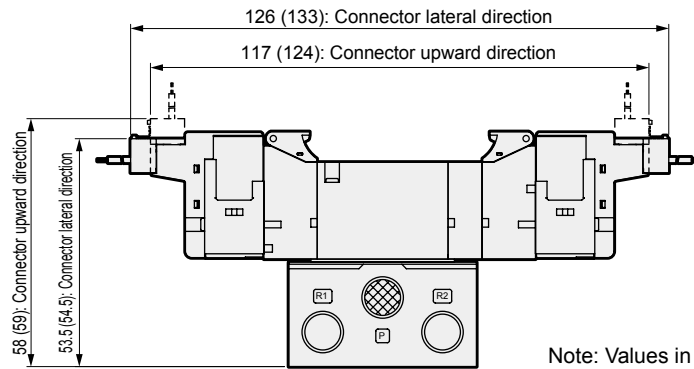
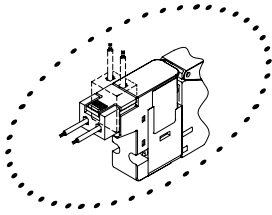
### 4GE10R

● 3-position grommet lead wire (blank)



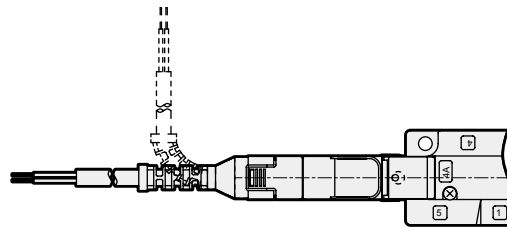
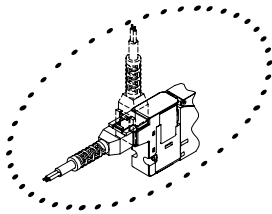
### Dimensions

● 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
<b>4GD/E</b>
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

# 4GE2 Series

Discrete valve; base piping

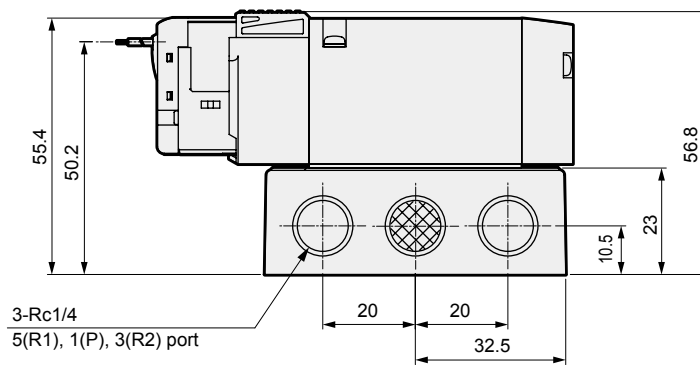
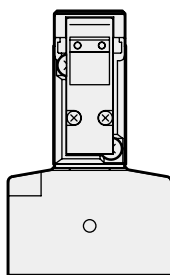
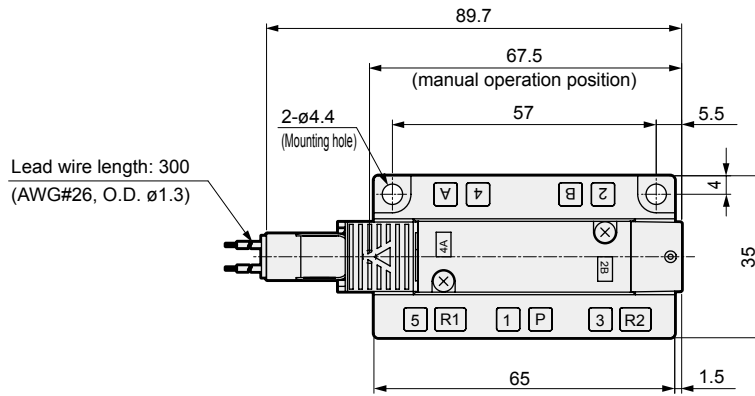
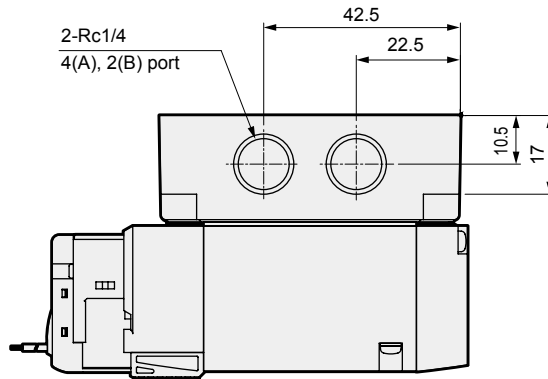
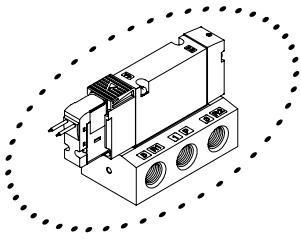
## Dimensions



- 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

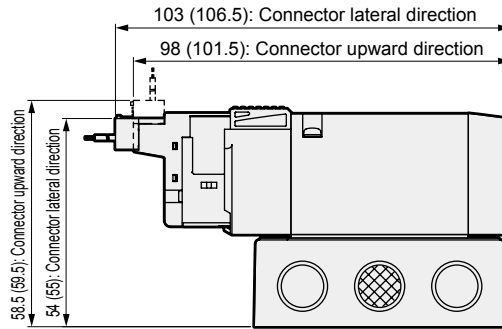
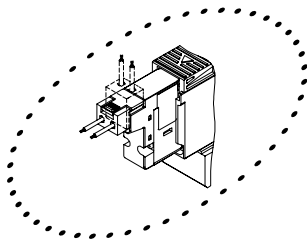
### 4GE210R

● 2-position single grommet lead wire (blank)



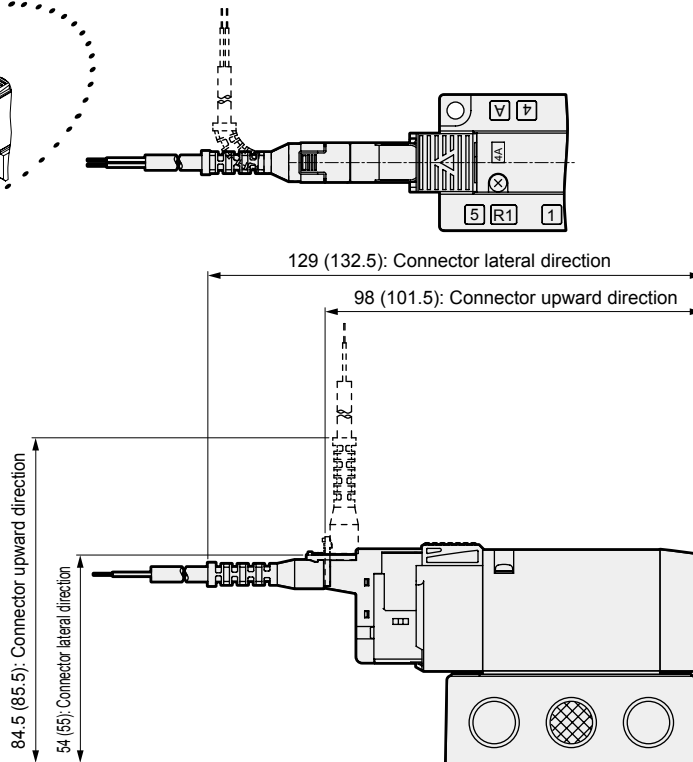
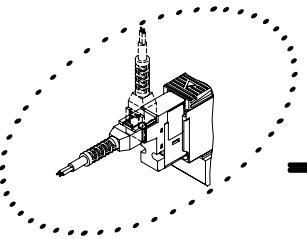
## Dimensions

### ● E type connector (E)



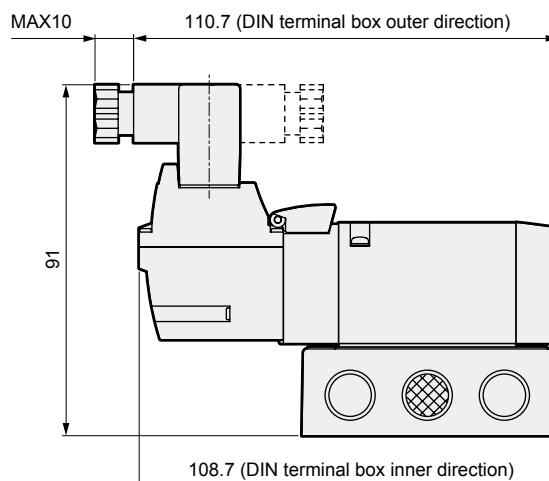
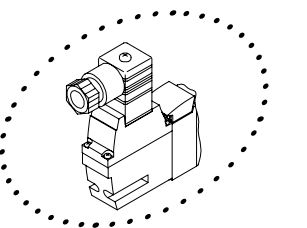
Note: Values in ( ) are for AC voltage.

### ● 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
<b>4GD/E</b>
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



# 4GE2 Series

Discrete valve; base piping

## Dimensions



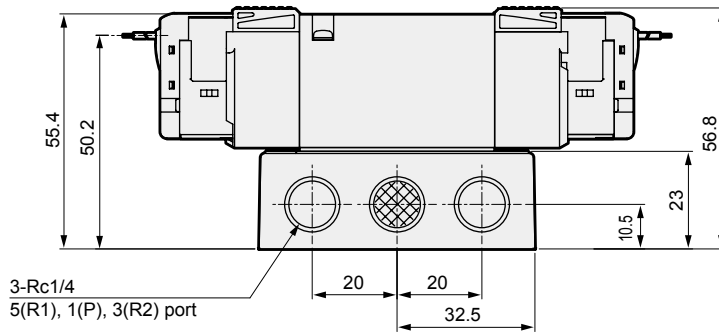
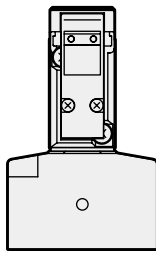
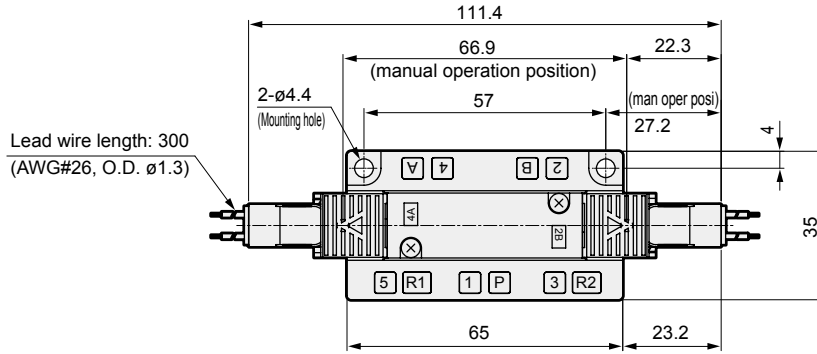
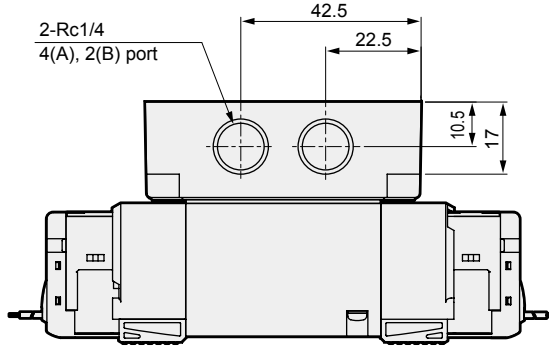
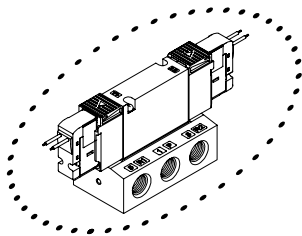
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

### 4GE220R

- 2-position double grommet lead wire (blank)

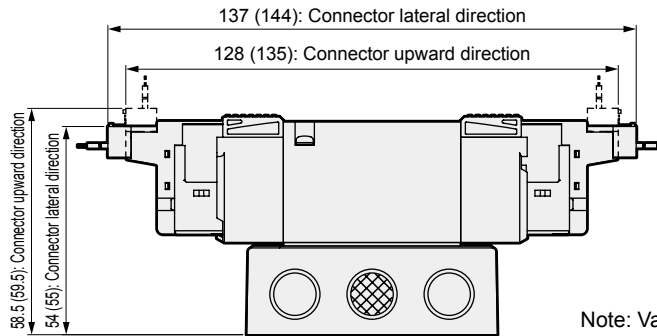
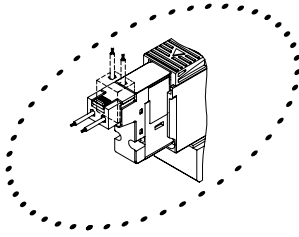
### 3GE2660R

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



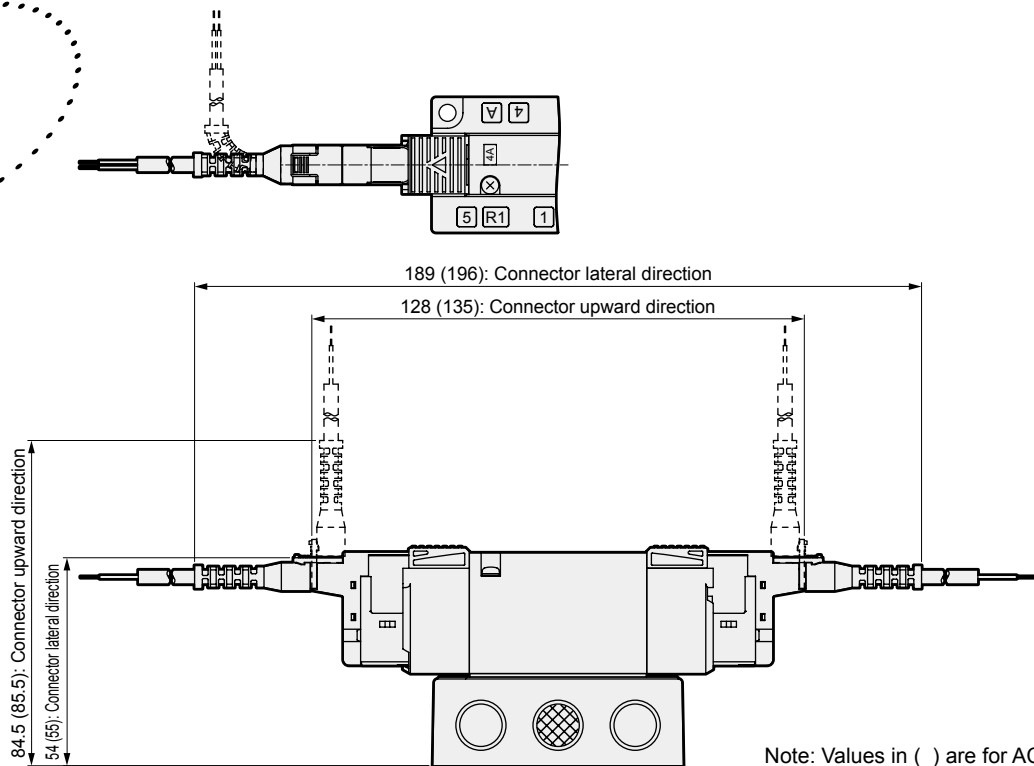
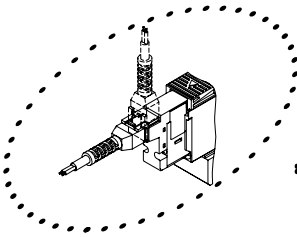
## Dimensions

### ● E type connector (E)



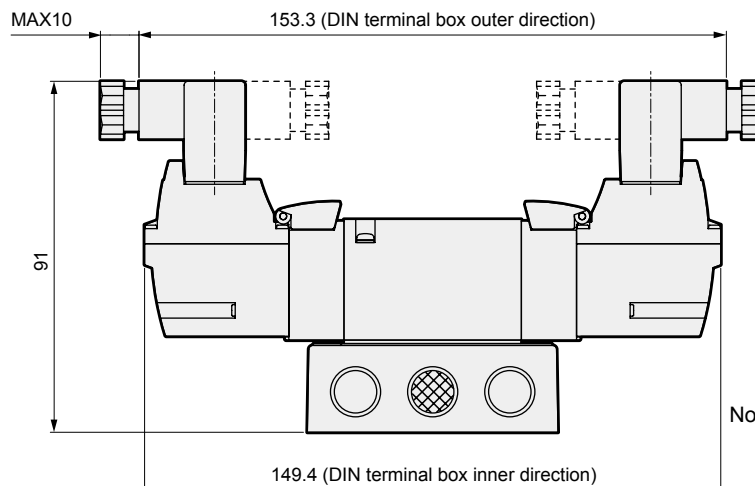
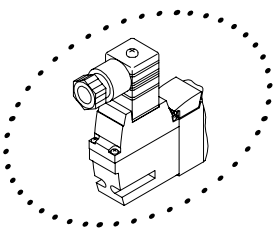
Note: Values in ( ) are for AC voltage.

### ● 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
<b>4GD/E</b>
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

# 4GE2 Series

Discrete valve; base piping

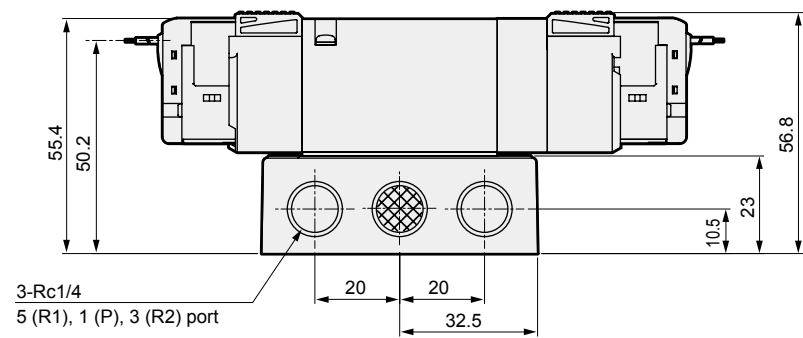
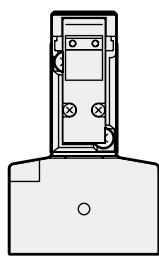
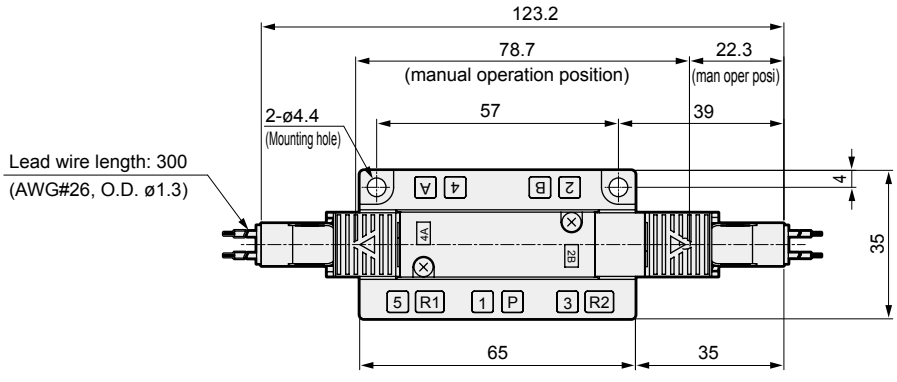
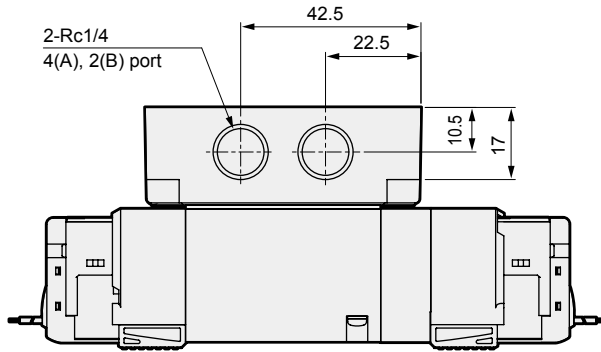
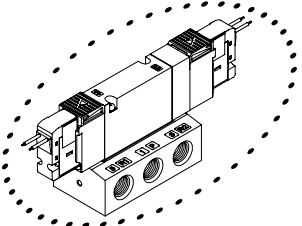
## Dimensions



- 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

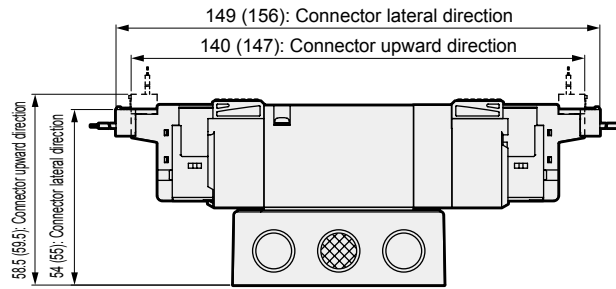
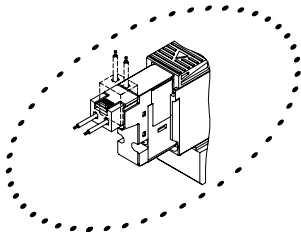
### 4GE2 0R

● 3-position grommet lead wire (blank)



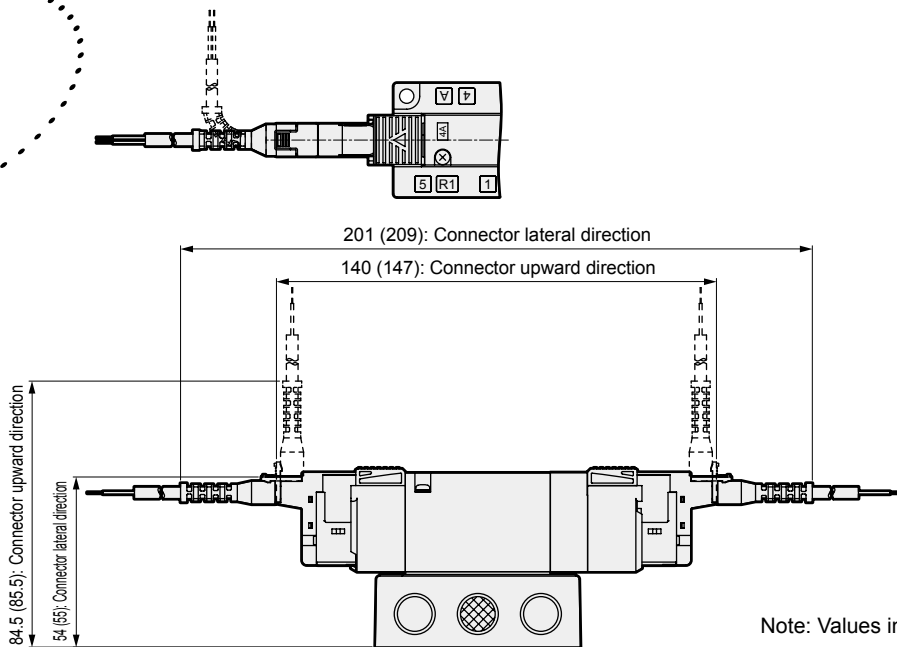
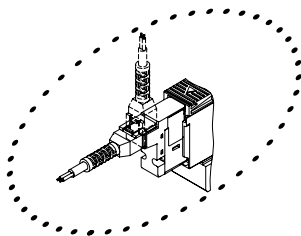
## Dimensions

### ● E type connector (E)



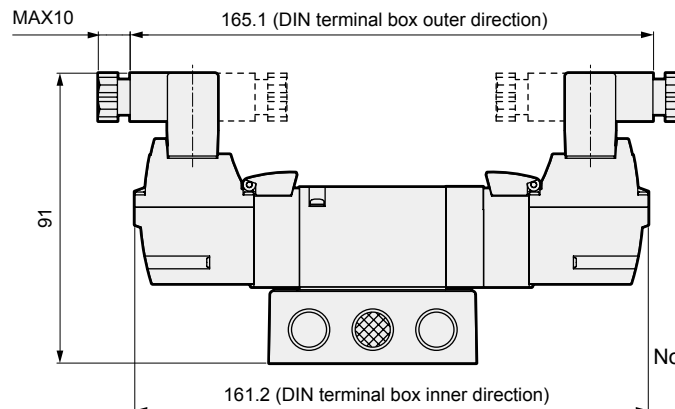
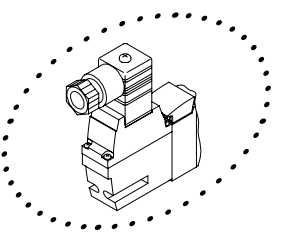
Note: Values in ( ) are for AC voltage.

### ● 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
<b>4GD/E</b>
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

# 4GE3 Series

Discrete valve; base piping

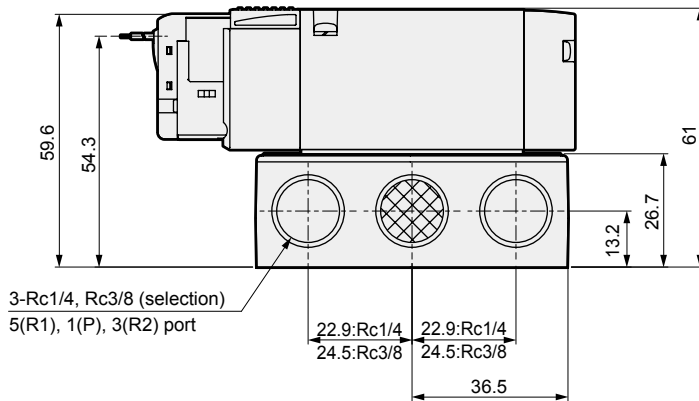
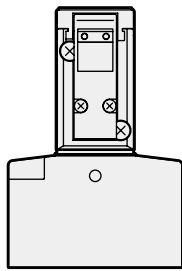
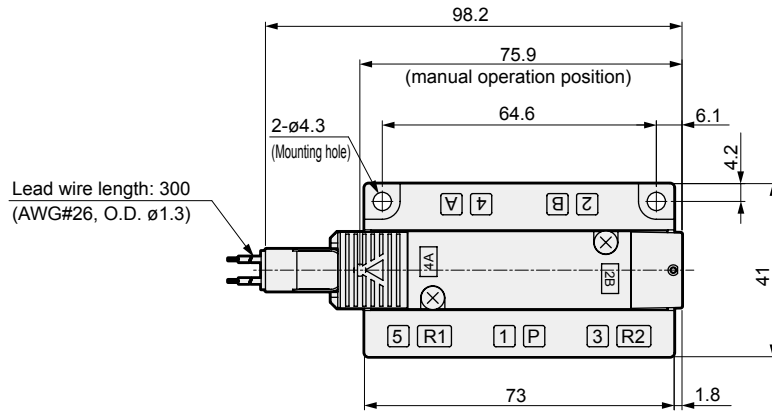
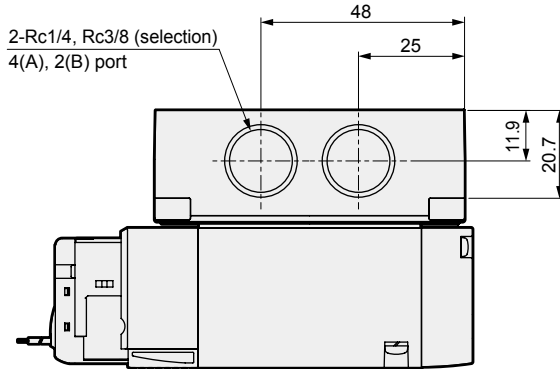
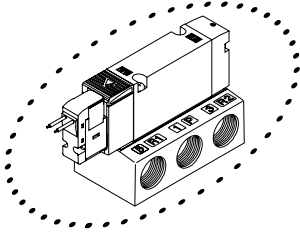
## Dimensions



- 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

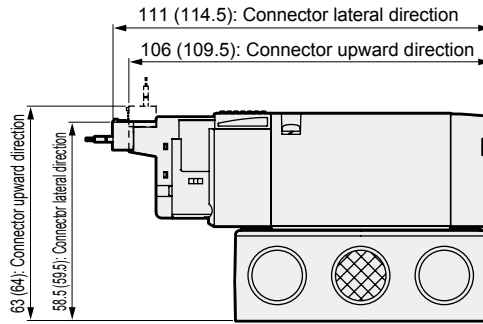
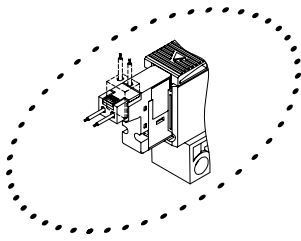
### 4GE310R

● 2-position single grommet lead wire (blank)



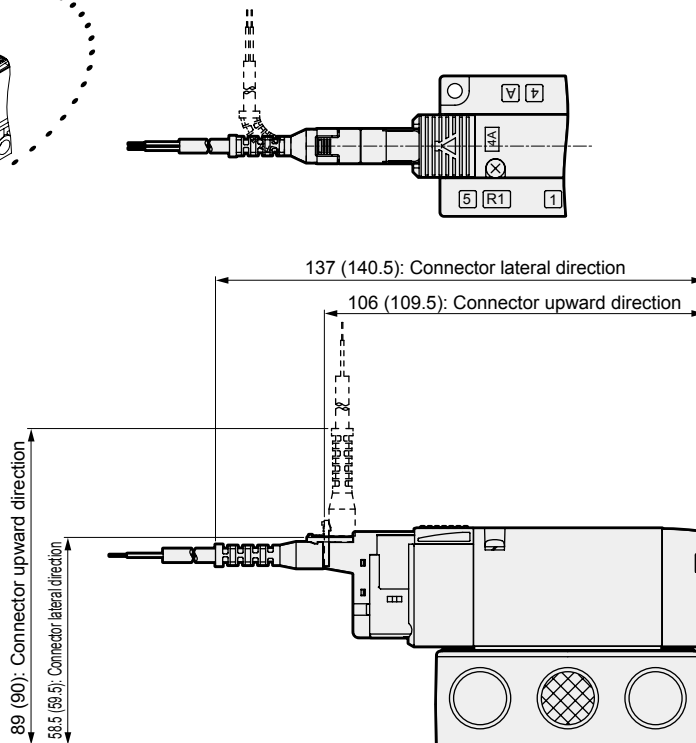
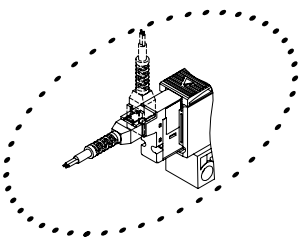
## Dimensions

● E type connector (E)



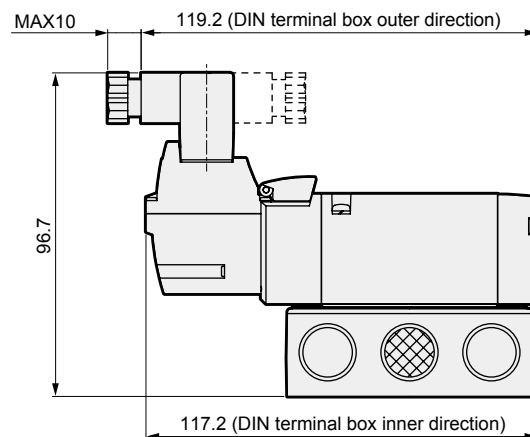
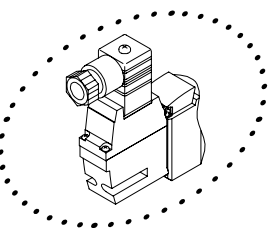
Note: Values in ( ) are for AC voltage.

● 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
<b>4GD/E</b>
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

# 4GE3 Series

Discrete valve; base piping

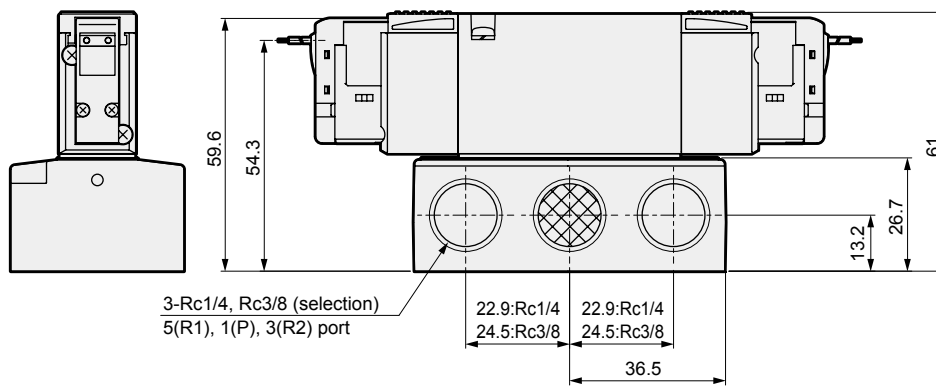
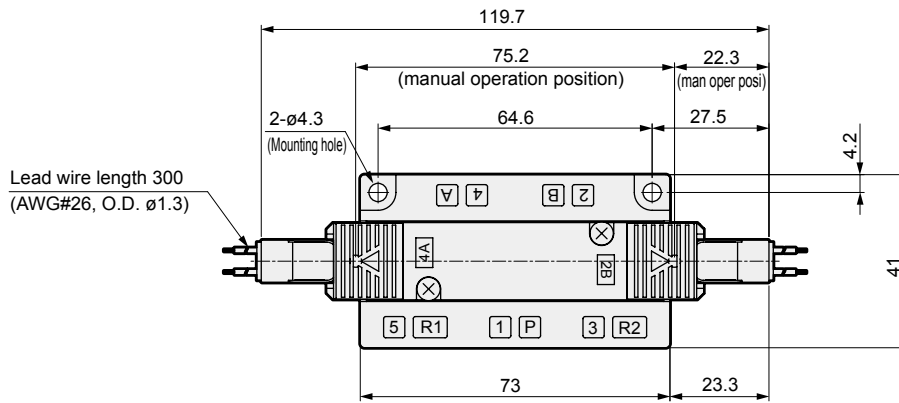
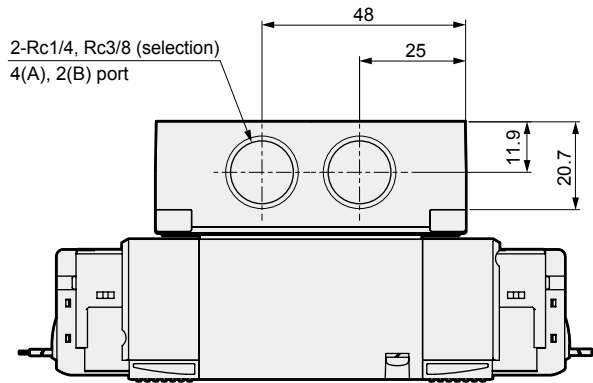
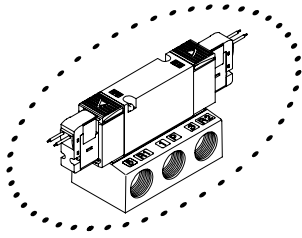
## Dimensions



- 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

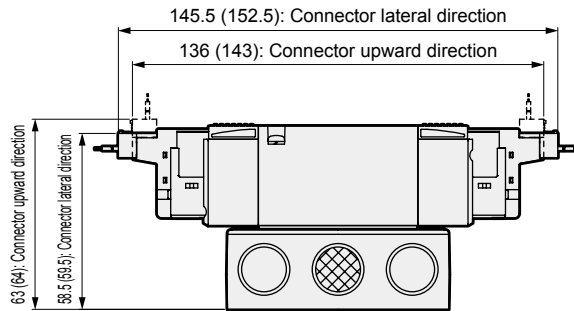
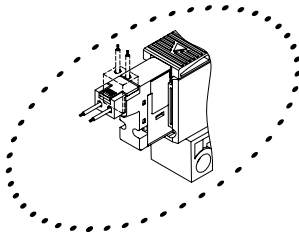
### 4GE320R

● 2-position double grommet lead wire (blank)



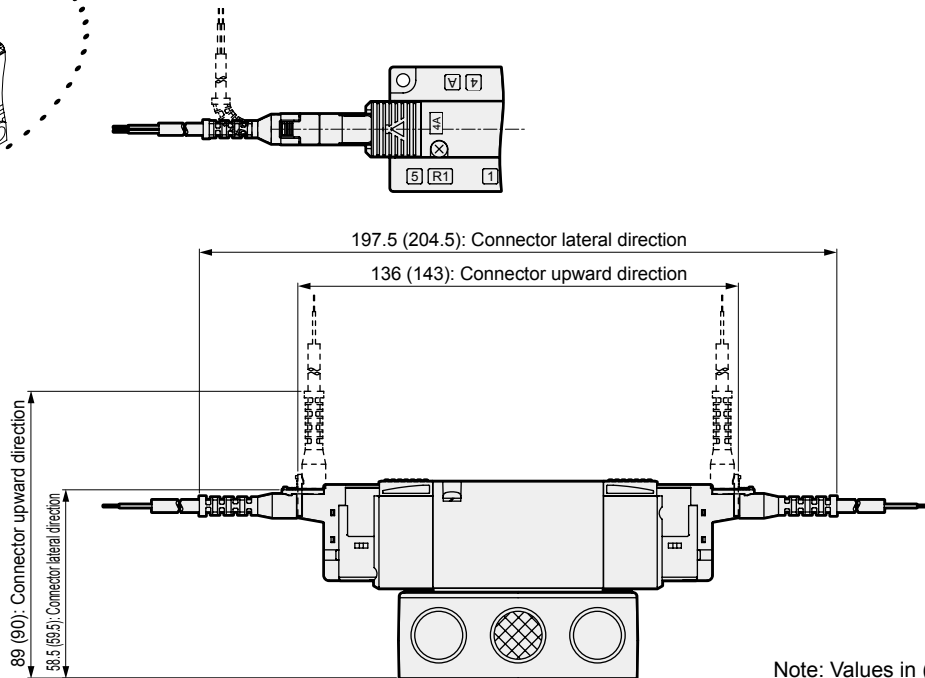
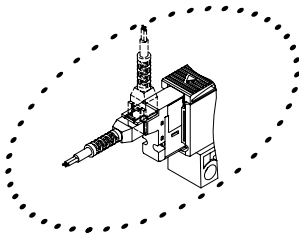
## Dimensions

### ● E type connector (E)



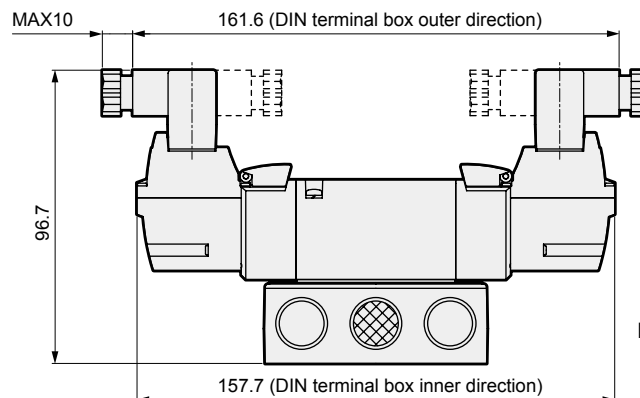
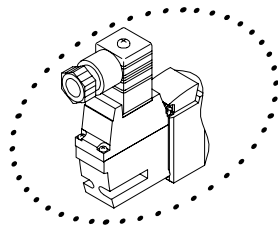
Note: Values in ( ) are for AC voltage.

### ● 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
<b>4GD/E</b>
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



# 4GE3 Series

Discrete valve; base piping

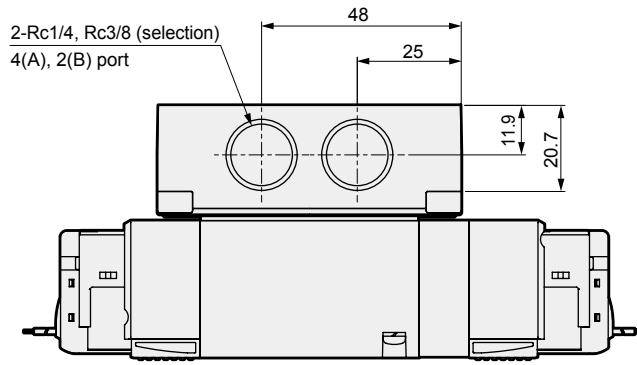
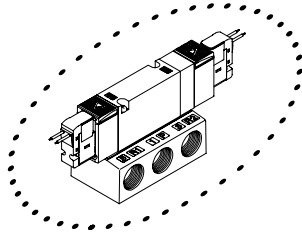
## Dimensions



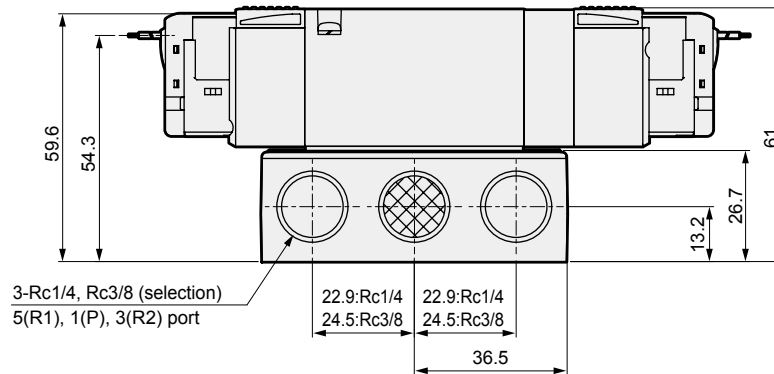
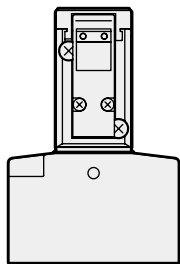
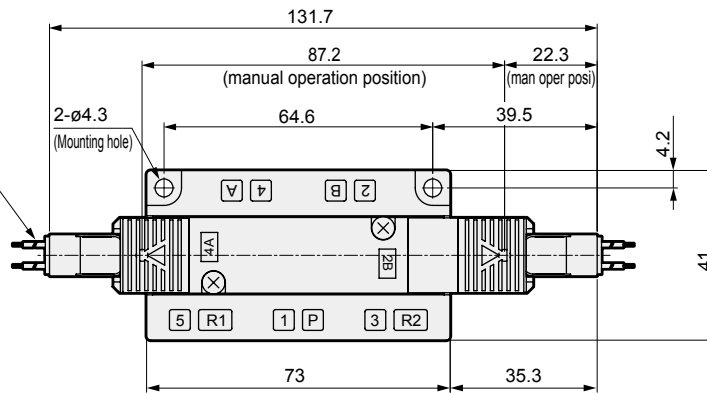
- 4GA/B
- M4GA/B
- MN4GA/B
- 4GA/B (master)
- 4GB With sensor
- 4GD/E
- M4GD/E
- MN4GD/E
- 4GA4/B4
- MN3E
- MN4E
- W4GA/B2
- W4GB4
- MN3S0
- MN4S0
- 4SA/B0
- 4KA/B
- 4KA/B (master)
- 4F
- 4F (master)
- PV5G
- GMF
- PV5
- GMF
- PV5S-0
- 3Q
- MV3QR
- 3MA/B0
- 3PA/B
- P/M/B
- NP/NAP
- NVP
- 4G\*0EJ
- 4F\*0EX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

### 4GE3 0R

● 3-position grommet lead wire (blank)

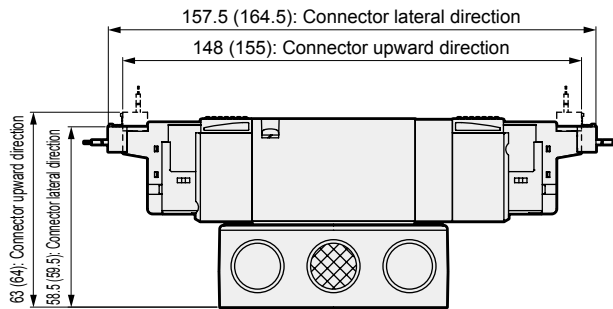
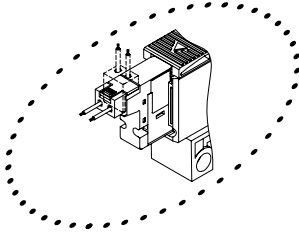


Lead wire length: 300 (AWG#26, O.D.  $\phi$ 1.3)



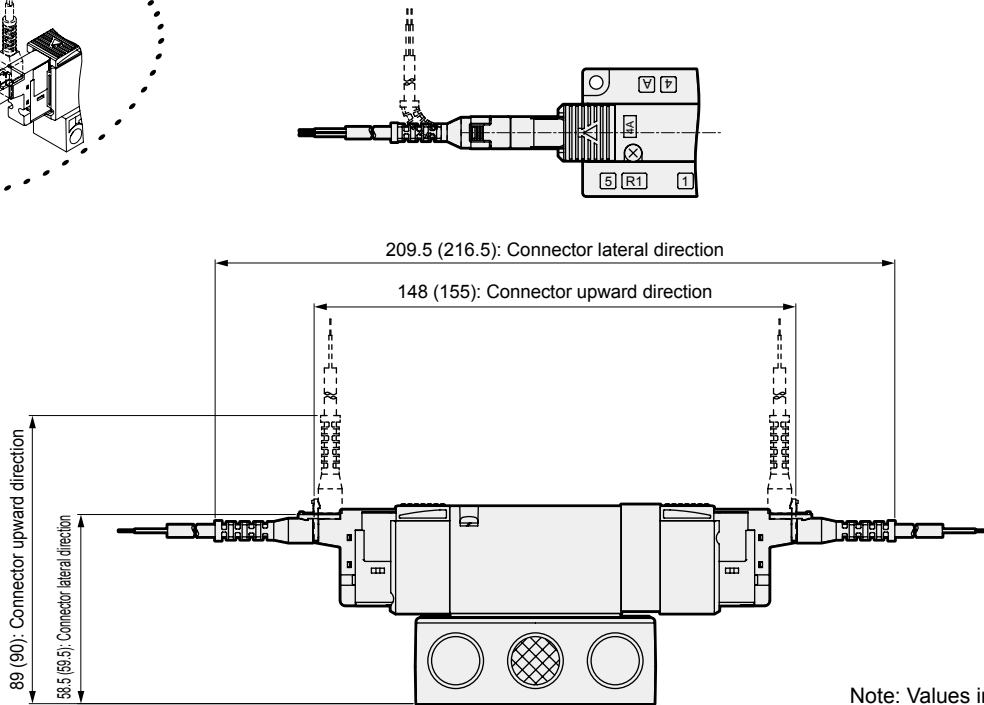
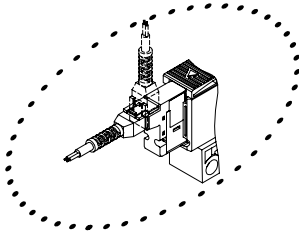
## Dimensions

● E type connector (E)



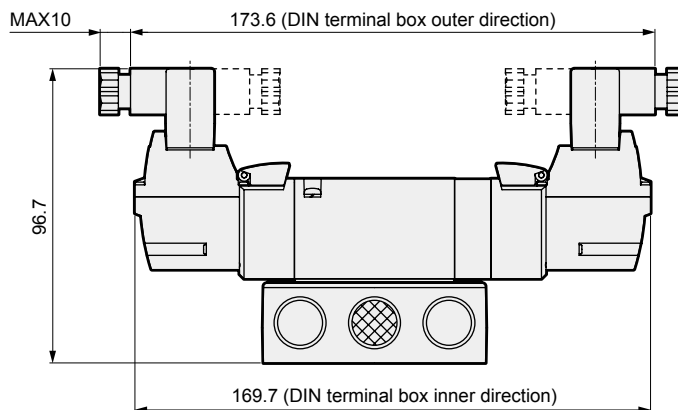
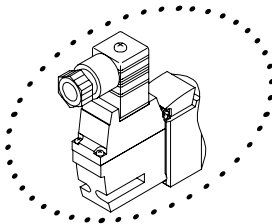
Note: Values in ( ) are for AC voltage.

● 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
<b>4GD/E</b>
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