



# Discrete valve Body porting 3GA1-2-3 /4GA1-2-3 Series

• Applicable cylinder bore size: 20 to 100 mm



## Common specifications

Descriptions		
Working fluid		Compressed air
Valve and solenoid type		Pilot operated soft spool valve
Min. working pressure	MPa	0.2 (2-position, 3-position)
Max. working pressure	MPa	0.7
Withstanding pressure	MPa	1.05
Ambient temperature	°C	-5 to 55
Fluid temperature	°C	5 to 55
Manual override		Non-locking/locking type
Pilot exhaust method		Main valve/pilot valve common exhaust type
Lubrication	Note 1	Not required
Protection structure	Note 2	Dust proof
Vibration/impact	m/s <sup>2</sup>	50 or less/300 or less
Working environment		Not to be subject to corrosive gas

Note 1. For lubrication, please use turbine oil Class 1ISOVG32.

Too much lubrication and intermittent lubrication may cause unstable operation.

Note 2. Not to be subject to water drip, oil etc.

For DIN terminal box specifications, IP65 (jet-proof type).

Cable O.D. and tightening torque conformable with the regulations should be observed.

Reference. Pressure unit is Mpa. Conversion ratio is 1MPa=10.1972kgf/cm<sup>2</sup>.

## Electrical specifications

Descriptions		
Rated voltage	DC	12, 24
	V AC	100
Rated voltage fluctuation		±10%
Holding current	DC24V	0.023 (0.025)
Note 3	A DC12V	0.046 (0.050)
	AC100V	0.010 (0.012)
Power consumption	DC24V	0.55 (0.6)
Note 3	W DC12V	0.55 (0.6)
Apparent power	VA AC100V	1.0 (1.2)
Heat proof class		B
Temperature rise	°C	50
Surge suppressor		Option
Indicator		Indicator light (Option)

Note 3. The value in ( ) for indicator light.

## Individual specifications

Descriptions		3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
Port size	Port A/B	Push in joint 4, 6 dia.	Push in joint 4, 6, 8 dia.	Push in joint 6, 8, 10 dia.	Push in joint 4, 6 dia.	Push in joint 4, 6, 8 dia.	Push in joint 6, 8, 10 dia.
		M5	Rc1/8	Rc1/4	M5	Rc1/8	Rc1/4
	Port P/R1/R2	M5	Rc1/8	Rc1/4	M5	Rc1/8	Rc1/4

Descriptions			3GA1		3GA2		3GA3		4GA1		4GA2		4GA3	
			P → A/B	A/B → R1/R2	P → A/B	A/B → R1/R2	P → A/B	A/B → R1/R2	P → A/B	A/B → R1/R2	P → A/B	A/B → R1/R2	P → A/B	A/B → R1/R2
Effective sectional area	mm <sup>2</sup>	Port size	Push in joint 6 dia.		Push in joint 8 dia.		Push in joint 10 dia.		Push in joint 6 dia.		Push in joint 8 dia.		Push in joint 10 dia.	
		Port A/B	3.8	4.5	11	12	18	19	3.8	4.5	11	12	18	19
	2-position	All ports closed	-	-	-	-	-	-	3.8	4.5	10	10	17	17
		ABR connection	-	-	-	-	-	-	3.8	4.5	10	12	17	19
3-position	PAB connection	-	-	-	-	-	-	4.0	4.5	13	10	19	17	

Descriptions			3GA1		3GA2		3GA3		4GA1		4GA2		4GA3	
			When ON	When OFF										
Response time	ms	2-position	Single		19		25		12		19		25	
			Double		-		-		9		-		24	
	3-position	ABR connection		-		-		-		8		15		23

The value of light, surge suppressor is shown. Response time is the value at supply pressure 0.5MPa, 20 °C and not lubricated. The value varies depending on pressure and oil quality.

Descriptions			3GA1	3GA2	3GA3	4GA1	4GA2	4GA3			
Mass	g	2-position	Single	Grommet lead wire		58 (44)	115 (85)	162 (120)	58 (44)	120 (90)	171 (129)
				E-connector		60 (46)	117 (87)	164 (122)	60 (46)	122 (92)	173 (131)
				DIN terminal box		-	137 (107)	184 (142)	-	142 (112)	193 (151)
		Double	Grommet lead wire		-	-	-	73 (59)	135 (105)	187 (141)	
			E-connector		-	-	-	77 (63)	139 (109)	191 (145)	
			DIN terminal box		-	-	-	-	179 (149)	231 (185)	
	3-position	All ports	Grommet lead wire		-	-	-	75 (61)	147 (117)	196 (154)	
		Block	E-connector		-	-	-	79 (65)	151 (121)	200 (158)	
			DIN terminal box		-	-	-	-	191 (161)	240 (198)	

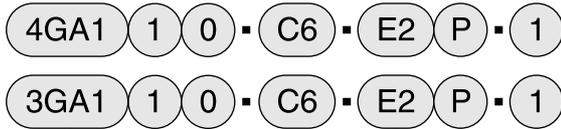
For no piping adapter, refer to the value in ( ). The value of E-connector includes the value of socket assembly (lead wire 300mm).

For mass of EJ connector, add 16g/piece to mass of E-connector.

# 3GA1-2-3/4GA1-2-3 Series

Discrete valve: Body porting

## How to order



Model					
3GA1	3GA2	3GA3	4GA1	4GA2	4GA3

Model

**A** Solenoid position

**B** Port size

**C** Electric connection

Please refer to Page 93 about circuit diagram of surge suppressor/indicator light.

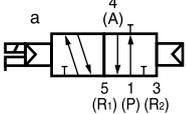
**D** Options

**E** Voltage

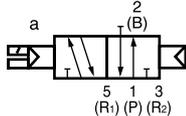
JIS symbol

• Port valve

2-pos. single NC

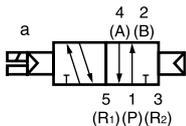


2-pos. single NO

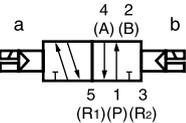


• 5 Port valve

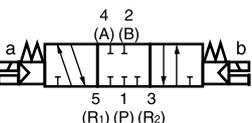
2-pos. single



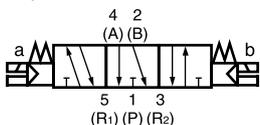
2-pos. double



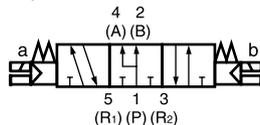
3-position all ports closed



3-pos. A/B/R connection



3-pos. P/A/B connection



Symbol	Descriptions	3GA1	3GA2	3GA3	4GA1	4GA2	4GA3
<b>A 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 solenoid, N.C. Note 1	●	●	●			
11	2-position single solenoid, N.O. Note 1	●	●	●			
<b>B Port size</b>							
Port	Port A/B	Port P/R1/R2 ①=M5 ②=Rc1/8 ③=Rc1/4					
C4	4 mm dia. push in joint	①	②		①	②	
C6	6 mm dia. push in joint	①	②	③	①	②	③
C8	8 mm dia. push in joint		②	③		②	③
C10	10 mm dia. push in joint			③			③
M5	M5	①			①		
06	Rc1/8		②			②	
08	Rc1/4			③			③
<b>C Electric connection</b>							
Blank	Grommet lead wire (300mm) Note 2	●	●	●	●	●	●
B	DIN terminal box (Pg7) surge suppressor/indicator light		●	●		●	●
<b>E-connector (radial/axial)</b>							
E0	Lead wire (300mm)	●	●	●	●	●	●
E00	Lead wire (500mm)	●	●	●	●	●	●
E01	Lead wire (1000mm)	●	●	●	●	●	●
E02	Lead wire (2000mm)	●	●	●	●	●	●
E03	Lead wire (3000mm)	●	●	●	●	●	●
E2	Lead wire (300mm) surge suppressor/indicator light	●	●	●	●	●	●
E20	Lead wire (500mm) surge suppressor/indicator light	●	●	●	●	●	●
E21	Lead wire (1000mm) surge suppressor/indicator light	●	●	●	●	●	●
E22	Lead wire (2000mm) surge suppressor/indicator light	●	●	●	●	●	●
E23	Lead wire (3000mm) surge suppressor/indicator light	●	●	●	●	●	●
E0N	No lead wire (no socket)	●	●	●	●	●	●
E2N	No lead wire (no socket) surge suppressor/light	●	●	●	●	●	●
E3	No lead wire (socket/terminal attached) surge suppressor/light	●	●	●	●	●	●
E1	No lead wire (socket/terminal attached)	●	●	●	●	●	●
<b>EJ-connector (socket with cover, radial/axial)</b>							
E01J	Lead wire (1000mm)	●	●	●	●	●	●
E02J	Lead wire (2000mm)	●	●	●	●	●	●
E03J	Lead wire (3000mm)	●	●	●	●	●	●
E21J	Lead wire (1000mm) surge suppressor/indicator light	●	●	●	●	●	●
E22J	Lead wire (2000mm) surge suppressor/indicator light	●	●	●	●	●	●
E23J	Lead wire (3000mm) indicator light	●	●	●	●	●	●
<b>D Option</b>							
Blank	B	●	●	●	●	●	●
H	Check valve	●	●	●	●	●	●
P	Mounting plate (Note 3)	●	●	●	●	●	●
A	Ozone/coolant proof	●	●	●	●	●	●
F	Filter incorporated in Port P/A/B	●	●	●	●	●	●
<b>E Voltage</b>							
1	AC100V (rectified bridge incorporated)	●	●	●	●	●	●
3	DC24V	●	●	●	●	●	●
4	DC12V	●	●	●	●	●	●

is not available.



## Cautions for model selection

Note 1. For 3GA, port is plugged.

Note 2. AC100V is not available for grommet lead wire specifications.

Note 3. When DIN terminal or AC100V, normal installation is not available. Consult with CKD.

4SA/B0

4SA/B1

4GA/B

MN4GA/B

4GA/B (master)

MN3S0/ MN4S0

4TB

4L2-4/ LMF0

4KA/B

4F

PV5/ CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/ NVP

4F\*\*0E

HMV/ HSV

Uniwire system

SKH

PCD/ FS/FD

Discrete

3, 5 port pilot operated valve

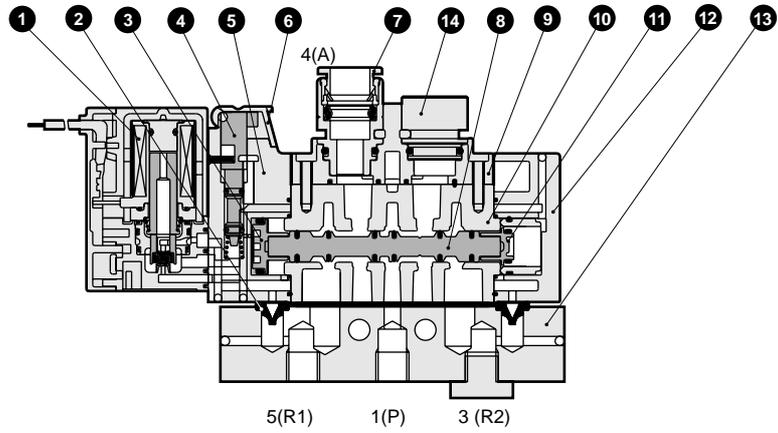
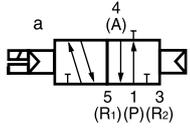
# 3GA1/4GA1 Series

Discrete valve: Body porting

## Internal structure and part list

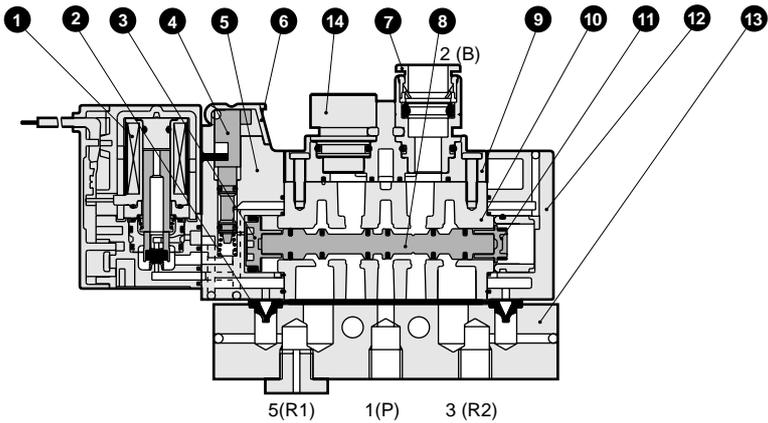
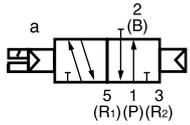
### 3GA110-C<sub>4</sub>-\* C<sub>6</sub>

- 2-position single solenoid, N.C.
- Grommet lead wire(Blank)



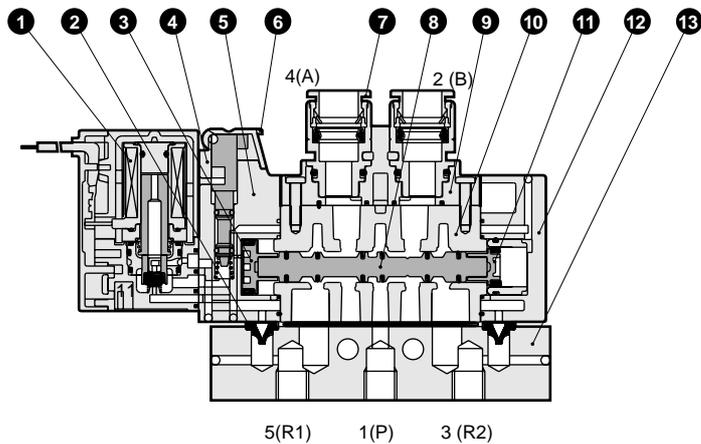
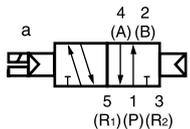
### 3GA1110-C<sub>4</sub>-\* C<sub>6</sub>

- 2-position single solenoid, N.O.
- Grommet lead wire(Blank)



### 4GA110

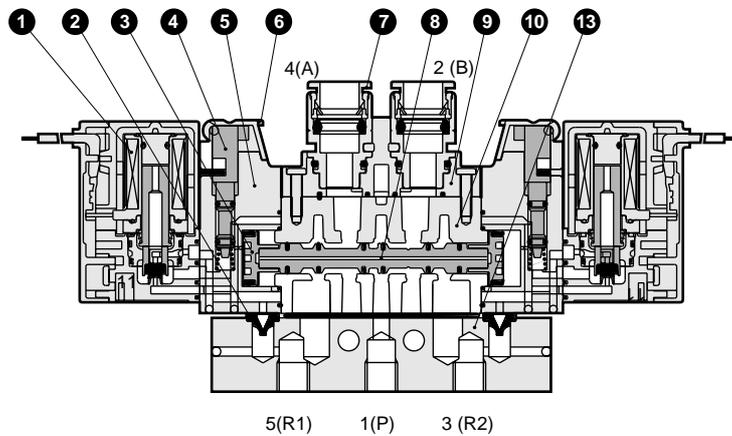
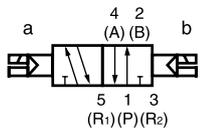
- 2-position single
- Grommet lead wire(Blank)



### Internal structure and part list

#### 4GA120

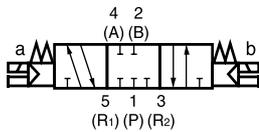
- 2-position double
- Grommet lead wire(Blank)



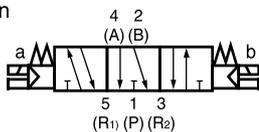
#### 4GA140

- 3-position
- Grommet lead wire(Blank)

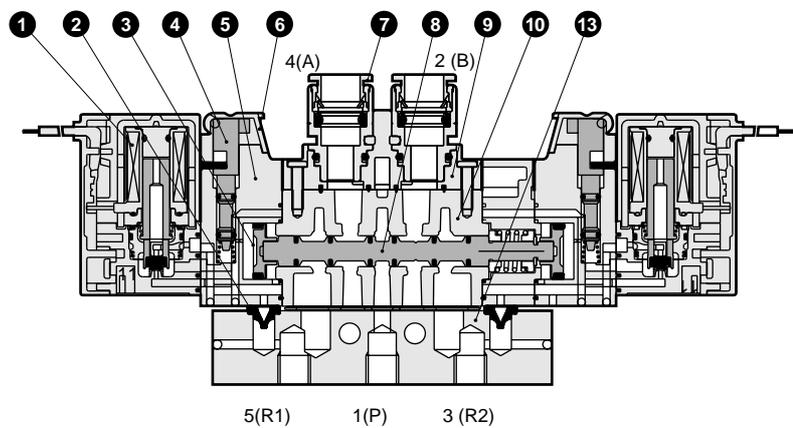
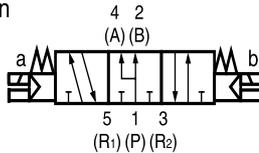
All ports closed



A/B/R connection



P/A/B connection



### Main part list

No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Nitrile rubber
3	Piston D assembly	-
4	Manual override	Resin
5	Piston room	Resin
6	Protective cover of manual override	Resin
7	Cartridge type quick connector	-
8	Spool assembly	-
9	Joint adaptor	Resin
10	Body	Aluminum alloy die casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adapter	Aluminum alloy die casting
14	Plug cartridge	Aluminum

### Repair parts list

No.	Parts name	Model No.	
1	Coil assembly	4G-[Electric connection]- * - COIL- [Voltage] Blank: Standard A: Ozone proof Blank: Grommet lead wire	
7	Cartridge type quick connector and related parts	4 dia. straight type	4G1-JOINT-C4
		6 dia. straight type	4G1-JOINT-C6
		Plug cartridge	4G1-JOINT-CPG

4SA/B0

4SA/B1

4GA/B

MN4GA/B

4GA/B (master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete  
3, 5 port pilot operated valve

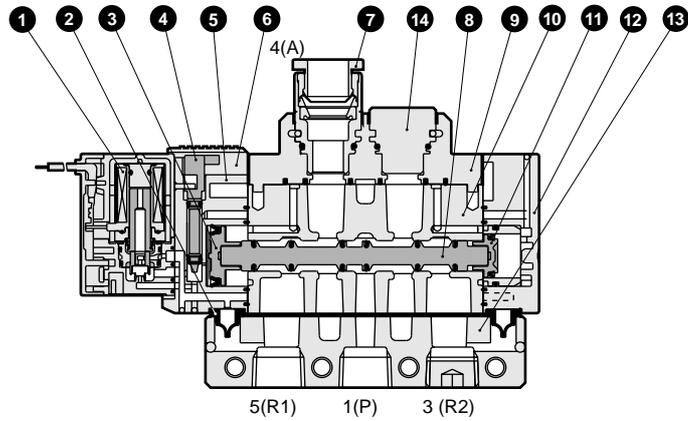
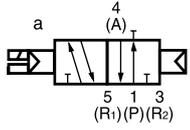
# 3GA2-3/4GA2-3 Series

Discrete valve: Body porting

## Internal structure and part list

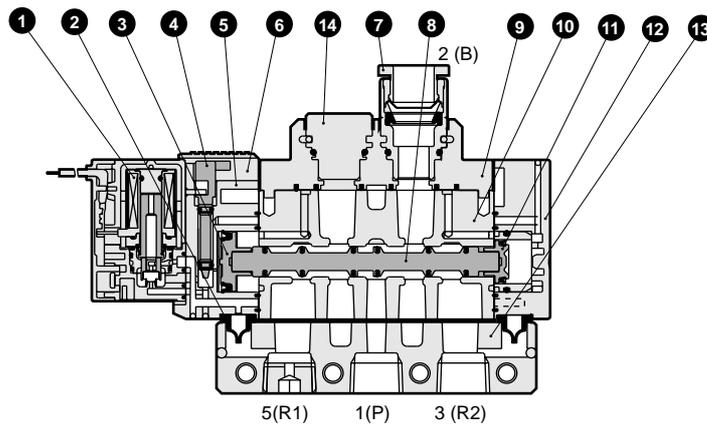
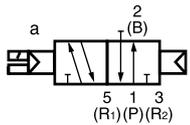
### 3GA210/3GA310

- 2-position single solenoid, N.C.
- Grommet lead wire(Blank)



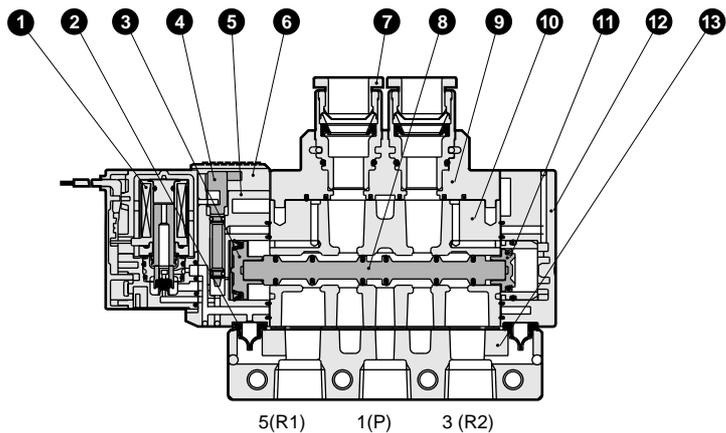
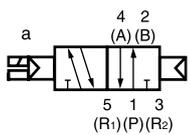
### 3GA2110/3GA3110

- 2-position single solenoid, N.O.
- Grommet lead wire(Blank)



### 4GA210/4GA310

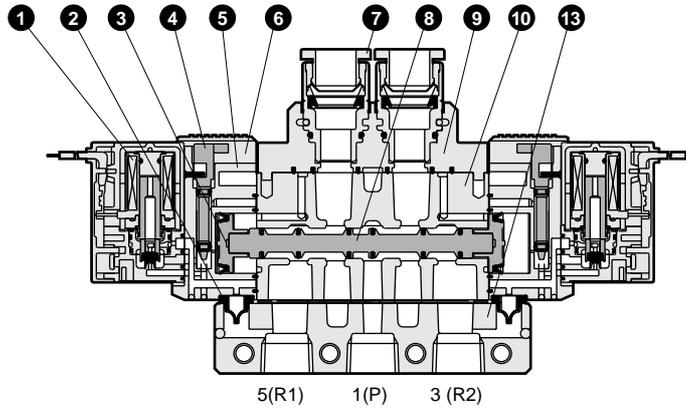
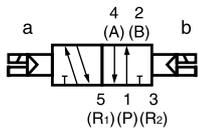
- 2-position single
- Grommet lead wire(Blank)



## Internal structure and part list

### 4GA220/4GA320

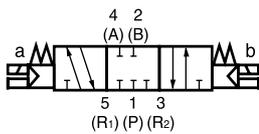
- 2-position double
- Grommet lead wire(Blank)



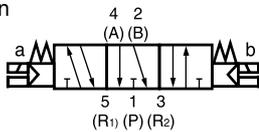
### 4GA2<sup>3</sup><sub>5</sub>40/4GA3<sup>3</sup><sub>5</sub>40

- 3-position
- Grommet lead wire(Blank)

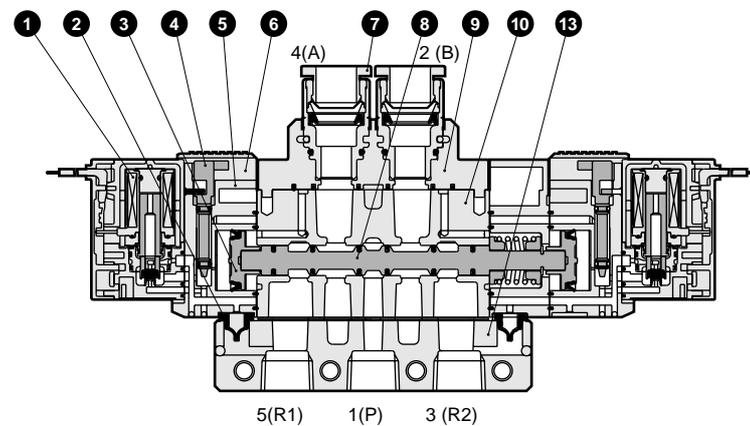
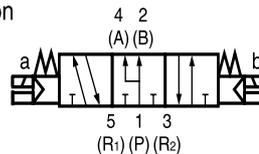
All ports closed



A/B/R connection



P/A/B connection



## Main part list

No.	Parts name	Material
1	Coil assembly	-
2	Pilot exhaust check valve	Nitrile rubber
3	Piston D assembly	-
4	Manual override	Resin
5	Piston room	Resin
6	Protective cover of manual override	Resin
7	Cartridge type quick connector	-
8	Spool assembly	-
9	Joint adaptor	Resin
10	Body	Aluminum alloy die casting
11	Piston S assembly	-
12	Cap	Resin
13	Piping adapter	Aluminum alloy die casting
14	Plug cartridge	Aluminum

## Repair parts list

No.	Parts name	Model No.
1	Coil assembly	4G-[Electric connection]- * - COIL- [Voltage]
		Blank: Standard A: Ozone proof Blank: Grommet lead wire
7	Cartridge type quick connector and related parts	4 dia. straight type
		6 dia. straight type
		8 dia. straight type
		10 dia. straight type
		Plug cartridge

4SA/B0

4SA/B1

4GA/B

MN4GA/B

4GA/B (master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

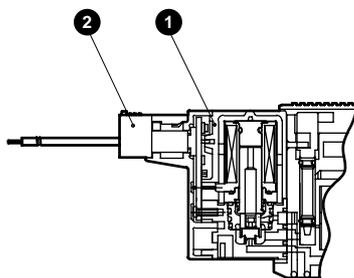
Discrete  
3, 5 port pilot operated valve

# 3GA1-2-3/4GA1-2-3 Series

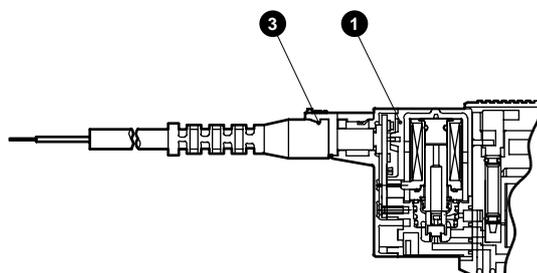
Discrete valve: Body porting

## Internal structure and part list (Electric connection)

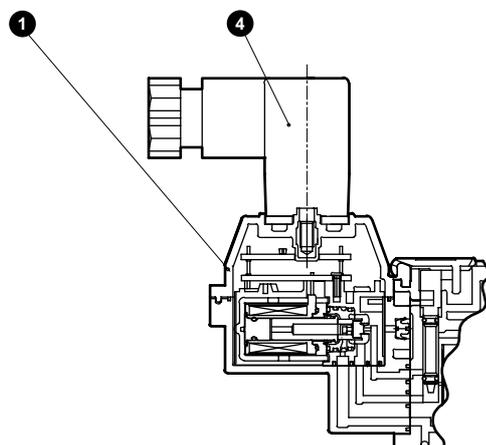
- E-connector type (E\*\*)



- EJ-connector type (E\*\*J)



- DIN terminal box type (B)



### Main part list

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

### Repair parts list

No.	Parts name	Model No.
1	Coil assembly	4G-[Electric connection]-* - COIL- [Voltage] Blank: Standard A: Ozone proof E* : E-connector type E* J: Socket with cover type B : DIN terminal box type When B, DIN terminal box is included.
2	E-connector socket assembly	4G-SOCKET ASSY-E**-[Voltage]
3	Socket with cover assembly	4G-SOCKET ASSY-E**J
4	DIN terminal box assembly	4G-TERMINAL BOX-[Voltage]

# 3GA1 Series

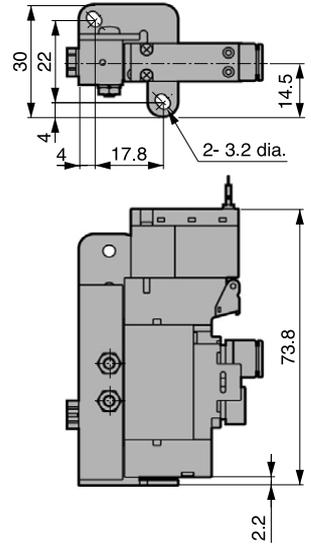
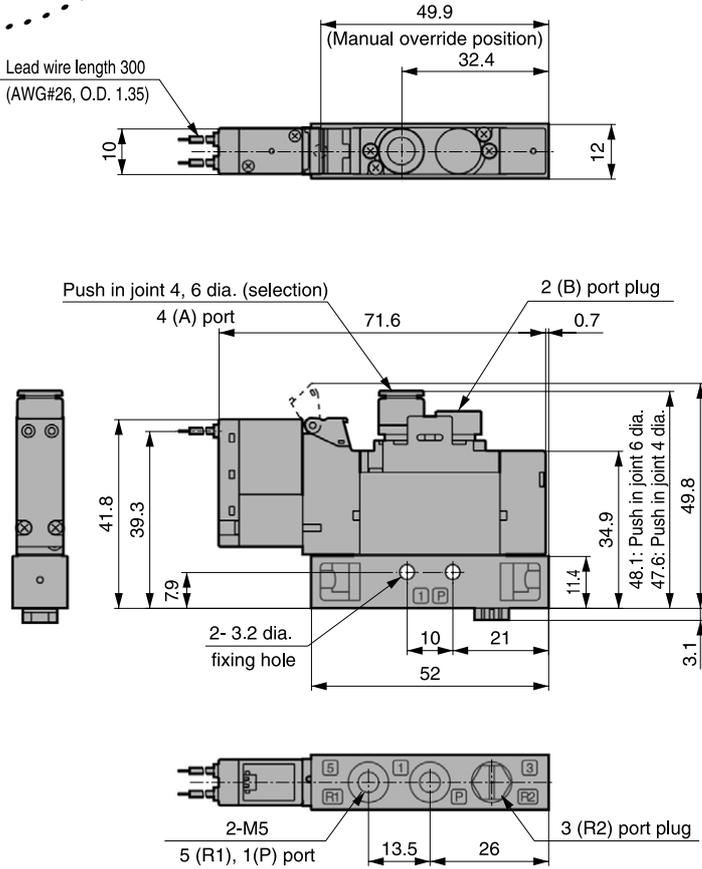
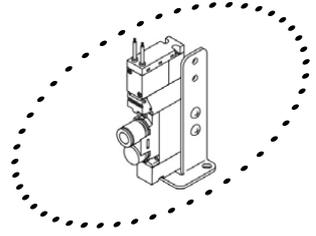
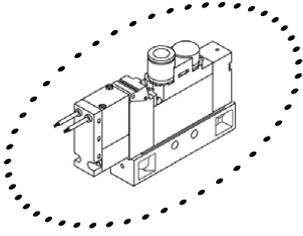
Discrete valve: Body porting

## Dimensions

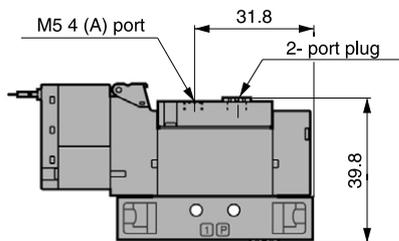
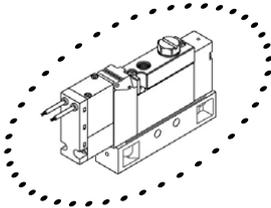
3GA110  (File name: Page 239 or Ending 15)

- 2-position single solenoid, N.C. grommet lead wire

- Mounting plate type(P)

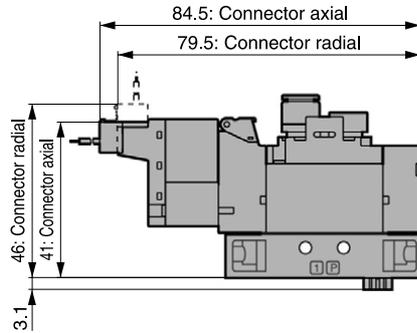
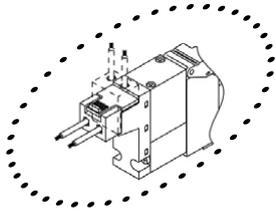


- M5 female thread type(M5)



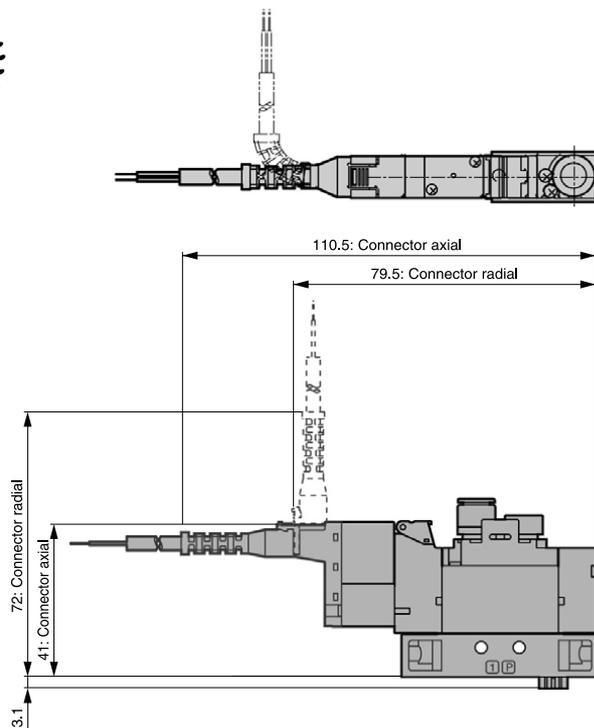
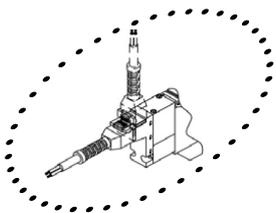
### Dimensions

- E-connector type(E)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

- EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete

3, 5 port pilot operated valve

# 3GA1 Series

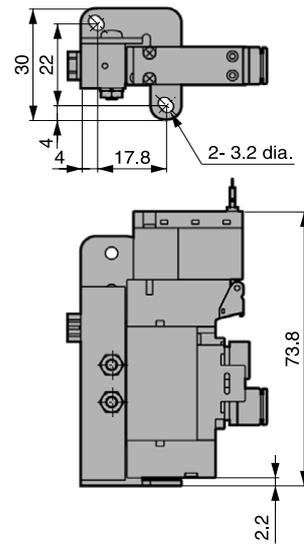
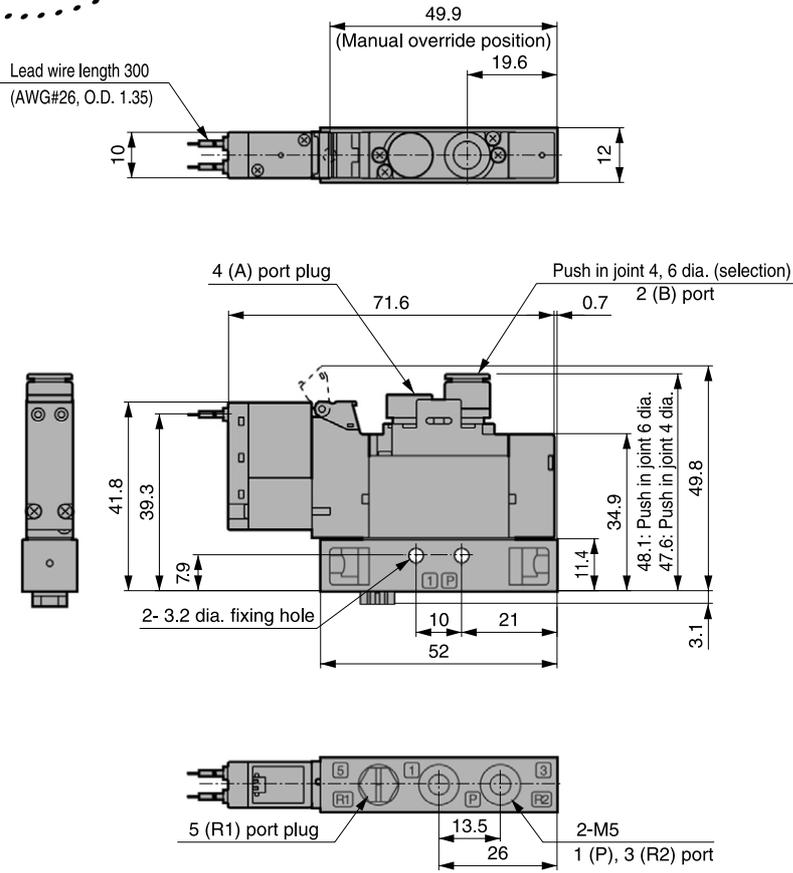
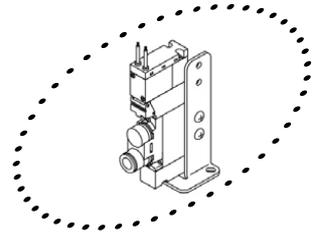
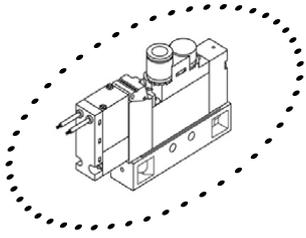
Discrete valve: Body porting

## Dimensions

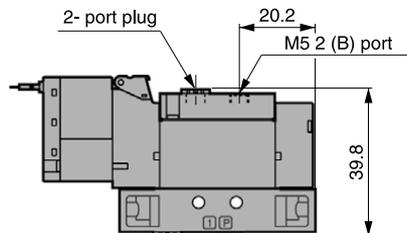
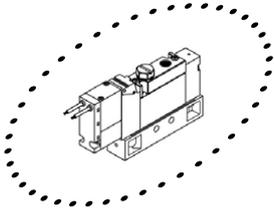
3GA1110  (File name: Page 239 or Ending 15)

• 2-position single solenoid, N.O. grommet lead wire

• Mounting plate type(P)

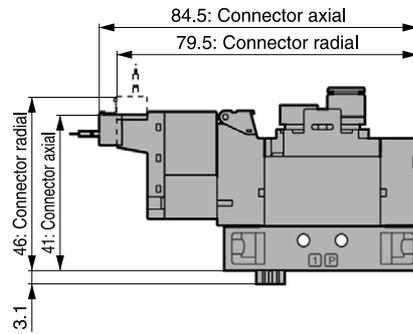
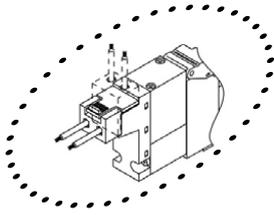


• M5 female thread type(M5)



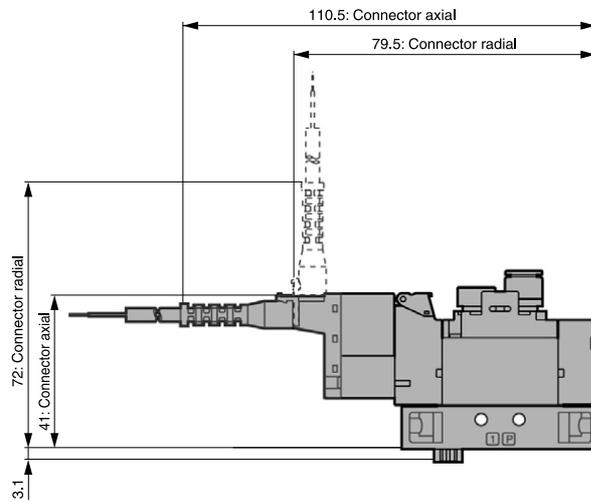
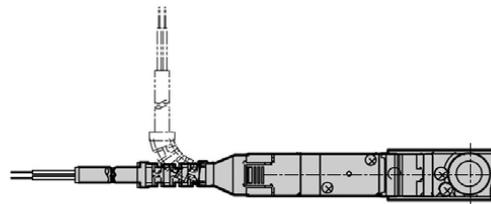
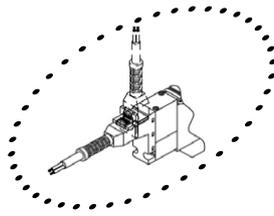
### Dimensions

• E-connector type(E)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete

3, 5 port pilot operated valve

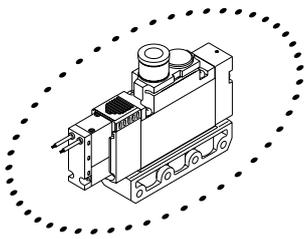
# 3GA2 Series

Discrete valve: Body porting

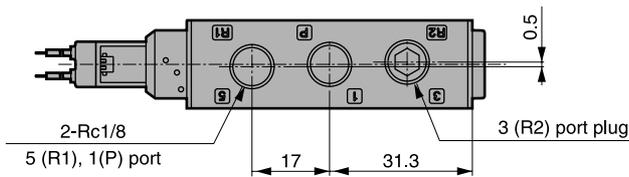
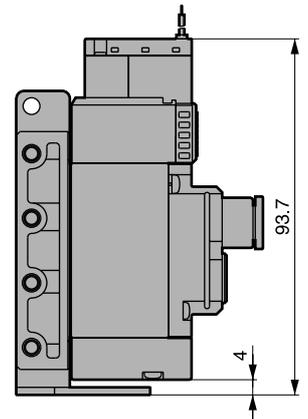
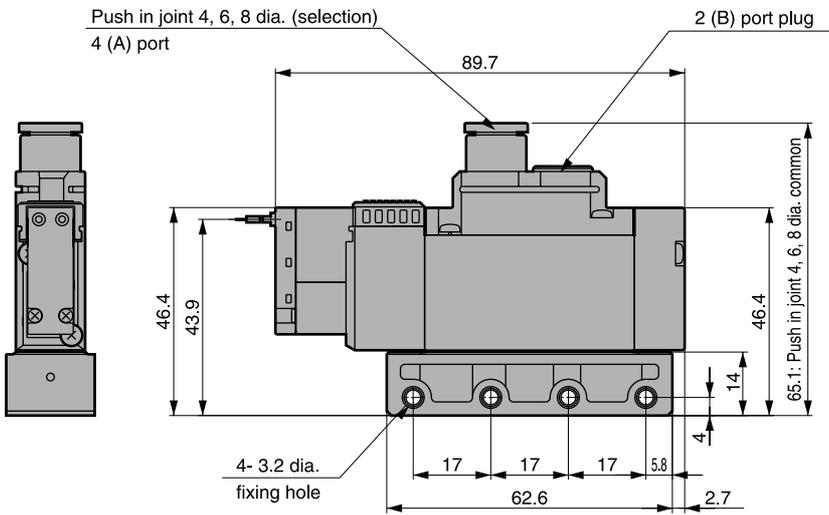
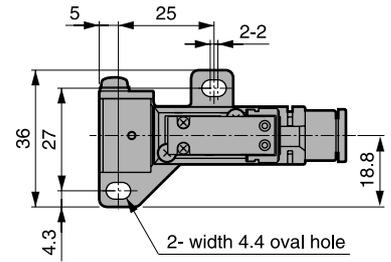
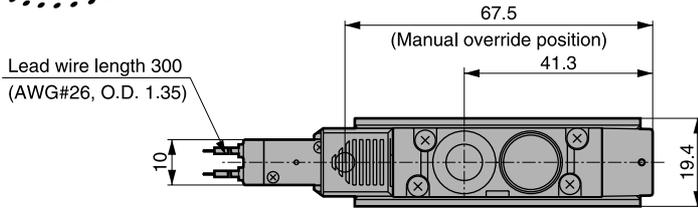
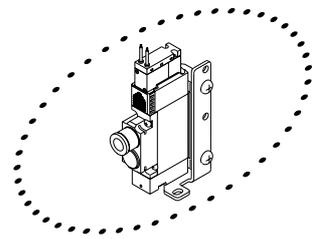
## Dimensions

3GA210  (File name: Page 239 or Ending 15)

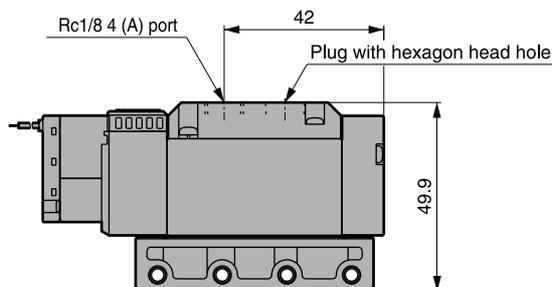
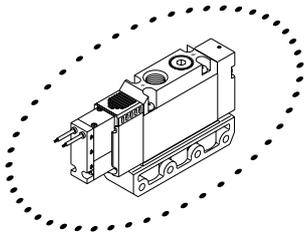
• 2-position single solenoid, N.C. grommet lead wire



• Mounting plate type(P)

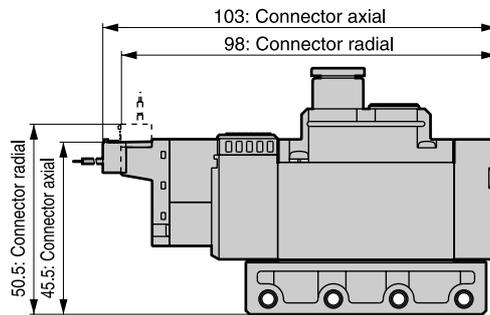
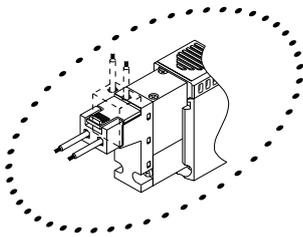


• Rc1/8 female thread type(06)



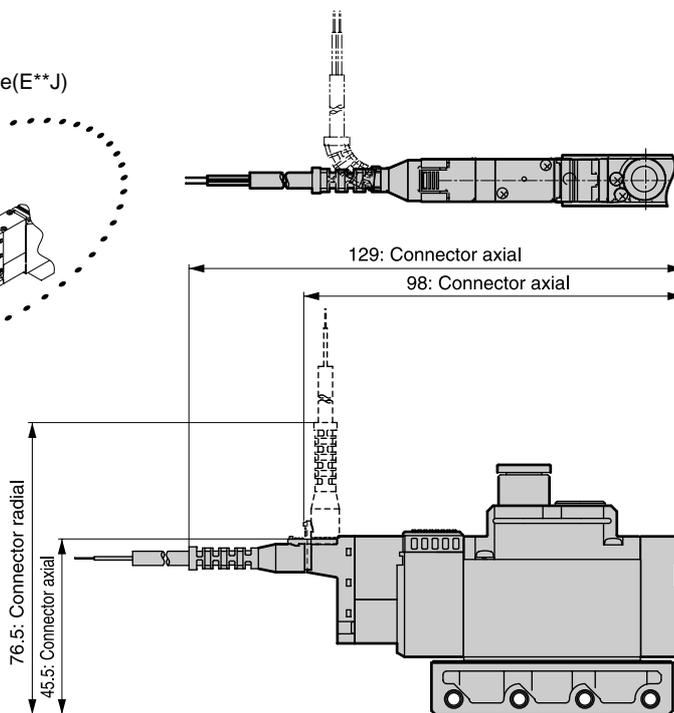
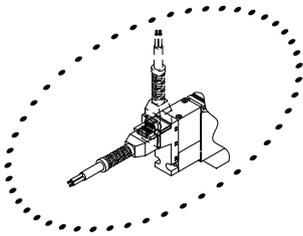
### Dimensions

• E-connector type(E)



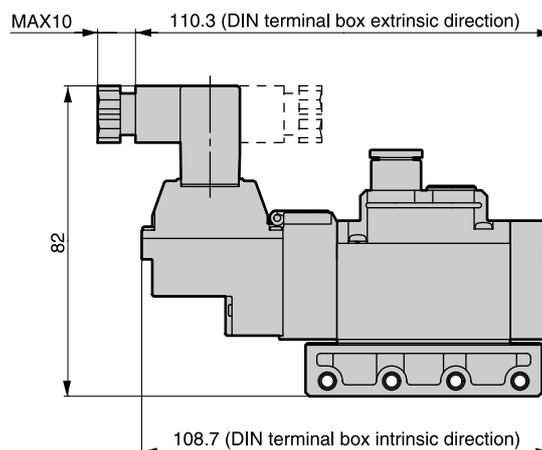
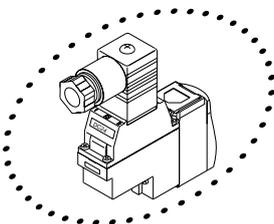
Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete  
**3, 5 port pilot operated valve**

# 3GA2 Series

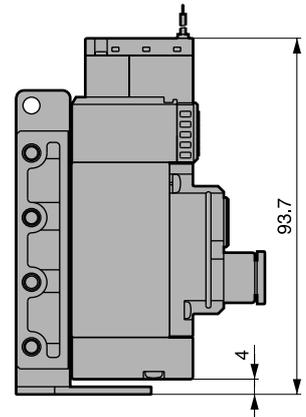
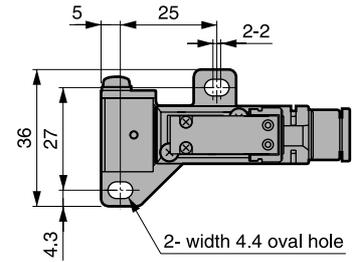
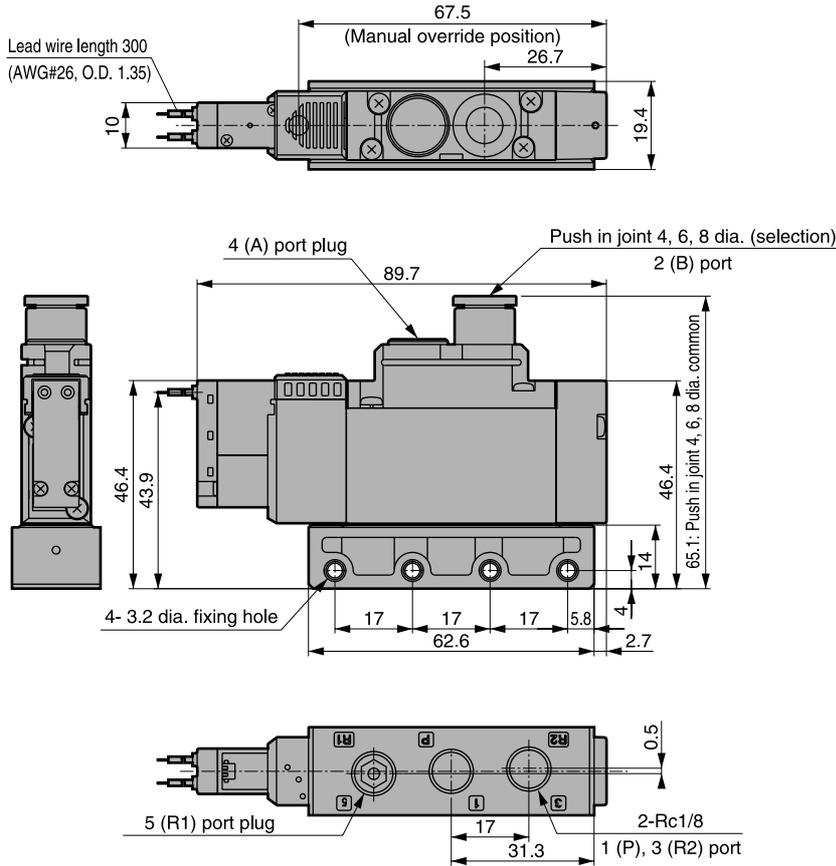
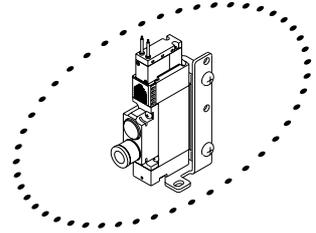
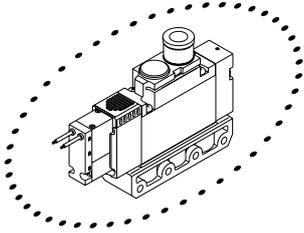
Discrete valve: Body porting

## Dimensions

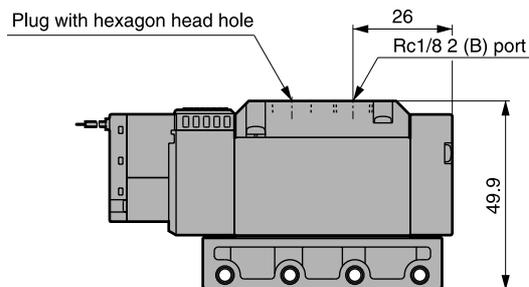
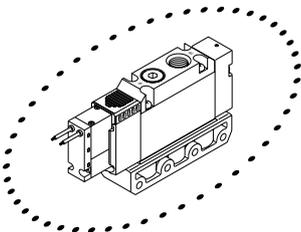
3GA2110  (File name: Page 239 or Ending 15)

• 2-position single solenoid, N.O. grommet lead wire

• Mounting plate type(P)

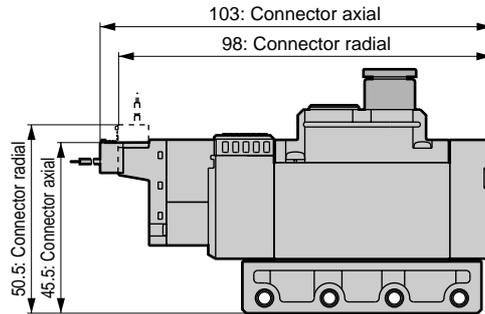
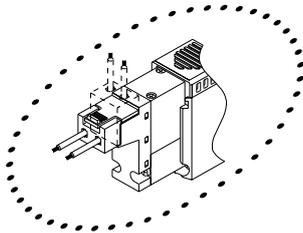


• Rc1/8 female thread type(O6)



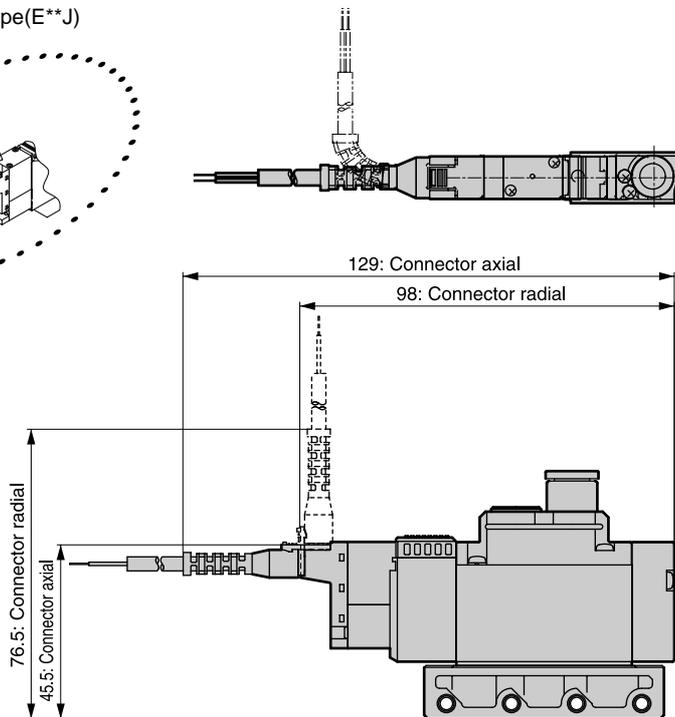
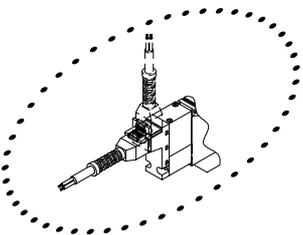
### Dimensions

• E-connector type(E)



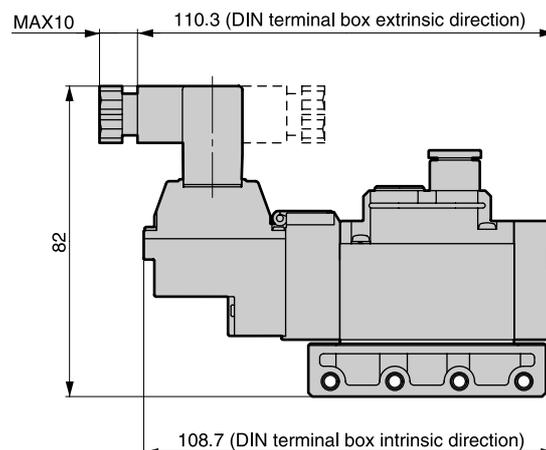
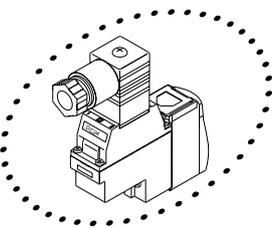
Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete

3, 5 port pilot operated valve

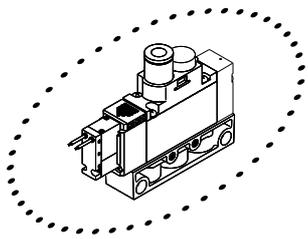
# 3GA3 Series

Discrete valve: Body porting

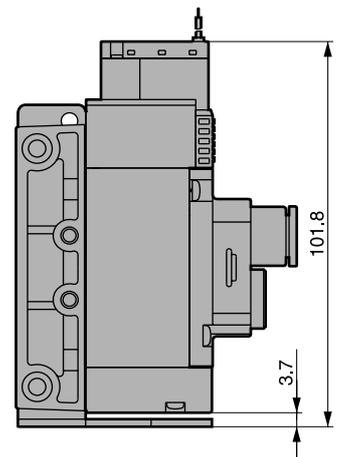
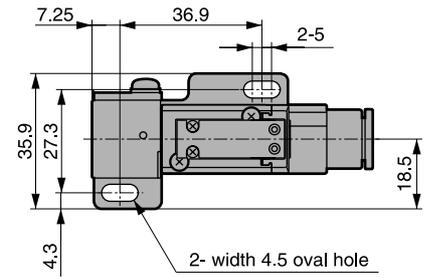
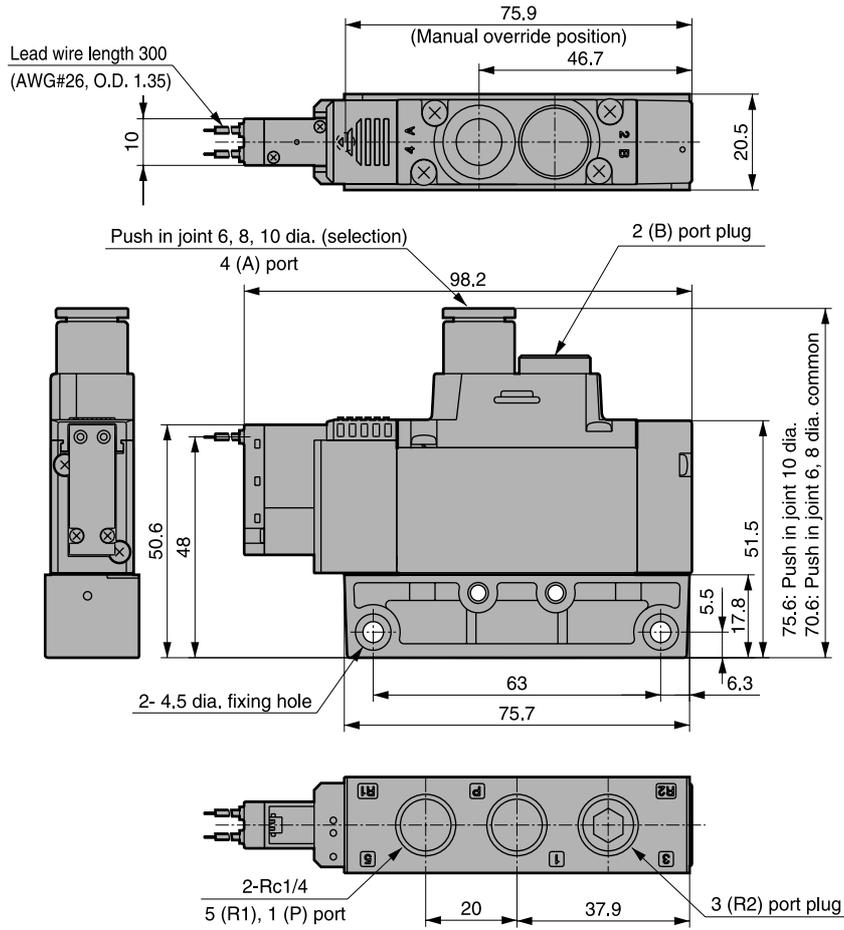
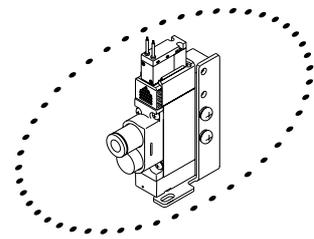
## Dimensions

3GA310  (File name: Page 239 or Ending 15)

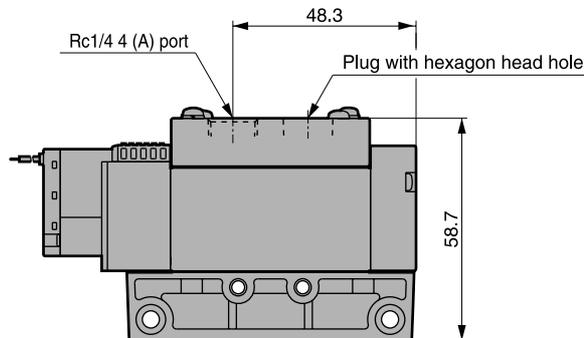
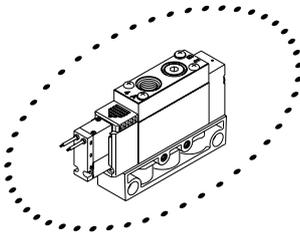
• 2-position single solenoid, N.C. grommet lead wire



• Mounting plate type(P)

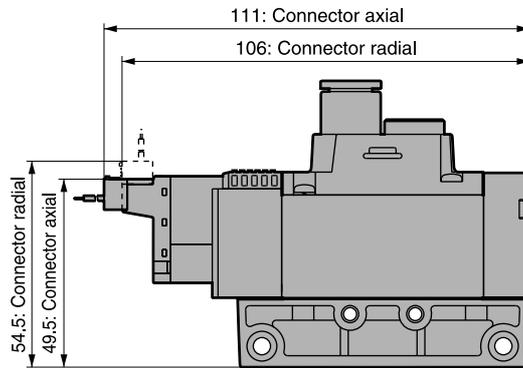
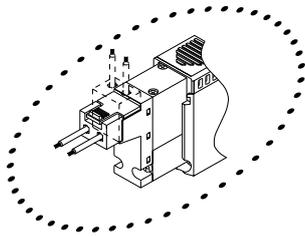


• Rc1/4 female thread type(08)



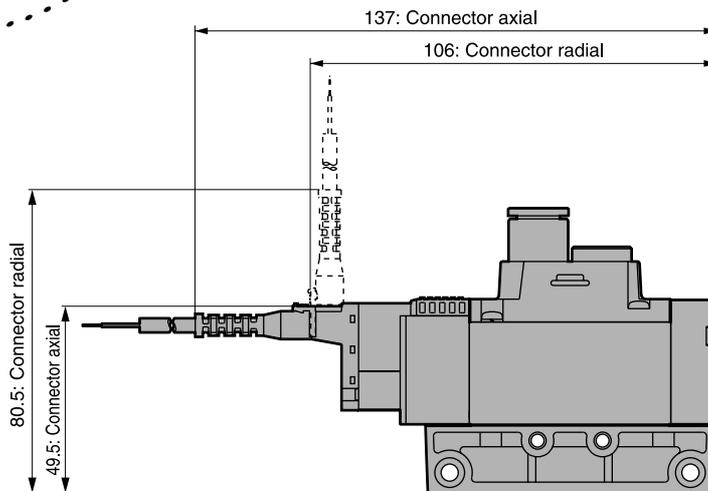
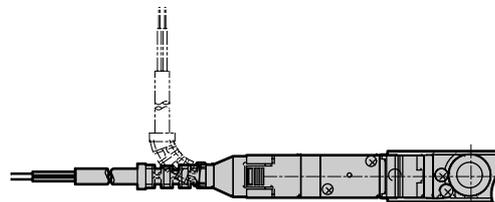
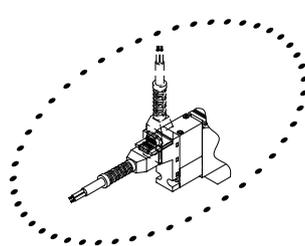
### Dimensions

• E-connector type(E)



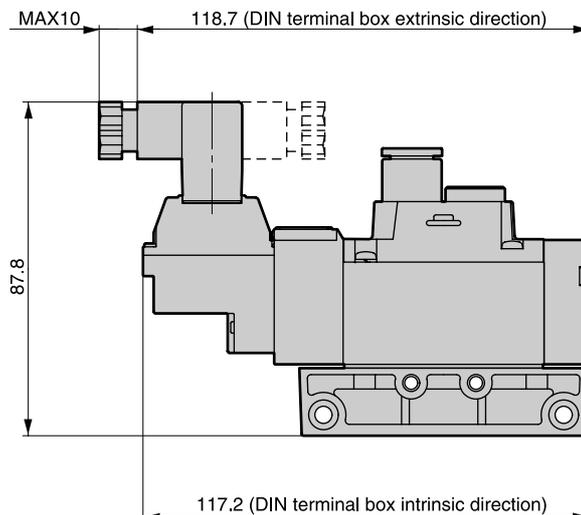
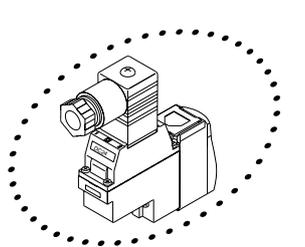
Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B (master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete

3, 5 port pilot operated valve

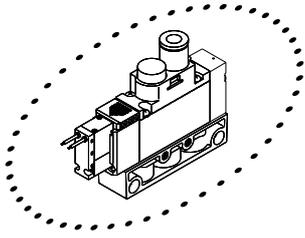
# 3GA3 Series

Discrete valve: Body porting

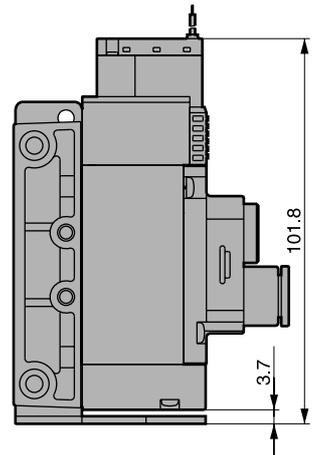
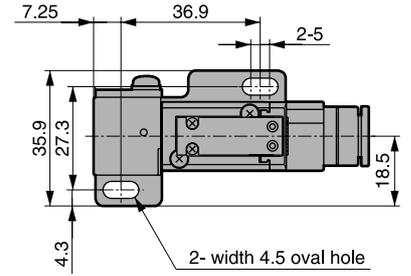
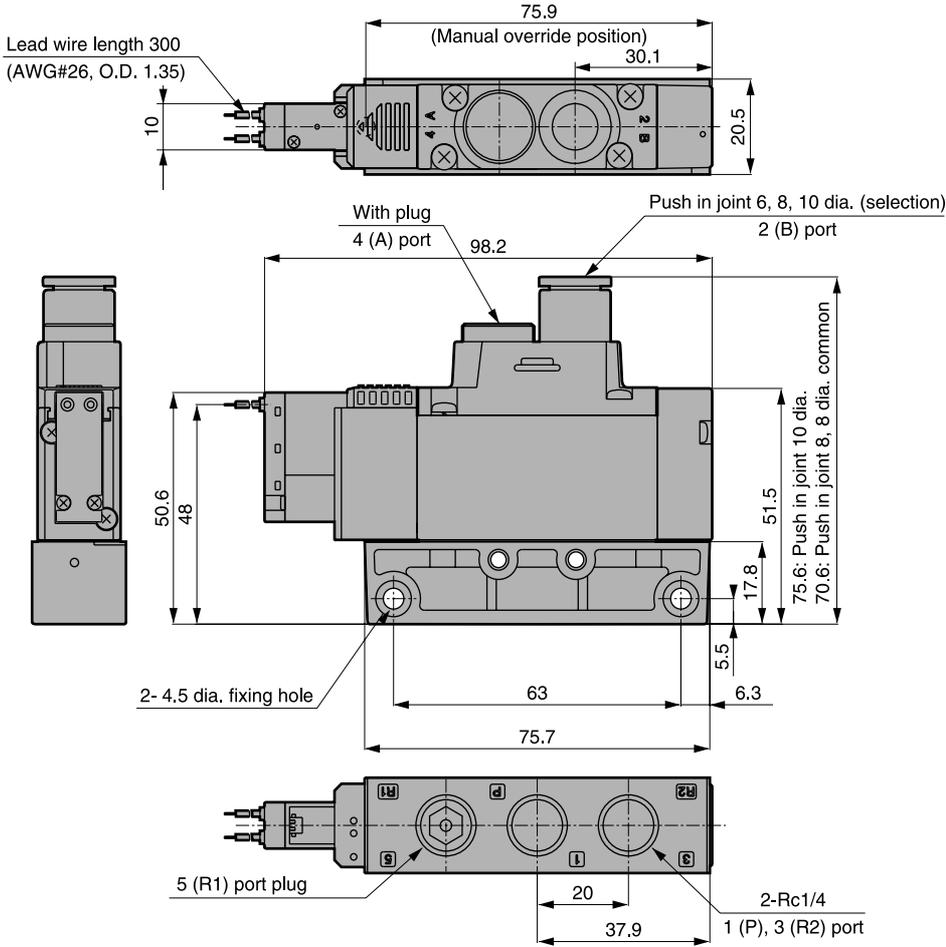
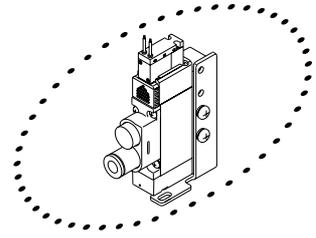
## Dimensions

3GA3110  (File name: Page 239 or Ending 15)

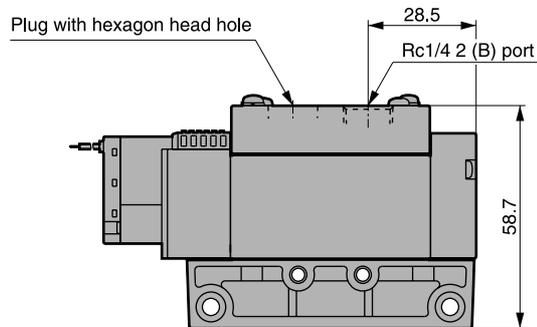
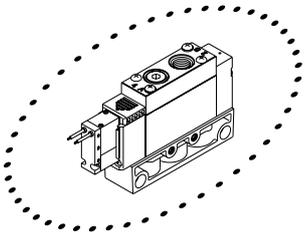
• 2-position single solenoid, N.O. grommet lead wire



• Mounting plate type(P)

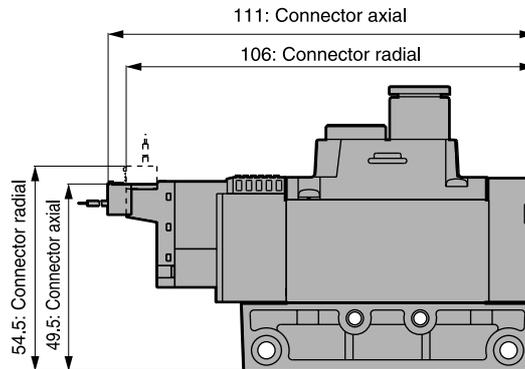
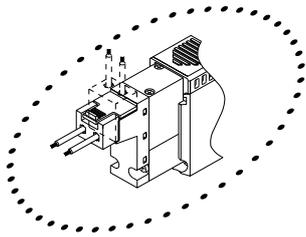


• Rc1/4 female thread type(08)



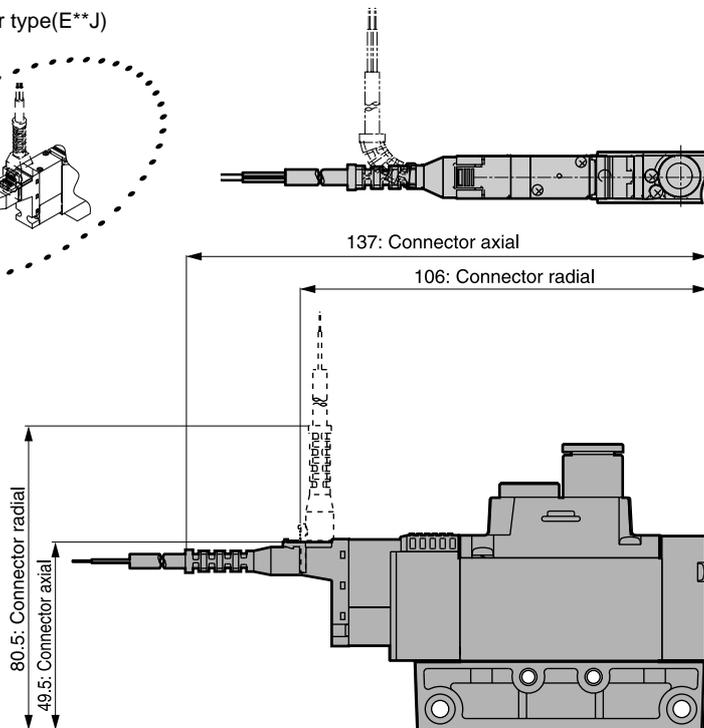
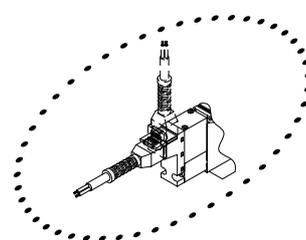
### Dimensions

• E-connector type(E)



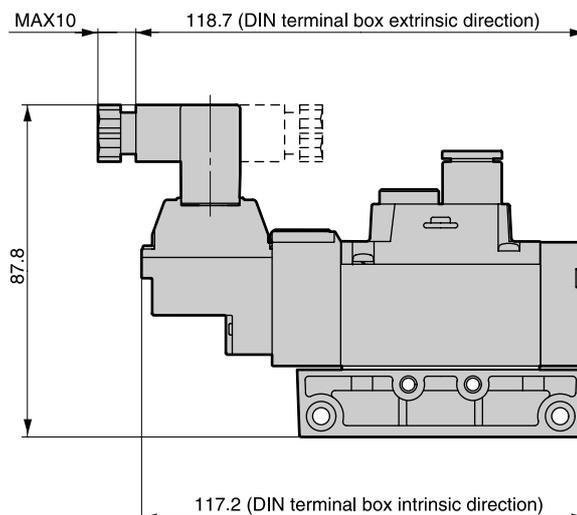
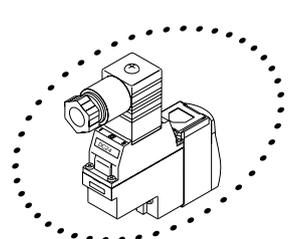
Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B (master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete  
**3, 5 port pilot operated valve**

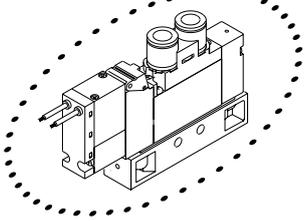
# 4GA1 Series

Discrete valve: Body porting

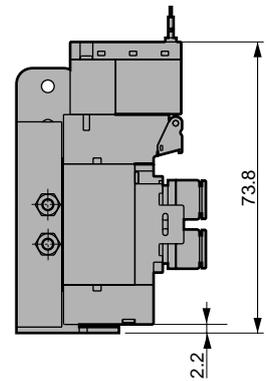
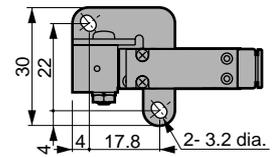
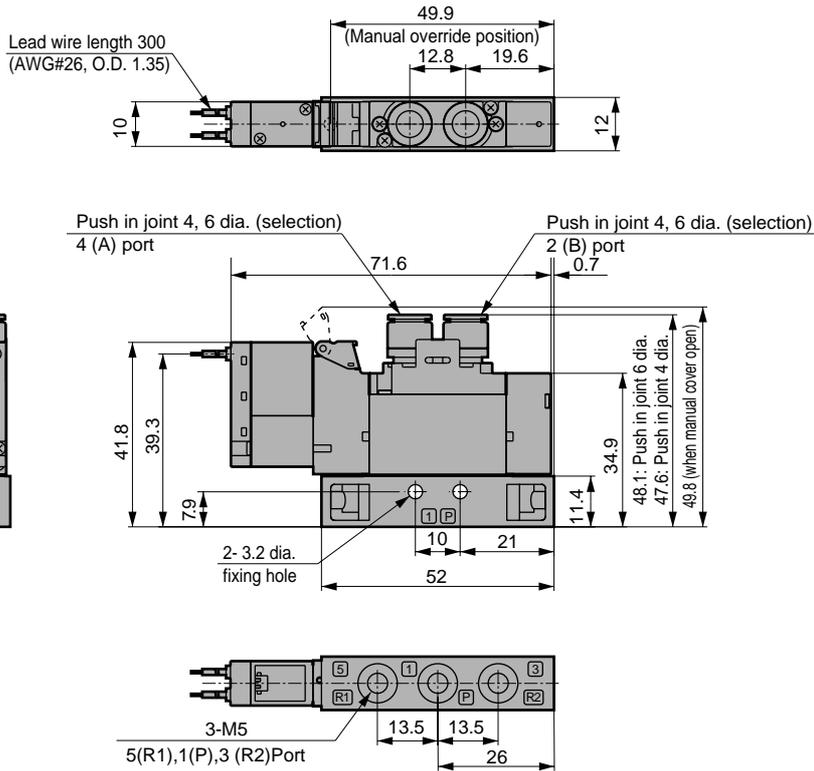
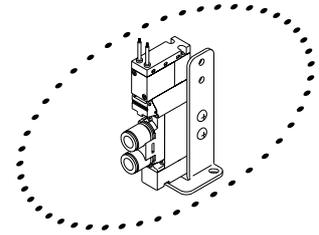
## Dimensions

4GA110  (File name: Page 239 or Ending 15)

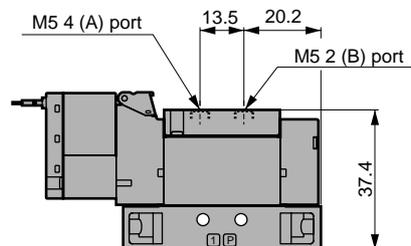
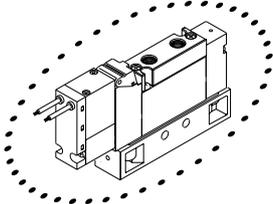
• 2-position single grommet lead wire (Blank)



• Mounting plate type (P)

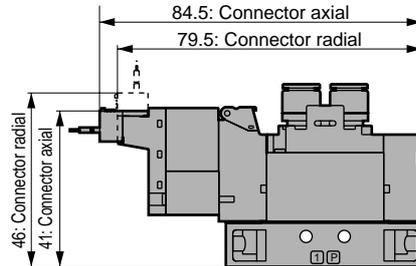
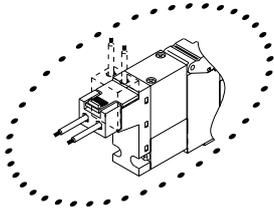


• M5 female thread type (M5)



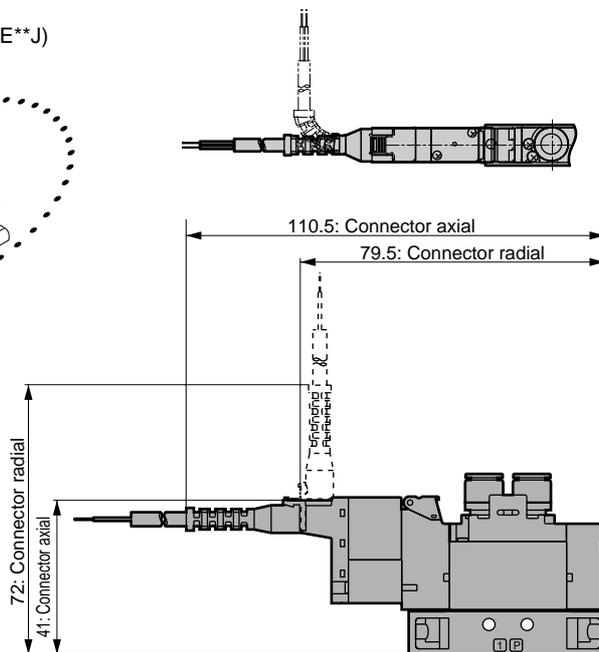
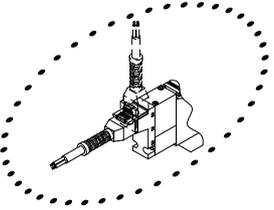
### Dimensions

• E-connector type(E)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete  
3, 5 port pilot operated valve

# 4GA1 Series

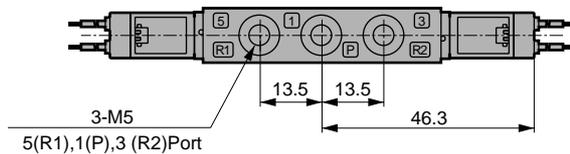
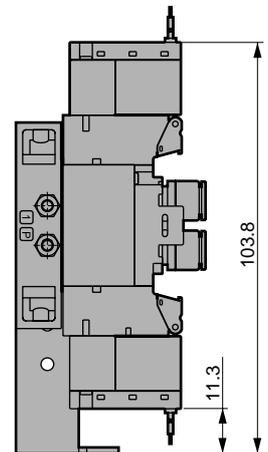
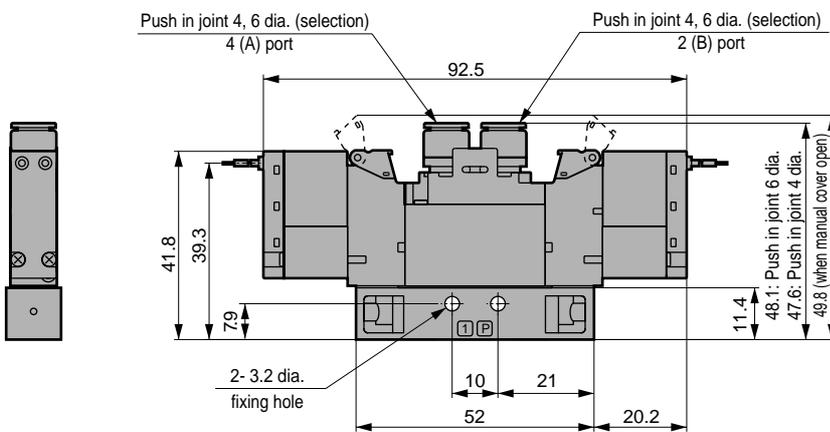
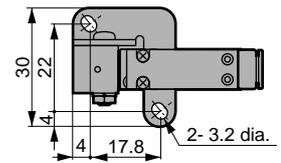
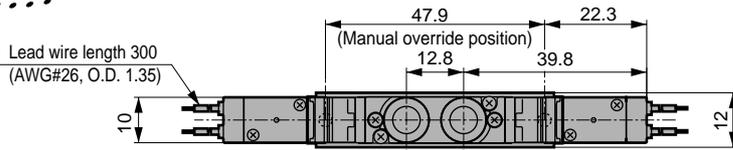
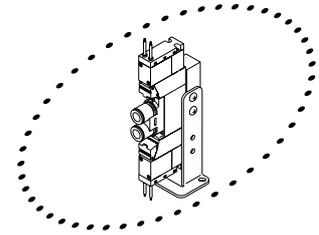
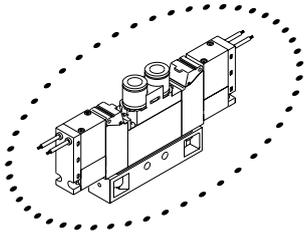
Discrete valve: Body porting

## Dimensions

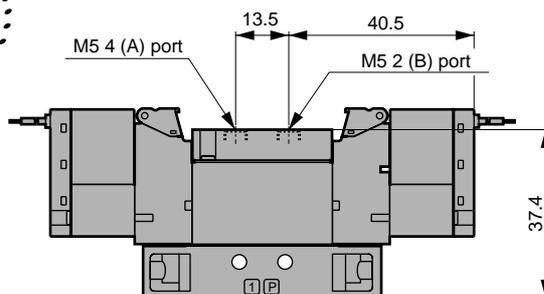
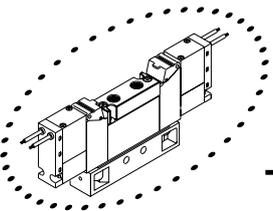
4GA120  (File name: Page 239 or Ending 15)

• 2-position double grommet lead wire (Blank)

• Mounting plate type (P)

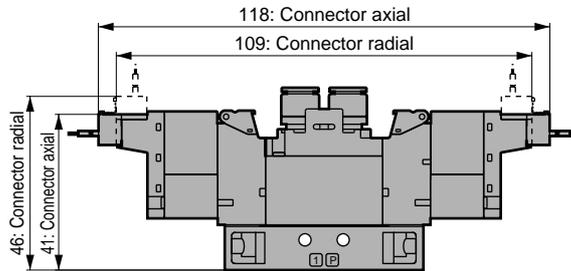
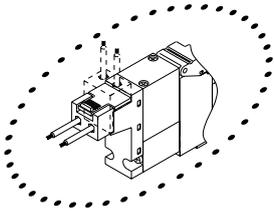


• M5 female thread type (M5)



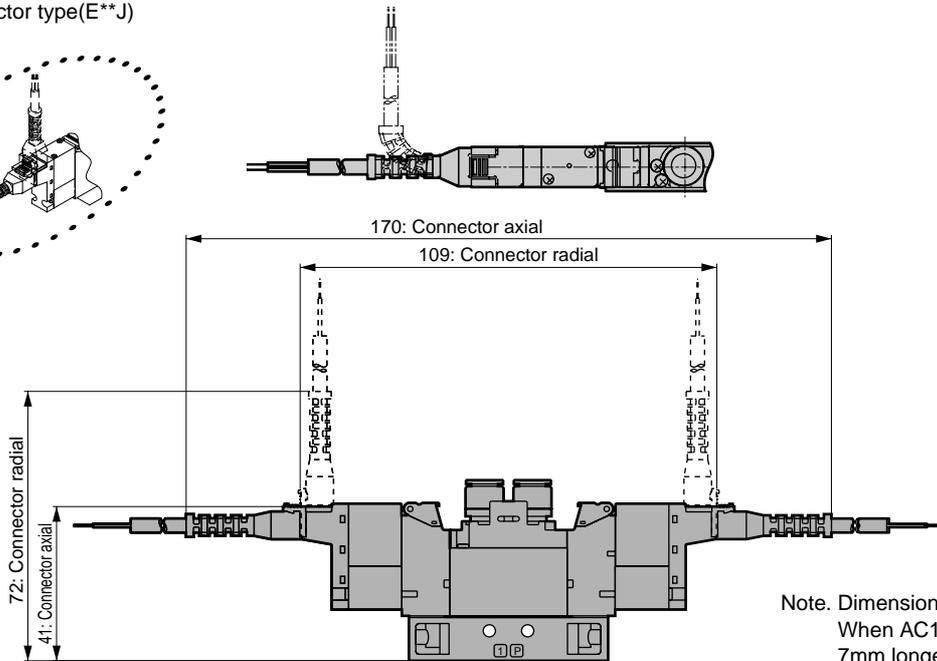
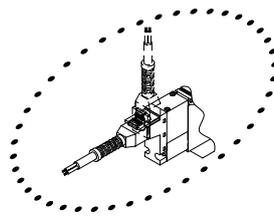
### Dimensions

• E-connector type(E)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMFO

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete

3, 5 port pilot operated valve

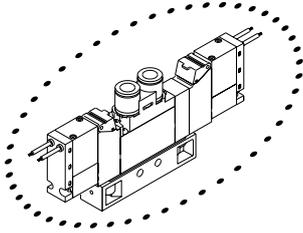
# 4GA1 Series

Discrete valve: Body porting

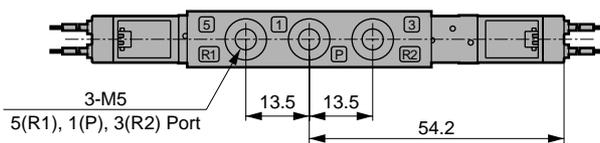
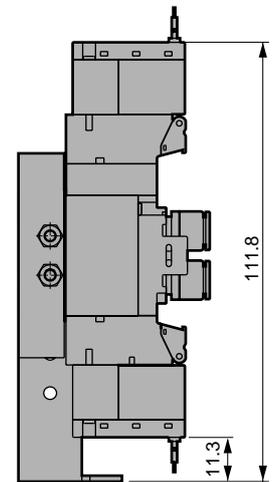
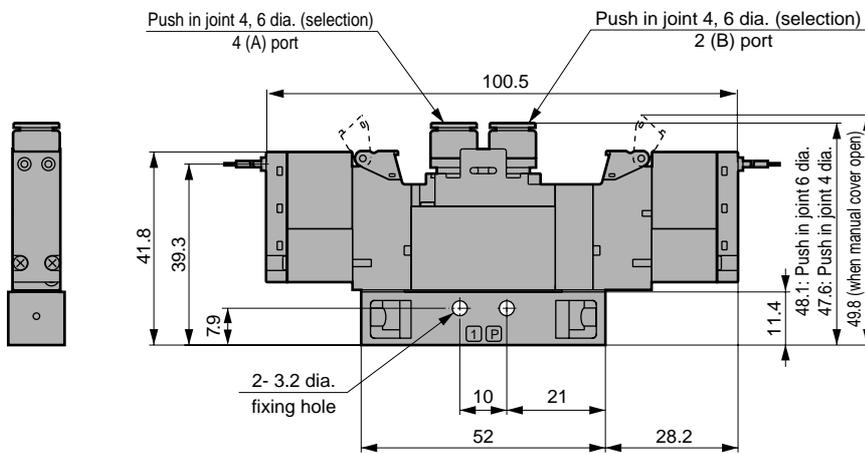
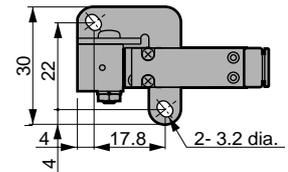
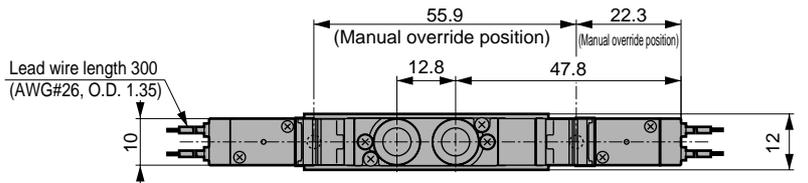
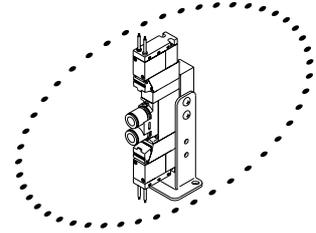
## Dimensions

4GA1<sup>3</sup><sub>4</sub><sup>5</sup>  (File name: Page 239 or Ending 15)

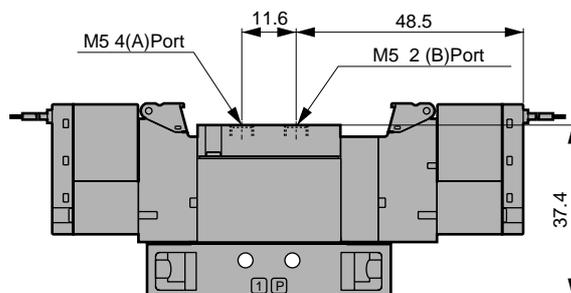
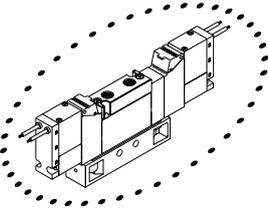
• 3-position grommet lead wire (Blank)



• Mounting plate type (P)

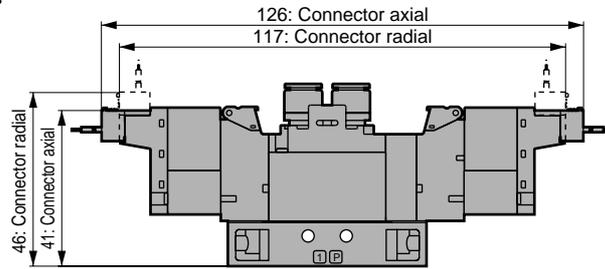
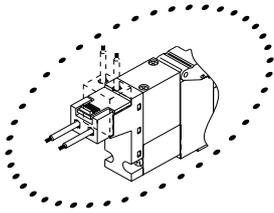


• M5 female thread type (M5)



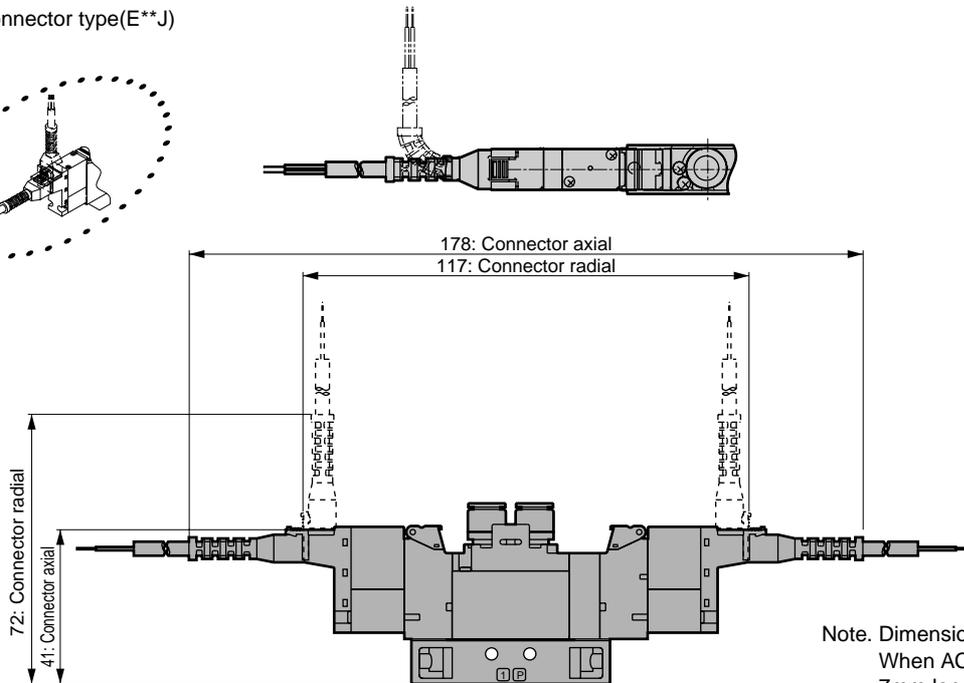
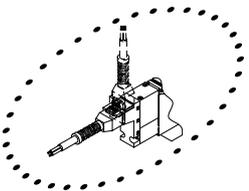
## Dimensions

• E-connector type(E)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete  
3, 5 port pilot operated valve

# 4GA2 Series

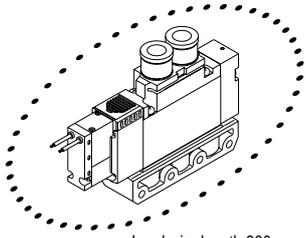
Discrete valve: Body porting

## Dimensions

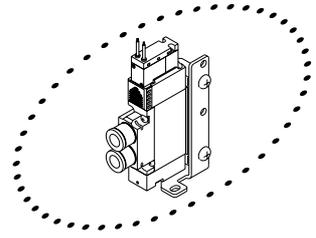
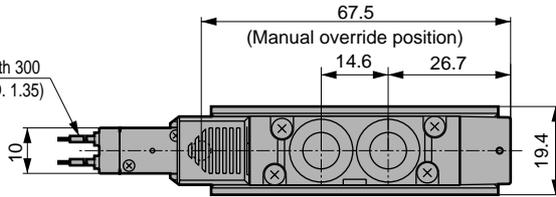
4GA210  (File name: Page 239 or Ending 15)

• 2-position single grommet lead wire (Blank)

• Mounting plate type (P)

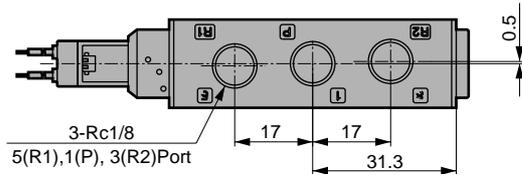
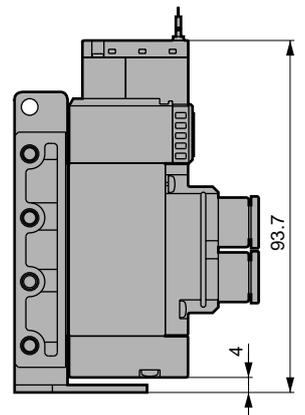
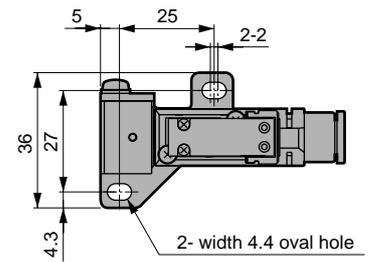
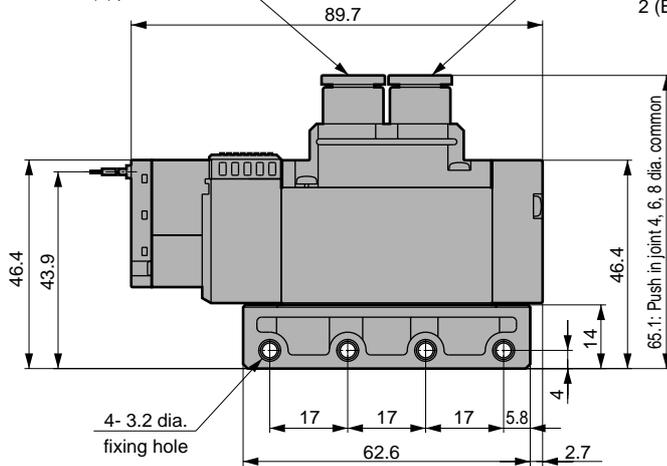
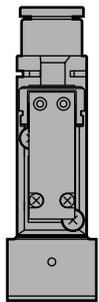


Lead wire length 300  
(AWG#26, O.D. 1.35)

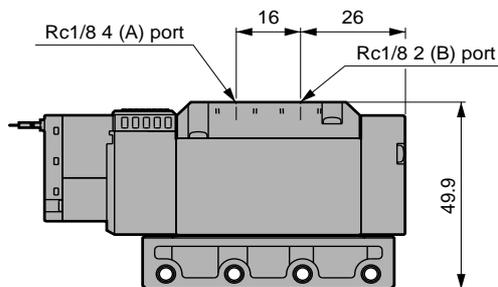
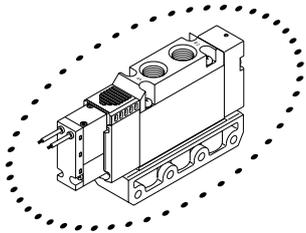


Push in joint 4, 6, 8 dia. (selection)  
4 (A) port

Push in joint 4, 6, 8 dia. (selection)  
2 (B) Port

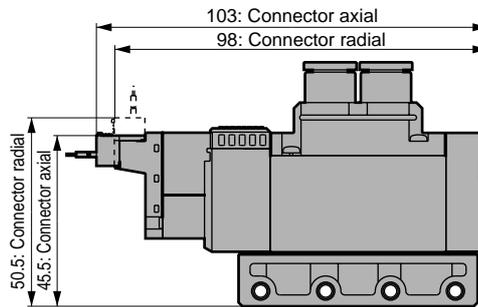
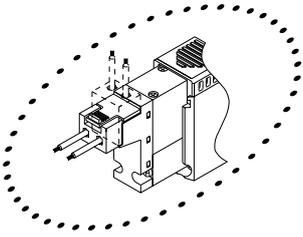


• Rc1/8 female thread type (06)



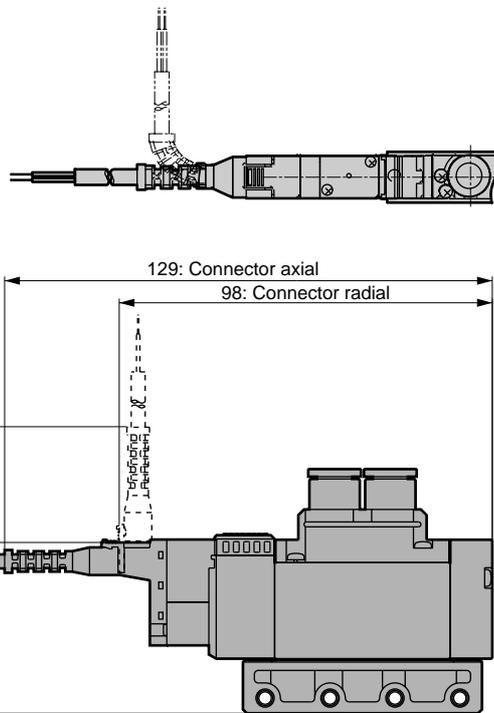
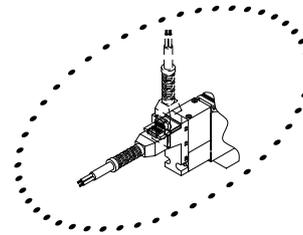
### Dimensions

• E-connector type(E)



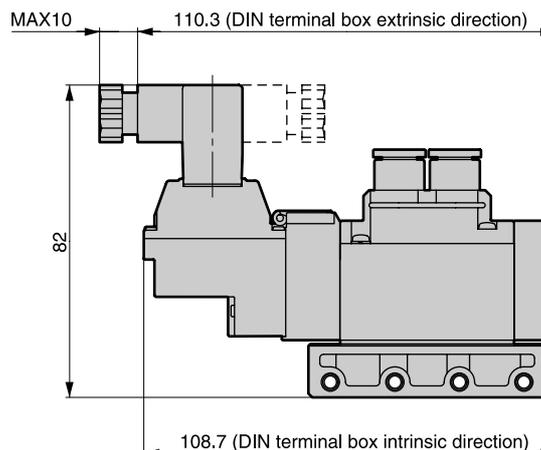
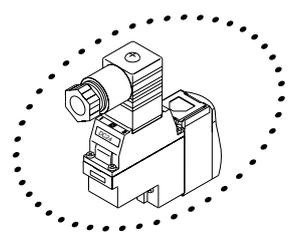
Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B (master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete  
3, 5 port pilot operated valve

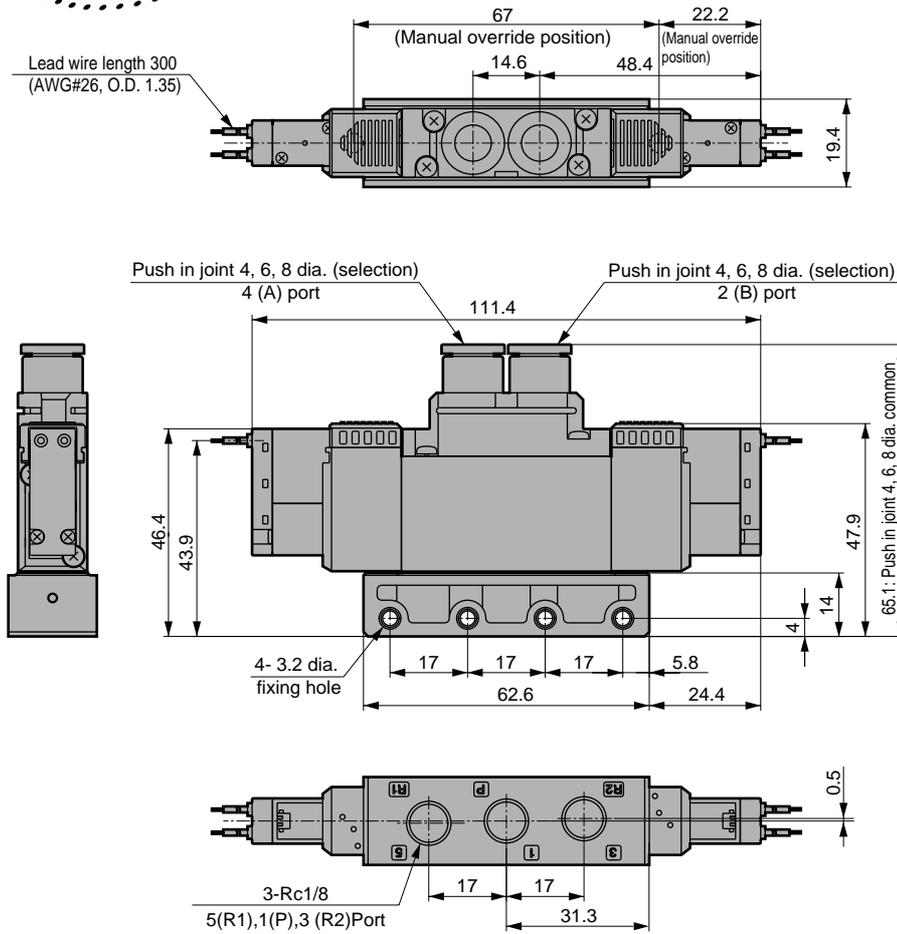
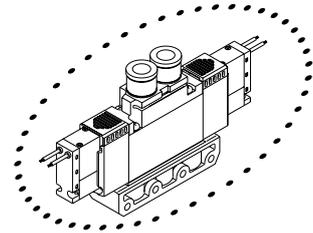
# 4GA2 Series

Discrete valve: Body porting

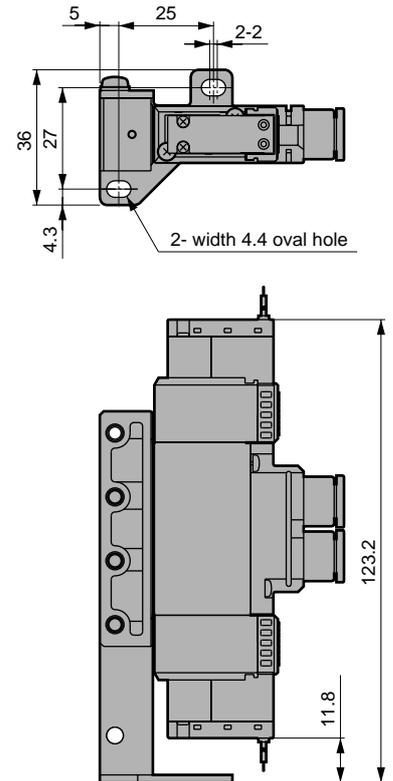
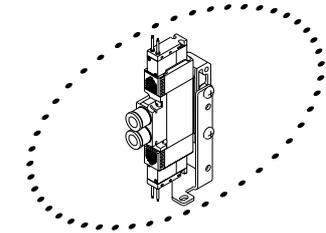
## Dimensions

4GA220  (File name: Page 239 or Ending 15)

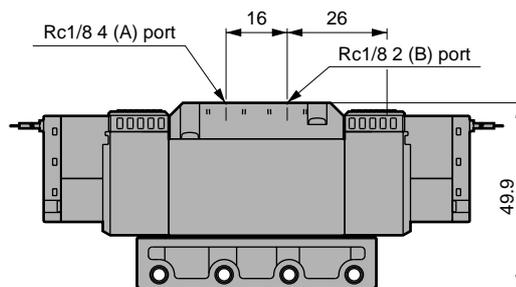
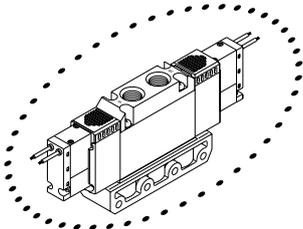
• 2-position double grommet lead wire (Blank)



• Mounting plate type (P)

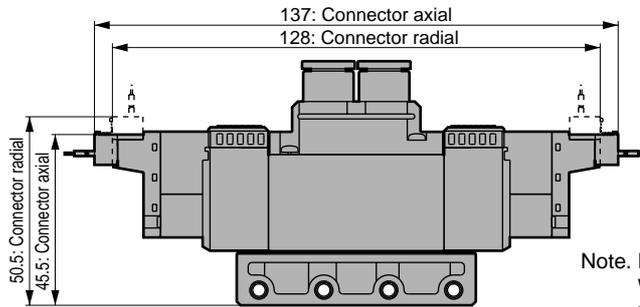
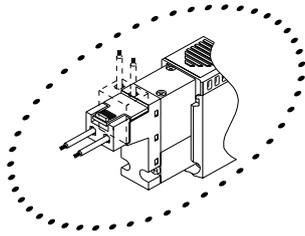


• Rc1/8 female thread type (06)



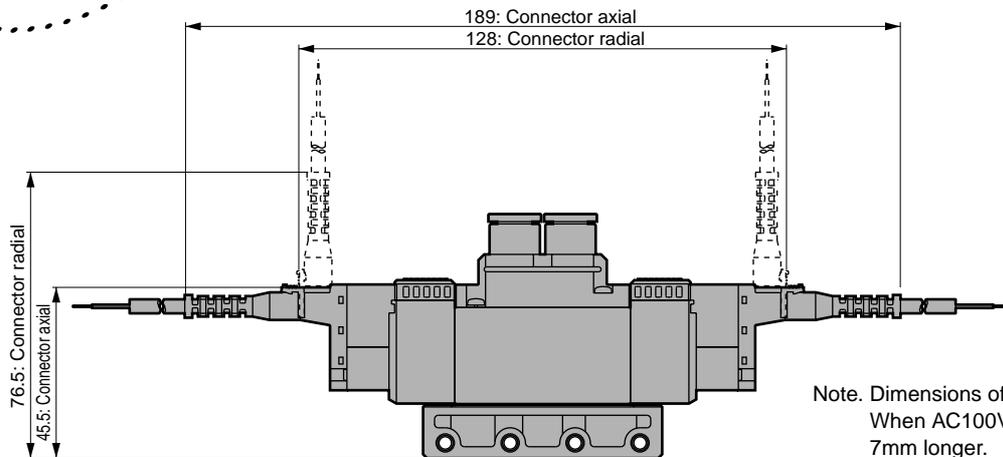
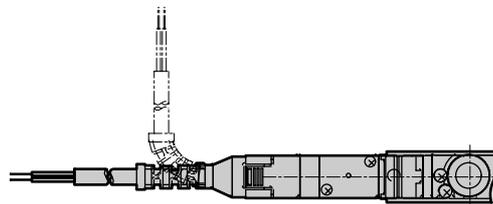
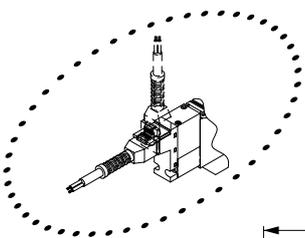
### Dimensions

• E-connector type(E)



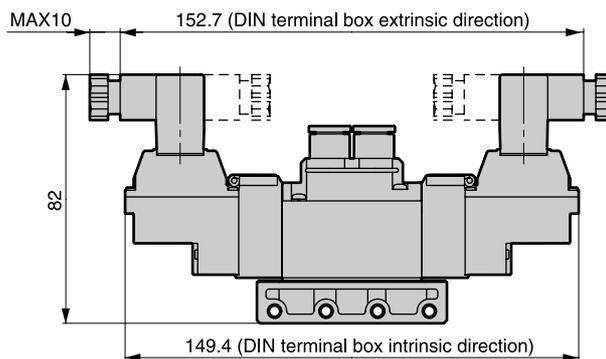
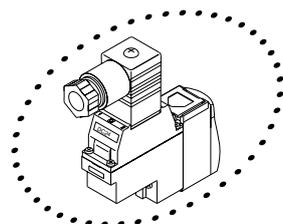
Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

• DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B (master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete  
3, 5 port pilot operated valve

# 4GA2 Series

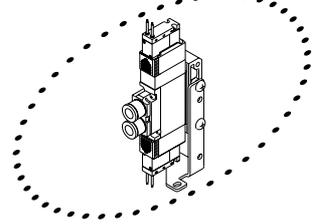
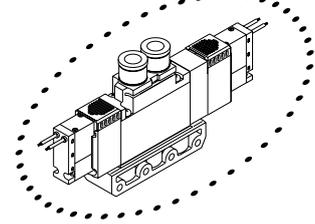
Discrete valve: Body porting

## Dimensions

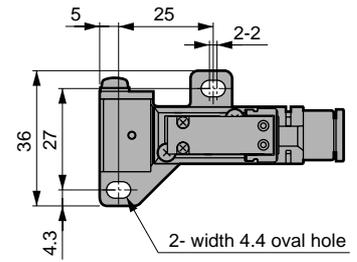
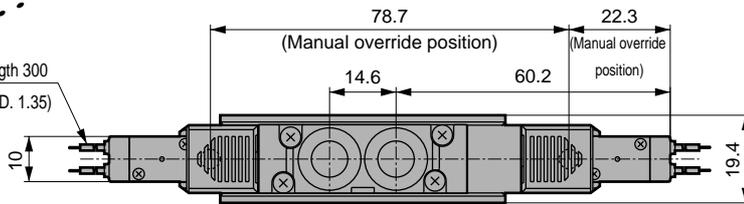
4GA2<sup>3</sup><sub>40</sub>  (File name: Page 239 or Ending 15)

• 3-position grommet lead wire (Blank)

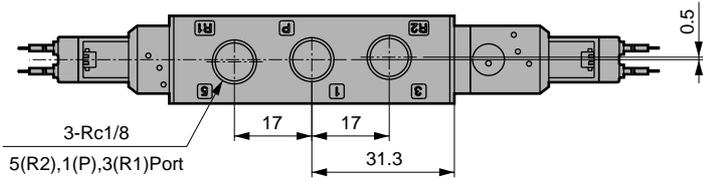
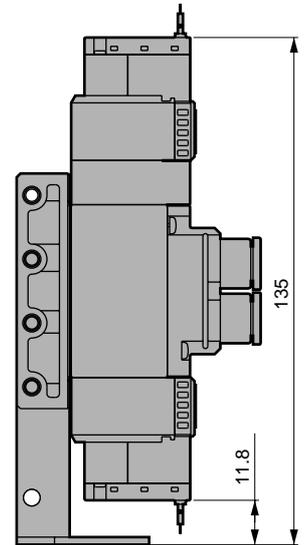
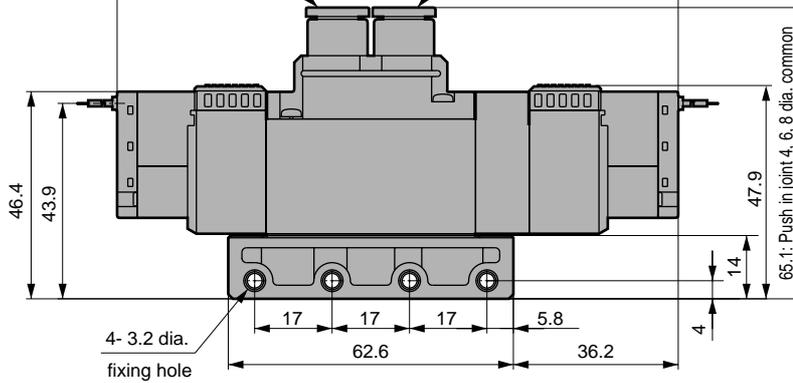
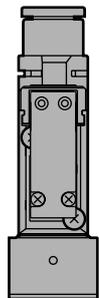
• Mounting plate type (P)



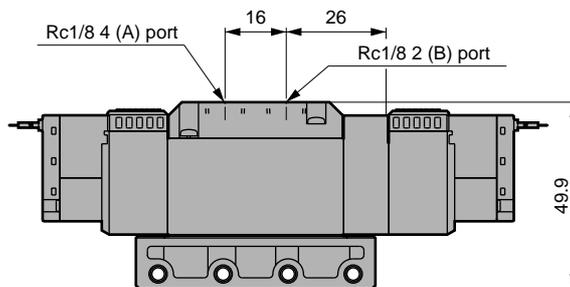
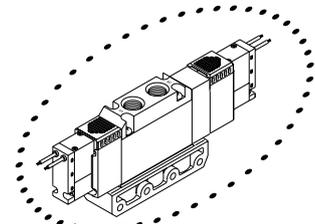
Lead wire length 300  
(AWG#26, O.D. 1.35)



Push in joint 4, 6, 8 dia. (selection)  
4 (A) port  
123.2  
Push in joint 4, 6, 8 dia. (selection)  
2 (B) port

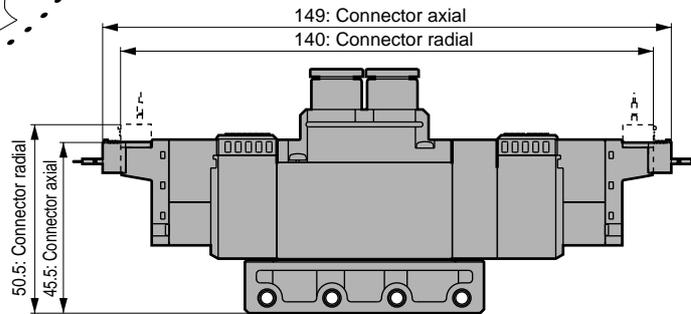
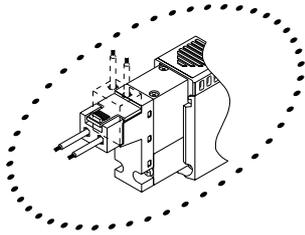


• Rc1/8 female thread type (06)



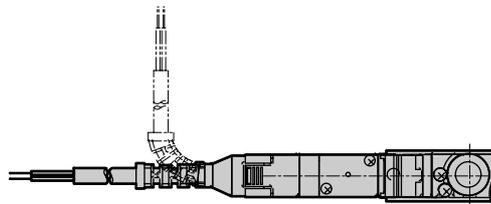
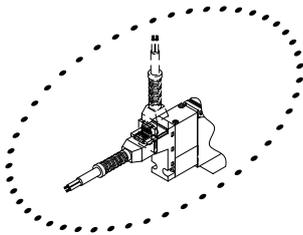
### Dimensions

#### • E-connector type(E)

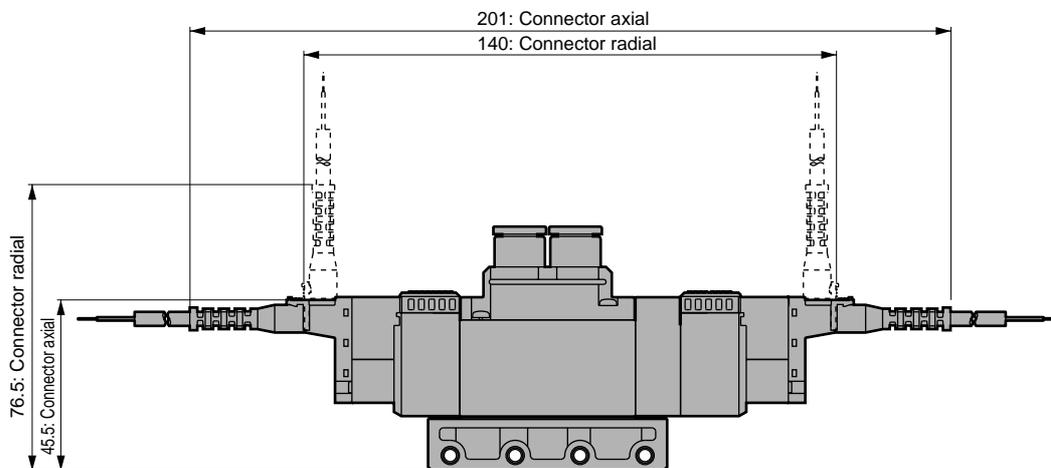


Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

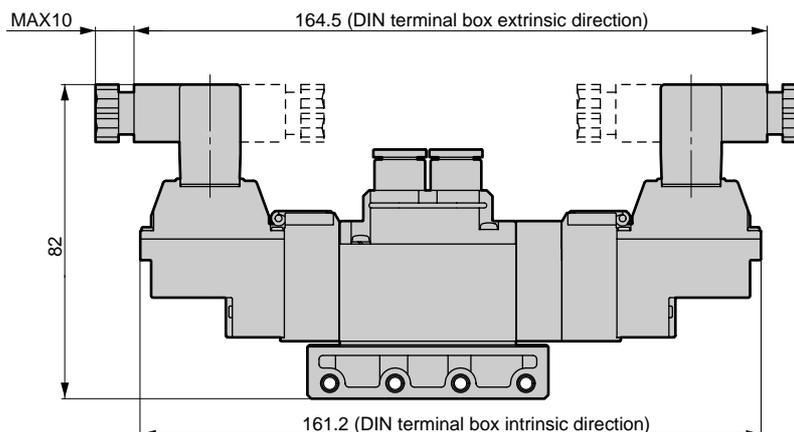
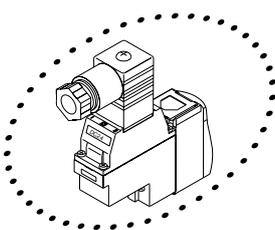
#### • EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.



#### • DIN terminal box type(B)



4SA/B0

4SA/B1

4GA/B

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete

3, 5 port pilot operated valve

# 4GA3 Series

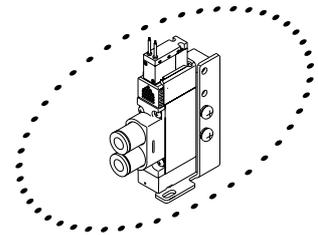
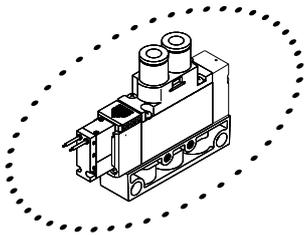
## Discrete valve: Body porting

### Dimensions

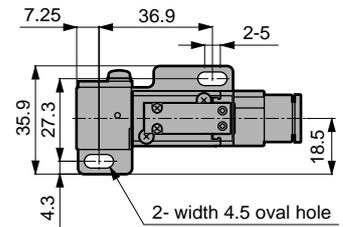
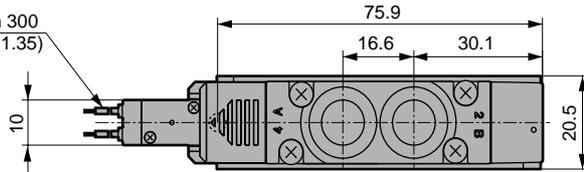
4GA310  (File name: Page 239 or Ending 15)

• 2-position single grommet lead wire (Blank)

• Mounting plate type (P)

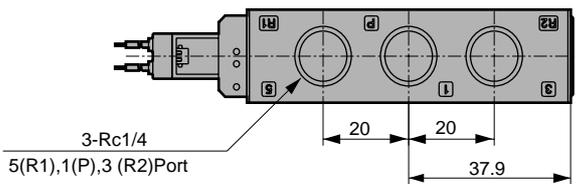
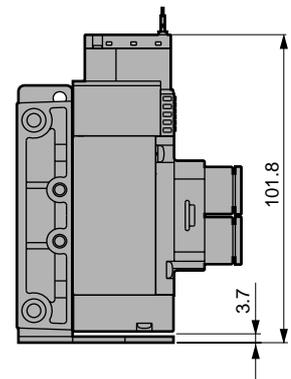
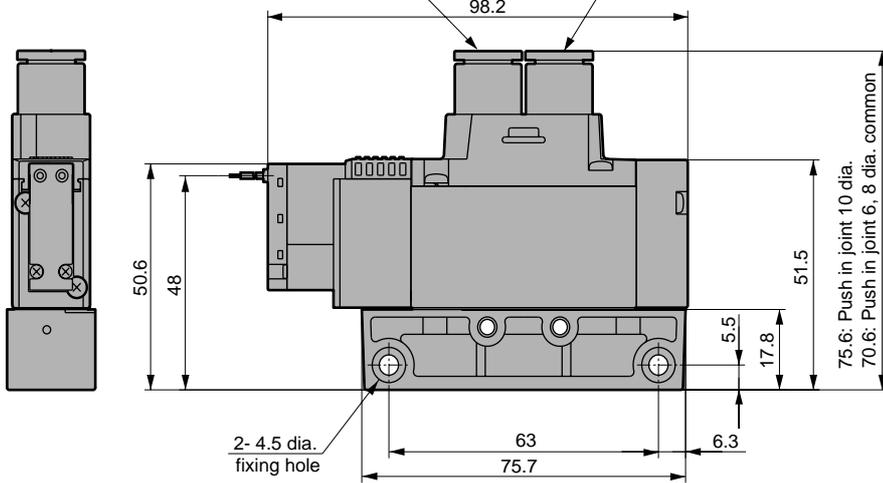


Lead wire length 300  
(AWG#26, O.D. 1.35)

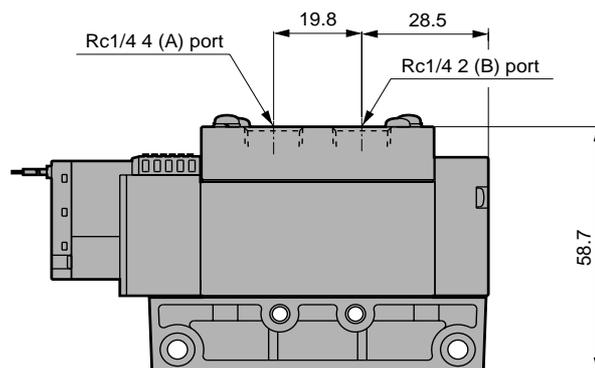
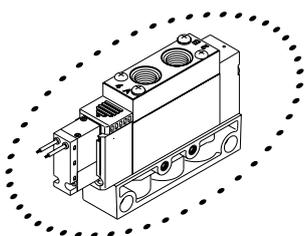


Push in joint 6, 8, 10 dia. (selection)  
4 (A) port

Push in joint 6, 8, 10 dia. (selection)  
2 (B) port

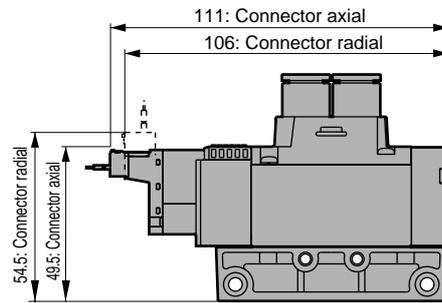
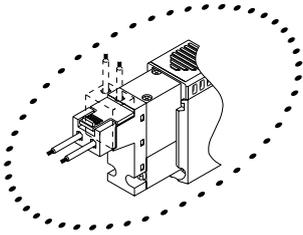


• Rc1/4 female thread type (08)



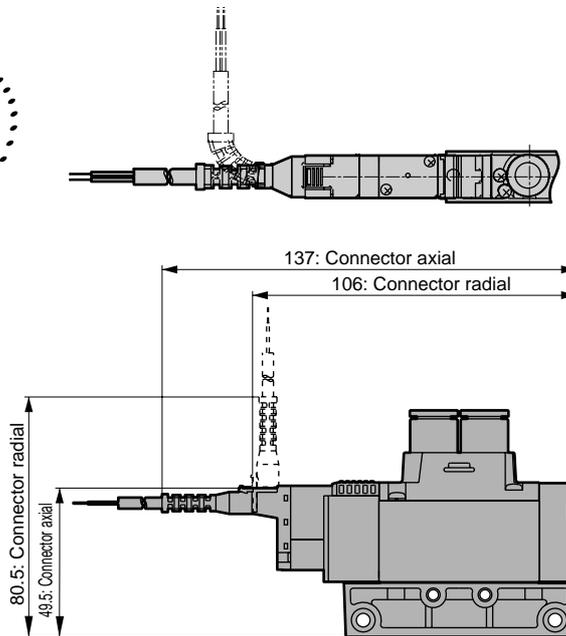
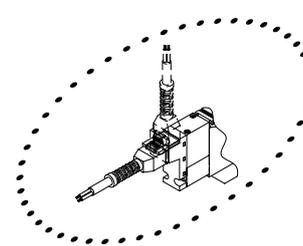
### Dimensions

• E-connector type(E)



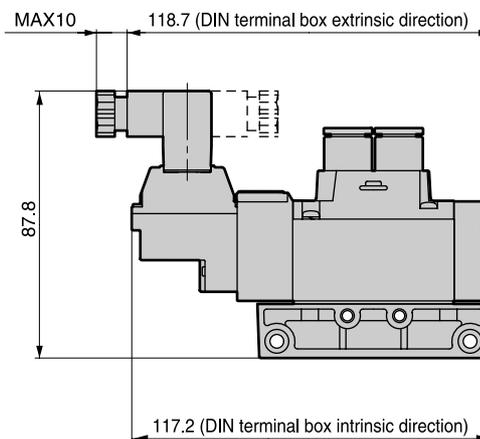
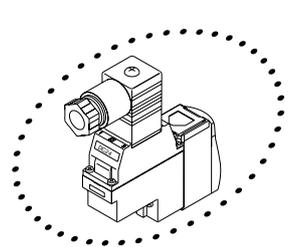
Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 3.5mm longer.

• DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete

3, 5 port pilot operated valve

# 4GA3 Series

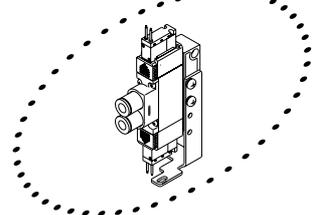
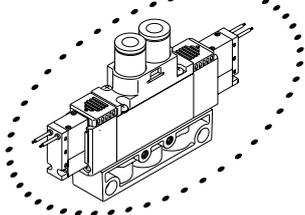
## Discrete valve: Body porting

### Dimensions

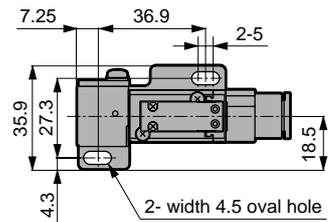
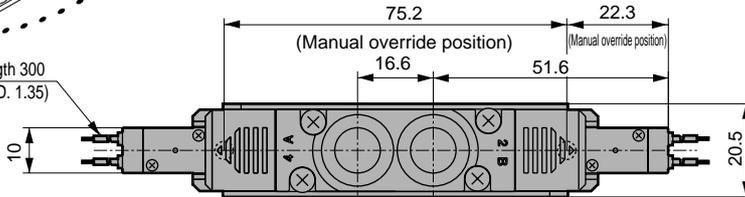
4GA320  (File name: Page 239 or Ending 15)

• 2-position double grogmet lead wire (Blank)

• Mounting plate type (P)

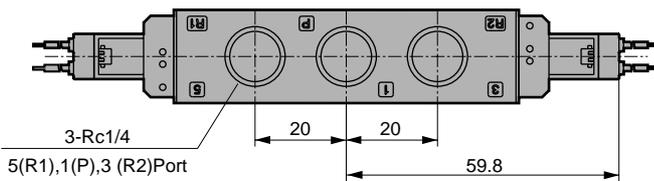
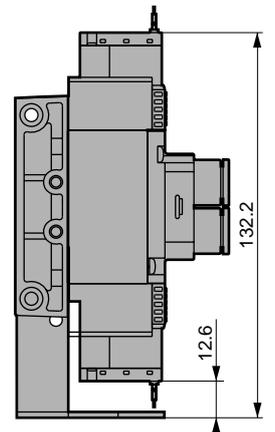
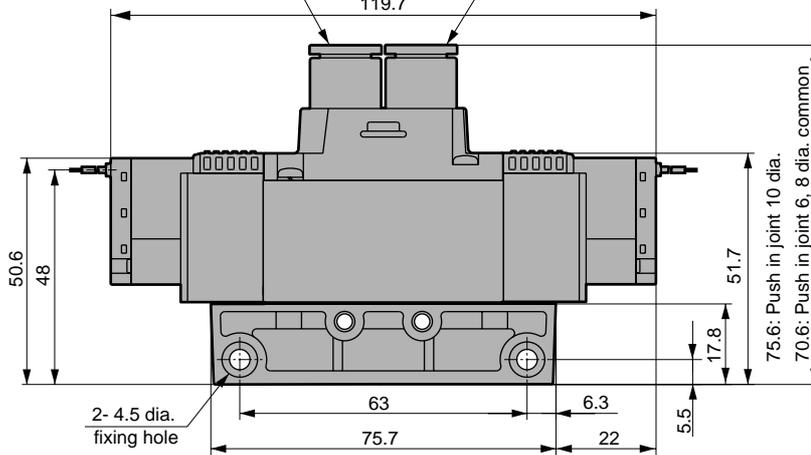
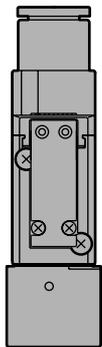


Lead wire length 300  
(AWG#26, O.D. 1.35)

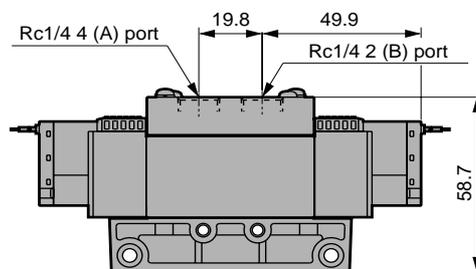
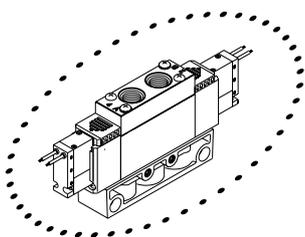


Push in joint 6, 8, 10 dia. (selection)  
4 (A) port

Push in joint 6, 8, 10 dia. (selection)  
2 (B) port

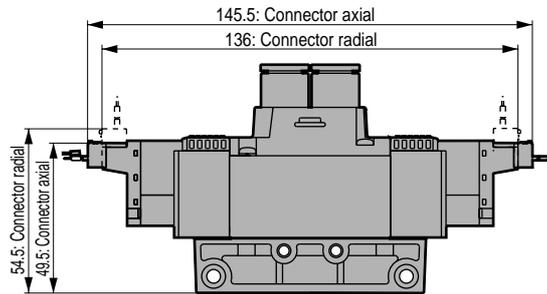
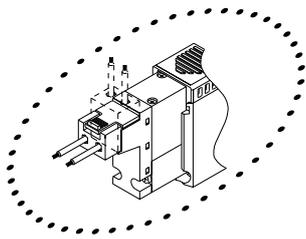


• Rc1/4 female thread type (08)



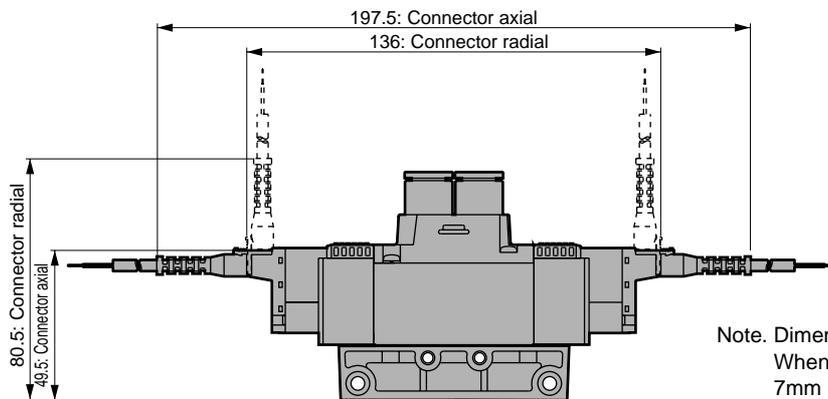
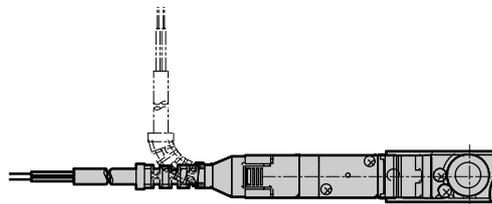
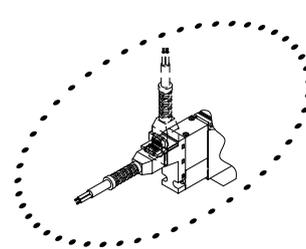
### Dimensions

• E-connector type(E)



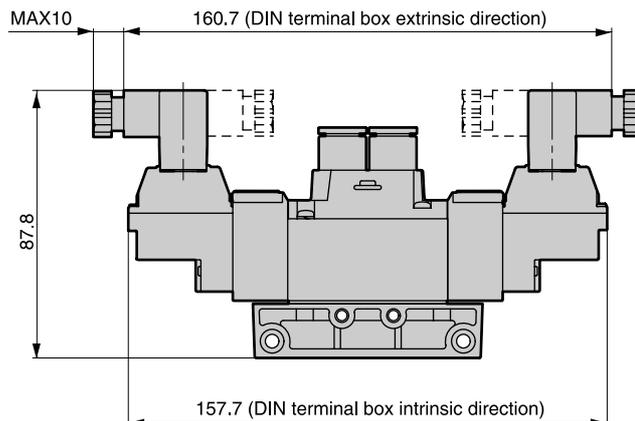
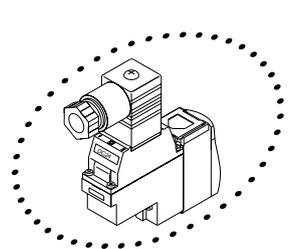
Note. Dimensions of DC specifications are shown. When AC100V, overall length of valve is 7mm longer.

• EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown. When AC100V, overall length of valve is 7mm longer.

• DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B (master)

MN3S0/ MN4S0

4TB

4L2-4/ LMF0

4KA/B

4F

PV5/ CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/ NVP

4F\*\*0E

HMV/ HSV

Uniwire system

SKH

PCD/ FS/FD

Discrete

3, 5 port pilot operated valve

# 4GA3 Series

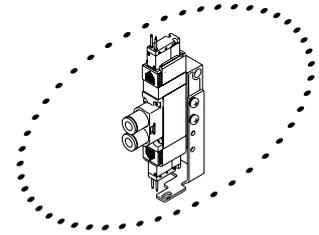
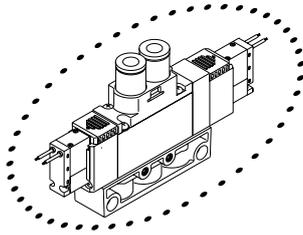
Discrete valve: Body porting

## Dimensions

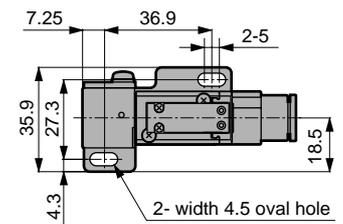
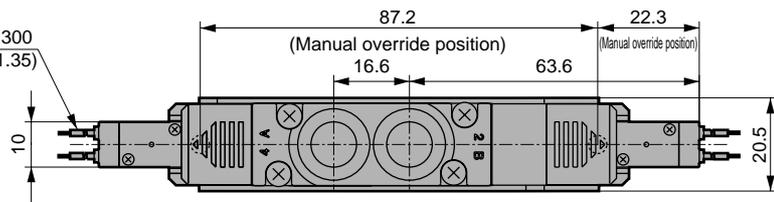
4GA3<sub>5</sub><sup>3</sup>0  (File name: Page 239 or Ending 15)

• 3-position grommet lead wire(Blank)

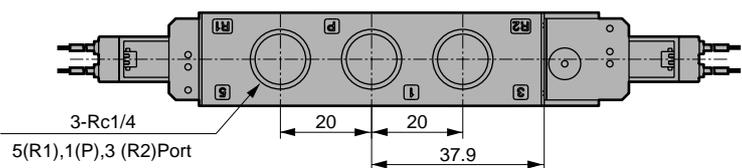
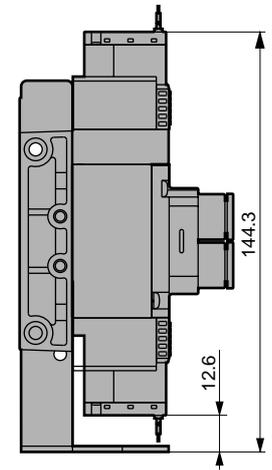
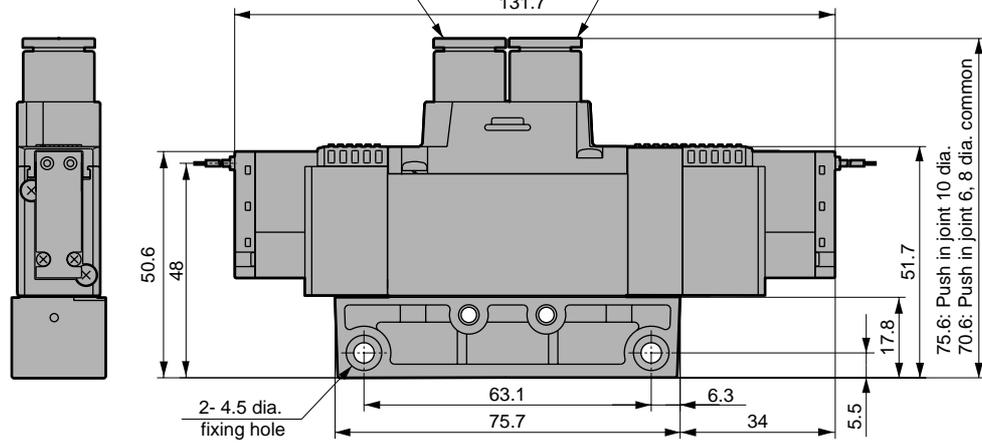
• Mounting plate type(P)



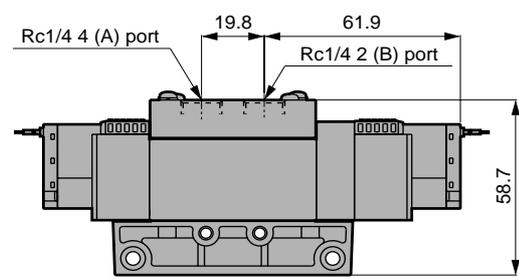
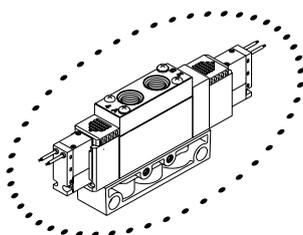
Lead wire length 300  
(AWG#26, O.D. 1.35)



Push in joint 6, 8, 10 dia. (selection)  
4 (A) port  
131.7  
Push in joint 6, 8, 10 dia. (selection)  
2 (B) port

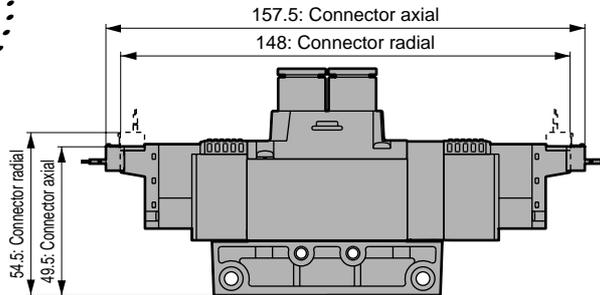
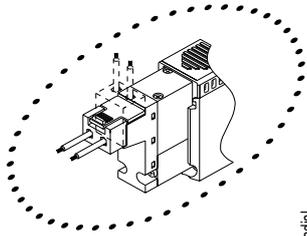


• Rc1/4 female thread type(08)



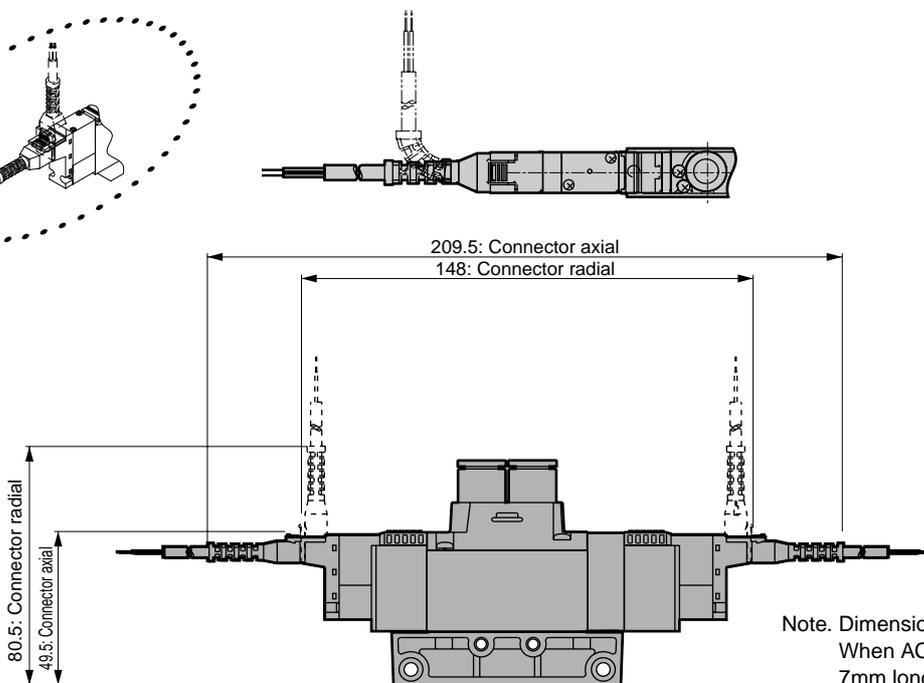
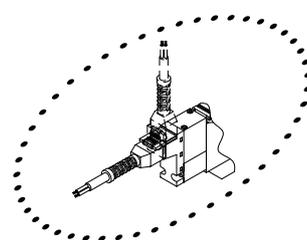
### Dimensions

#### • E-connector type(E)



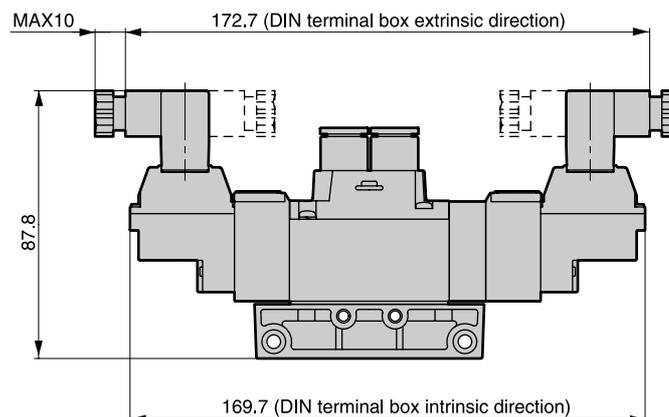
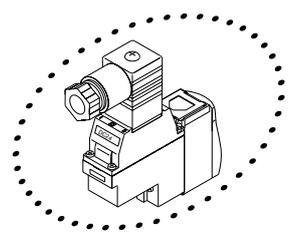
Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

#### • EJ-connector type(E\*\*J)



Note. Dimensions of DC specifications are shown.  
When AC100V, overall length of valve is 7mm longer.

#### • DIN terminal box type(B)



4SA/B0

4SA/B1

**4GA/B**

MN4GA/B

4GA/B  
(master)

MN3S0/  
MN4S0

4TB

4L2-4/  
LMF0

4KA/B

4F

PV5/  
CMF

3MA/B0

3PA/B

P/M/B

NP/NAP/  
NVP

4F\*\*0E

HMV/  
HSV

Uniwire  
system

SKH

PCD/  
FS/FD

Discrete  
3, 5 port pilot operated valve