



Discrete valve  
Body piping

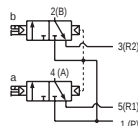
# 3GD1/2 / 4GD1/2/3 / 4\*0EA Series

● Applicable cylinder bore size: ø20 to ø140

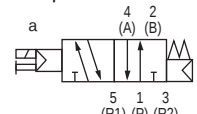


## JIS symbol

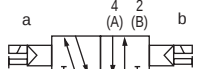
- Two 3-port valves integrated  
(A side valve: NC, B side valve: NC)



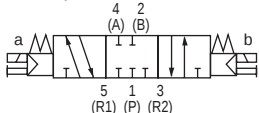
- 5-port valve  
2 position single



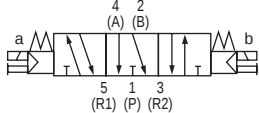
- 2-position double



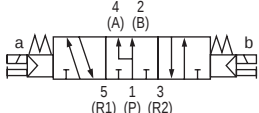
- 3-position  
All ports closed



- 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                                          |
| Min. working pressure MPa             | 0.2                                          |
| Proof pressure MPa                    | 1.05                                         |
| Ambient temperature °C                | -5 to 55 (no freezing)                       |
| Fluid temperature °C                  | 5 to 55                                      |
| Manual override                       | Non-locking/locking common                   |
| Pilot exhaust method                  | Main valve/pilot valve common exhaust        |
| Lubrication *1                        | Not required                                 |
| Degree of protection*2                | IP67                                         |
| Vibration resistance m/s <sup>2</sup> | 50 or less                                   |
| Shock resistance m/s <sup>2</sup>     | 300 or less                                  |
| Atmosphere                            | Cannot be used in corrosive gas environments |

## Solenoid specifications

| Item                      | Description  |
|---------------------------|--------------|
| Rated voltage V           | DC12         |
| Voltage fluctuation range | +10%<br>-20% |
| Rated current A           | 0.05         |
| Power consumption W       | 0.6          |
| Thermal class             | B            |

Note1 Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

Note2 Tested according to the test method for IP67 (IEC60529) standards. Note that while the unit is protected from dust and water, it cannot be used immersed in water. Countermeasures such as covering the unit should also be taken if using in environments where it will be constantly exposed to dust or water.

## Intrinsic safety explosion-proof specifications

| Item                                                          | Description                                     |
|---------------------------------------------------------------|-------------------------------------------------|
| Types of explosion-proof structures                           | Intrinsic safety explosion-proof structure (ib) |
| Target gas or above listed ignitability and flame-proof grade | II 2G Ex ib IIC T4 Gb                           |
| Barrier input voltage                                         | 24 VDC                                          |
| Intrinsic safety circuit allowable voltage Ui                 | 30V DC                                          |
| Intrinsic safety circuit allowable current Ii                 | 200mA                                           |
| Intrinsic safety circuit allowable power Pi                   | 0.68 W                                          |
| Internal inductance Li                                        | Value that can be ignored                       |
| Internal capacitance Ci                                       | Value that can be ignored                       |

## Individual specifications

| Port size                      | 3GD1/4GD1                    | 3GD2/4GD2                          | 4GD3                                | 4GD4                                 |
|--------------------------------|------------------------------|------------------------------------|-------------------------------------|--------------------------------------|
| 2/4-port<br>(port A/B)         | Push-in fitting ø4, ø6<br>M5 | Push-in fitting ø4, ø6, ø8<br>G1/8 | Push-in fitting ø6, ø8, ø10<br>G1/4 | Push-in fitting ø8, ø10, ø12<br>G3/8 |
| 1, 3, 5-port<br>(Port P/R1/R2) | M5                           | G1/8                               | G1/4                                | G1/4                                 |

## Performance/characteristics by model

| Item                |                              | 3GD1           |     | 3GD2 |     | 4GD1 |     | 4GD2 |     | 4GD3 |     | 4GD4 |     |
|---------------------|------------------------------|----------------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
|                     |                              | ON             | OFF | ON   | OFF | ON   | OFF | ON   | OFF | ON   | OFF | ON   | OFF |
| Response time<br>ms | Two 3-port valves integrated | 15             | 35  | 20   | 50  | -    | -   | -    | -   | -    | -   | -    | -   |
|                     | 2-position                   | Single         | -   | -    | -   | 15   | 35  | 20   | 40  | 25   | 60  | 100  | 110 |
|                     |                              | Double         | -   | -    | -   | 25   | 25  | 30   | 30  | 35   | 35  | 110  | 110 |
|                     | 3-position                   | ABR connection | -   | -    | -   | 20   | 40  | 25   | 45  | 35   | 60  | 100  | 160 |

The response times are values under continuous operation at supply pressure of 0.5 MPa, at rated voltage and at 20°C without lubrication. They depend on the pressure and the lubricant quality.

## Weight

| Item    |            |                | 4GD1    | 4GD2      | 4GD3      | 4GD4      |
|---------|------------|----------------|---------|-----------|-----------|-----------|
| Weightg | 2-position | Single         | 61 (54) | 120 (90)  | 155 (112) | 296 (303) |
|         |            | Double         | 81 (74) | 140 (110) | 176 (133) | 329 (336) |
|         | 3-position | ABR connection | 84 (77) | 148 (118) | 187 (143) | 361 (367) |

· ( ) Values in the do not include the pipe adaptor. These values include the M8 connector (straight).

· 3 The weight of the two port valves integrated type 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 |
| 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 |
| 4GD4      | 2-position                   |                  | 8.1                         | 0.4  | 8.0                         | 0.31 |
|           | 3-position                   | All ports closed | 6.9                         | 0.37 | 7.5                         | 0.42 |
|           |                              | ABR connection   | 6.9                         | 0.38 | 8.4                         | 0.34 |
|           |                              | PAB connection   | 8.9                         | 0.37 | 7.6                         | 0.27 |

\*1: Formula for converting effective cross-sectional area S and sonic conductance C is  $S \approx 5.0 \times C$ .

3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

# 3GD1/2 / 4GD1/2/3/4\*0EA Series

Discrete valve; Body piping

How to order (solenoid valve single unit)

● Single unit

4GD1 1 0 EA - M5G - RN - 4  
3GD1 66 0 EA - C4G - RN - 4

A Model No.

B Solenoid position

C Explosion-proof Series

D Port size

E Electrical connections

F Option

G Voltage

A Model No.

3GD1 3GD2 4GD1 4GD2 4GD3 4GD4

| Code                                  | Description                                                    | 3GD1                                        | 3GD2 | 4GD1 | 4GD2 | 4GD3 | 4GD4 |
|---------------------------------------|----------------------------------------------------------------|---------------------------------------------|------|------|------|------|------|
| <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                                    | 3-port valve<br>Two valves integrated Note1                    | ●                                           | ●    |      |      |      |      |
|                                       | A valve side: Normally closed<br>B valve side: Normally closed |                                             |      |      |      |      |      |
| <b>C Explosion-proof Series</b>       |                                                                |                                             |      |      |      |      |      |
| EA                                    | ATEX Directive compliant product                               | ●                                           | ●    | ●    | ●    | ●    | ●    |
| <b>D Port size {ports 4(A), 2(B)}</b> |                                                                |                                             |      |      |      |      |      |
| Port                                  | 4(A)/2(B) port                                                 | Port P/R1/R2<br>(1)=M5 (2)=G1/8<br>(3)=G1/4 |      |      |      |      |      |
| C4G                                   | ø4 push-in fitting                                             | (1)                                         | (2)  | (1)  | (2)  |      |      |
| C6G                                   | ø6 push-in fitting                                             | (1)                                         | (2)  | (1)  | (2)  | (3)  |      |
| C8G                                   | ø8 push-in fitting                                             |                                             | (2)  |      | (2)  | (3)  | (3)  |
| C10G                                  | ø10 push-in fitting                                            |                                             |      |      |      | (3)  | (3)  |
| C12G                                  | ø12 push-in fitting                                            |                                             |      |      |      |      | (3)  |
| M5G                                   | M5                                                             | (1)                                         |      | (1)  |      |      |      |
| 06G                                   | G1/8                                                           |                                             | (2)  |      | (2)  |      |      |
| 08G                                   | G1/4                                                           |                                             |      |      |      | (3)  |      |
| 10G                                   | G3/8                                                           |                                             |      |      |      |      | (3)  |
| <b>E Electrical connections</b>       |                                                                |                                             |      |      |      |      |      |
| RN                                    | M8 connector without cable                                     | ●                                           | ●    | ●    | ●    | ●    | ●    |
| R 1                                   | M8 connector straight cable                                    | ●                                           | ●    | ●    | ●    | ●    | ●    |
| R 2                                   | M8 connector L-type cable                                      | ●                                           | ●    | ●    | ●    | ●    | ●    |
| <b>F Option</b>                       |                                                                |                                             |      |      |      |      |      |
| Blank                                 | Manual override of non-locking/locking common (standard)       | ●                                           | ●    | ●    | ●    | ●    | ●    |
| H                                     | With exhaust check valve *3                                    | ●                                           | ●    | ●    | ●    | ●    | ●    |
| P                                     | Mounting plate attached (for 2-position single only)           |                                             |      | ●    | ●    | ●    | ●    |
| F                                     | Port A/B filter *4                                             | ●                                           | ●    | ●    | ●    | ●    | ●    |
| <b>G Voltage</b>                      |                                                                |                                             |      |      |      |      |      |
| 4                                     | 12 VDC                                                         | ●                                           | ●    | ●    | ●    | ●    | ●    |

## ⚠ Precautions for model No. selection

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

\*2 M8 connector length is 300mm. Select other lengths from page 63 as needed.

\*3 3-position all ports closed and PAB connection are not provided with exhaust check valve specifications (H).

\*4 A filter is built into port P as standard.

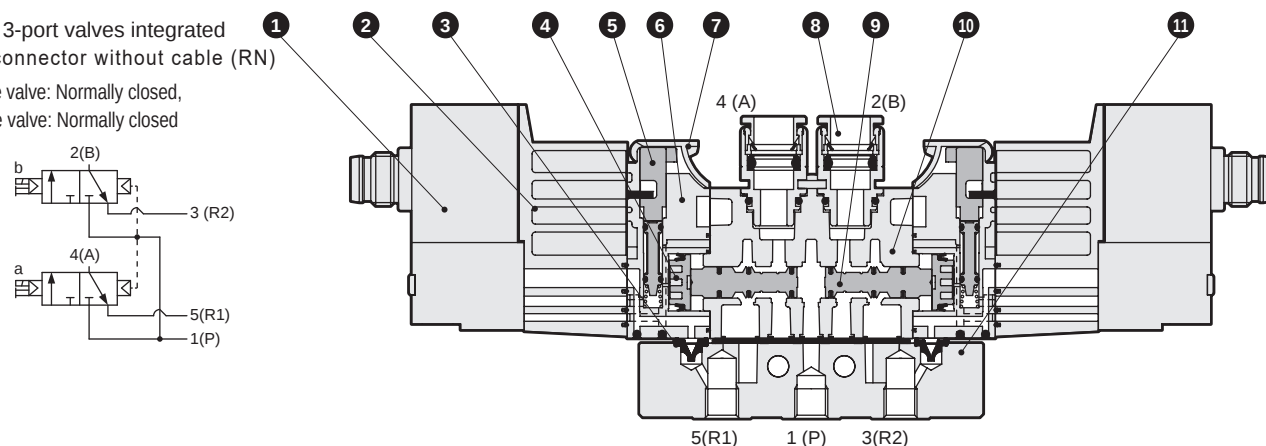
\*5 Explosion-proof barrier sold separately. Select from page 67.

## Internal structure diagram and parts list

### 3GD1660EA

- Two 3-port valves integrated M8 connector without cable (RN)

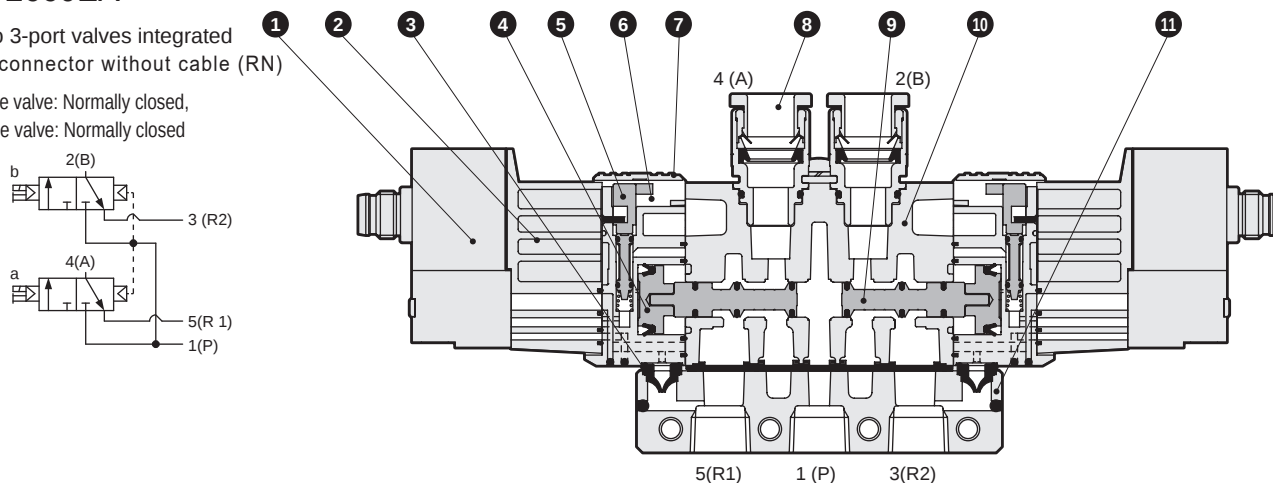
A side valve: Normally closed,  
B side valve: Normally closed



### 3GD2660EA

- Two 3-port valves integrated M8 connector without cable (RN)

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



## Main parts list

| Part number | Part name                 | Material                    |
|-------------|---------------------------|-----------------------------|
| 1           | Coil assembly             | -                           |
| 2           | Adapter                   | Resin                       |
| 3           | Pilot exhaust check valve | Hydrogenated nitrile rubber |
| 4           | Piston D assembly         | -                           |
| 5           | Manual override           | Resin                       |
| 6           | Piston chamber            | Resin                       |
| 7           | Manual protection cover   | Resin                       |
| 8           | Cartridge push-in fitting | -                           |
| 9           | Spool assembly            | -                           |
| 10          | Body                      | Aluminum alloy die-casting  |
| 11          | Pipe adaptor              | Aluminum alloy die-casting  |

## Parts list

| Part number | Part name                                   | Model No.                     |
|-------------|---------------------------------------------|-------------------------------|
| 8           | Cartridge push-in fitting and related parts | ø4 straight 4G1R-JOINT-C4     |
|             |                                             | ø6 straight 4G1R-JOINT-C6     |
|             |                                             | Plug cartridge 4G1R-JOINT-CPG |

3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

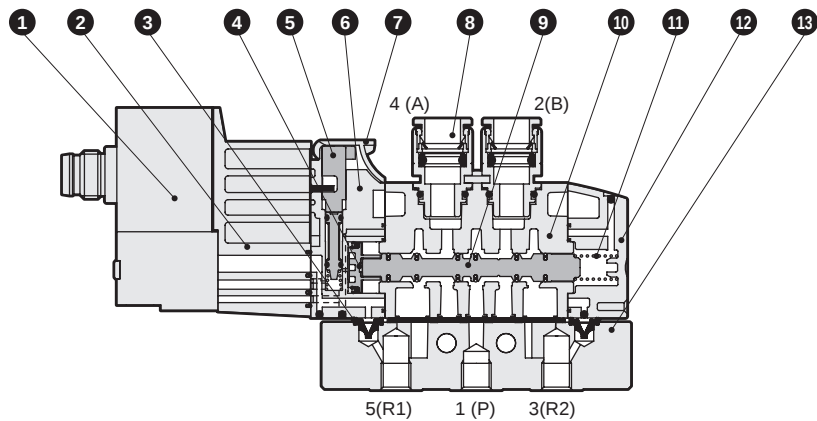
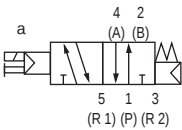
# 4GD1\*0EA Series

Discrete valve; Body piping

## Internal structure diagram and parts list

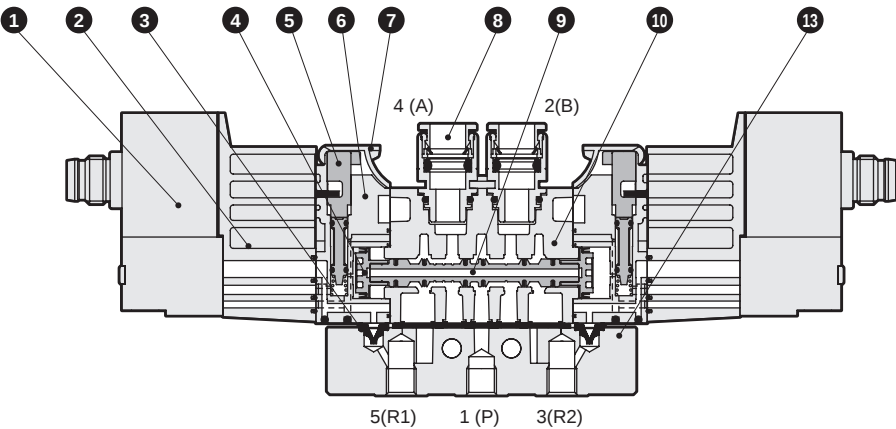
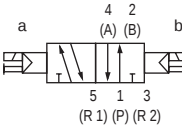
### 4GD110EA

- 2 position single
- M8 connector without cable (RN)



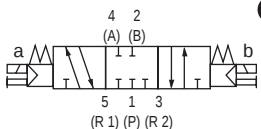
### 4GD120EA

- 2-position double
- M8 connector without cable (RN)

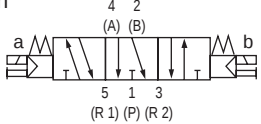


### 4GD130EA

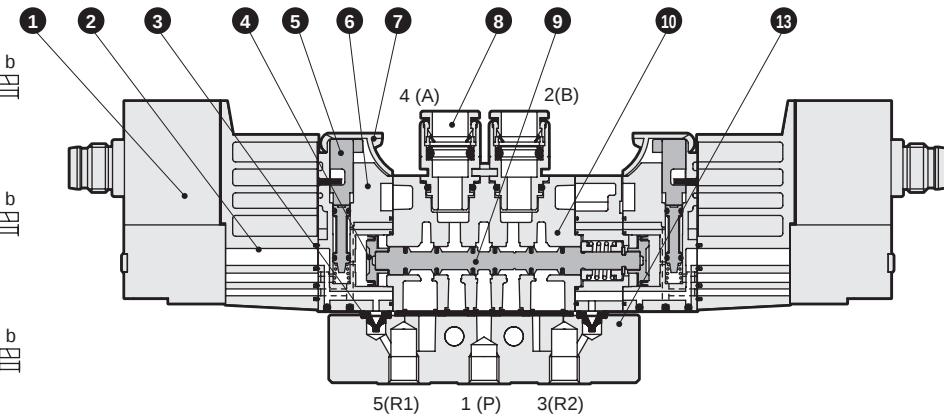
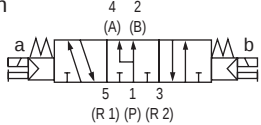
- 3-position
- M8 connector without cable (RN)
- All ports closed



A/B/R connection



P/A/B connection



## Main parts list

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

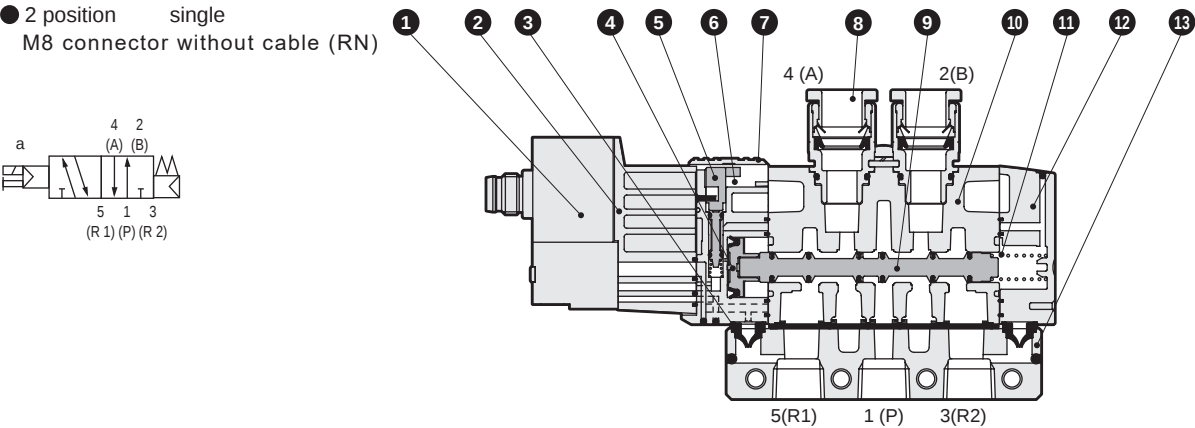
## Parts list

| Part No. | Part name                                   | Model No.                     |
|----------|---------------------------------------------|-------------------------------|
| 8        | Cartridge push-in fitting and related parts | ø4 straight 4G1R-JOINT-C4     |
|          |                                             | ø6 straight 4G1R-JOINT-C6     |
|          |                                             | Plug cartridge 4G1R-JOINT-CPG |

Internal structure diagram and parts list

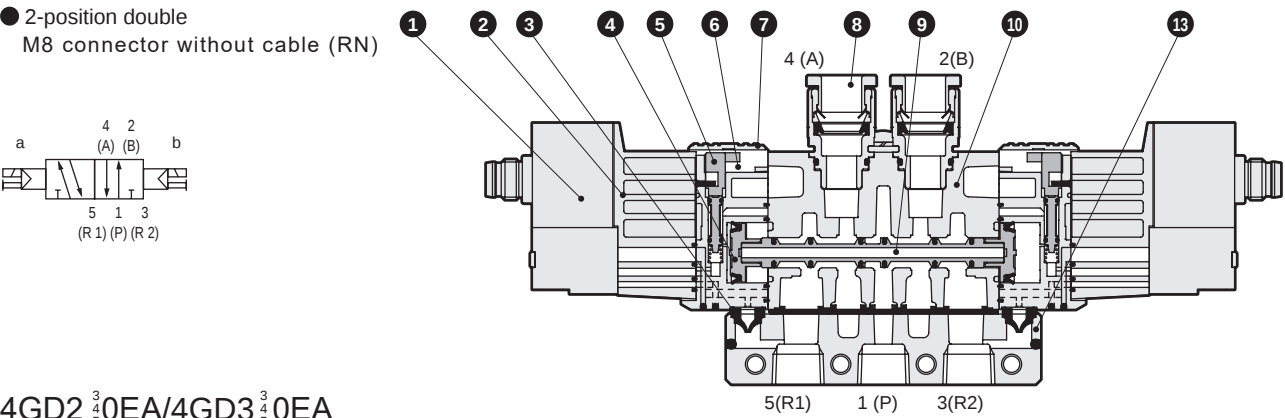
4GD210EA/4GD310EA

- 2 position single
- M8 connector without cable (RN)



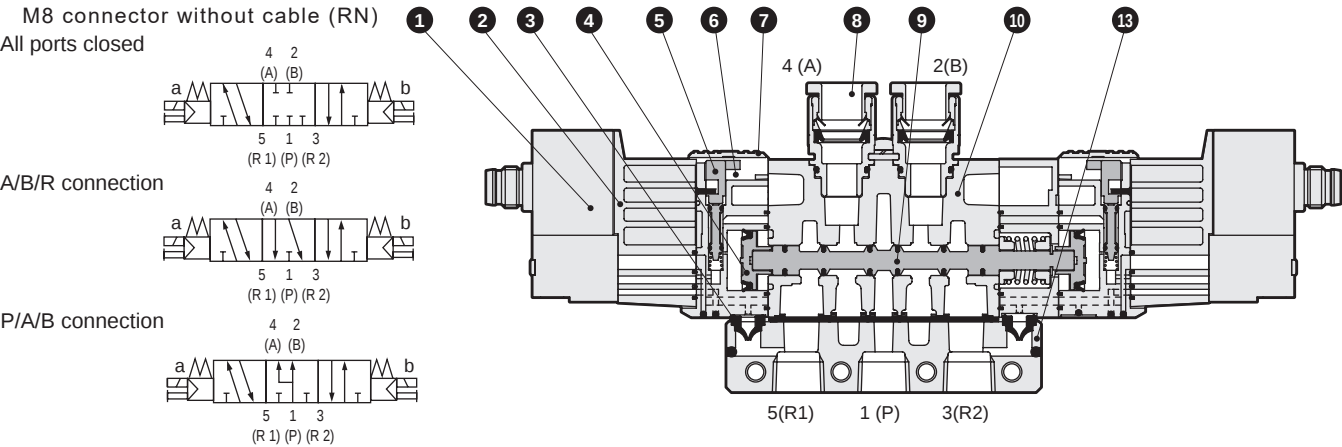
4GD220EA/4GD320EA

- 2-position double
- M8 connector without cable (RN)



4GD2<sup>3</sup>0EA/4GD3<sup>3</sup>0EA

- 3-position
- M8 connector without cable (RN)
- All ports closed



Main parts list

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

Parts list

| Part No. | Part name                                   | Model No.                       |
|----------|---------------------------------------------|---------------------------------|
| 8        | Cartridge push-in fitting and related parts | 4G2 ø4 straight 4G2R-JOINT-C4   |
|          |                                             | 4G2 ø6 straight 4G2R-JOINT-C6   |
|          |                                             | 4G2 ø8 straight 4G2R-JOINT-C8   |
|          |                                             | 4G3 ø6 straight 4G3R-JOINT-C6   |
|          |                                             | 4G3 ø8 straight 4G3R-JOINT-C8   |
|          |                                             | 4G3 ø10 straight 4G3R-JOINT-C10 |

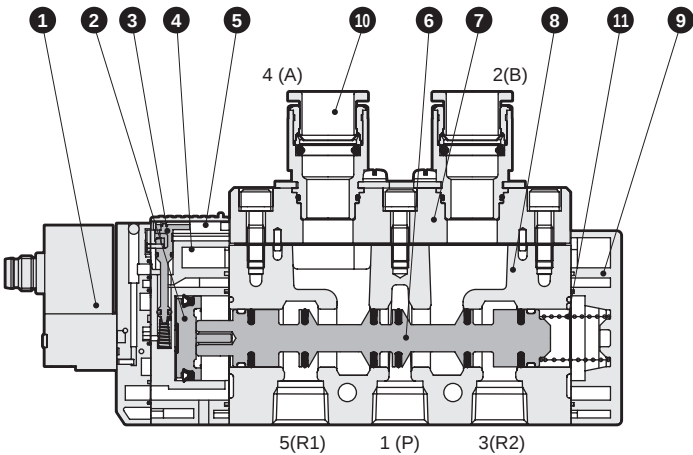
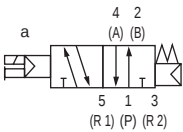
# 4GD4\*0EA Series

Discrete valve; Body piping

Internal structure diagram and parts list

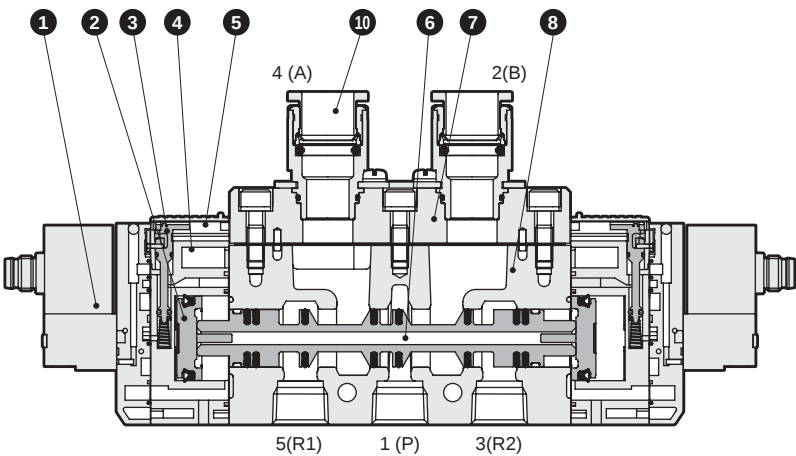
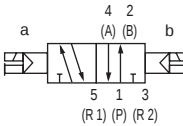
## 4GD410EA

- 2 position single
- M8 connector without cable (RN)



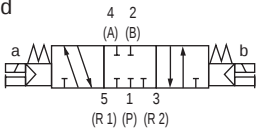
## 4GD420EA

- 2-position double
- M8 connector without cable (RN)

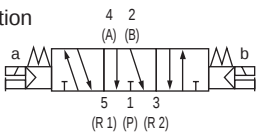


## 4GD430EA

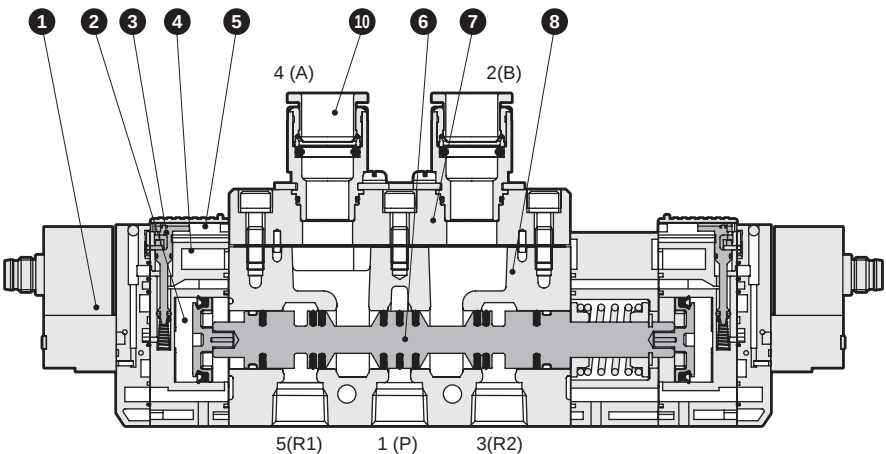
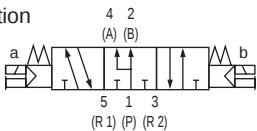
- 3-position
- M8 connector without cable (RN)
- All ports closed



A/B/R connection



P/A/B connection



## Main parts list

| Part No. | Part name                 | Material                   |
|----------|---------------------------|----------------------------|
| 1        | Coil assembly             | -                          |
| 2        | Piston assembly           | -                          |
| 3        | Manual override           | Resin                      |
| 4        | Piston chamber            | Resin                      |
| 5        | Manual protection cover   | Resin                      |
| 6        | Spool assembly            | -                          |
| 7        | Fitting adapter           | Aluminum                   |
| 8        | Body                      | Aluminum alloy die-casting |
| 9        | Cap                       | Resin                      |
| 10       | Cartridge push-in fitting | -                          |
| 11       | Spool spring              | Stainless steel            |

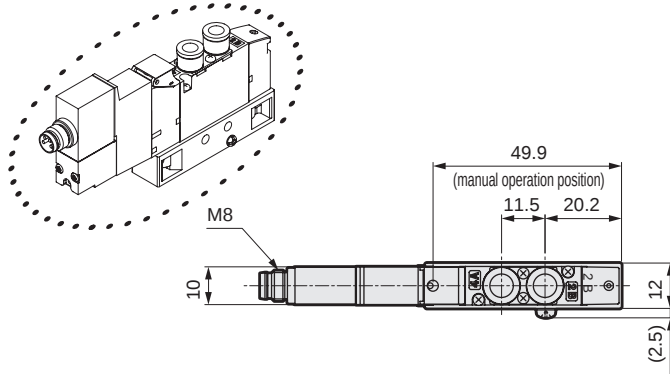
## Parts list

| Part No. | Part name                                   | Model No.     |
|----------|---------------------------------------------|---------------|
| -        | Cartridge push-in fitting and related parts | 4G4-JOINT-C8  |
| -        |                                             | 4G4-JOINT-C10 |
| -        |                                             | 4G4-JOINT-C12 |

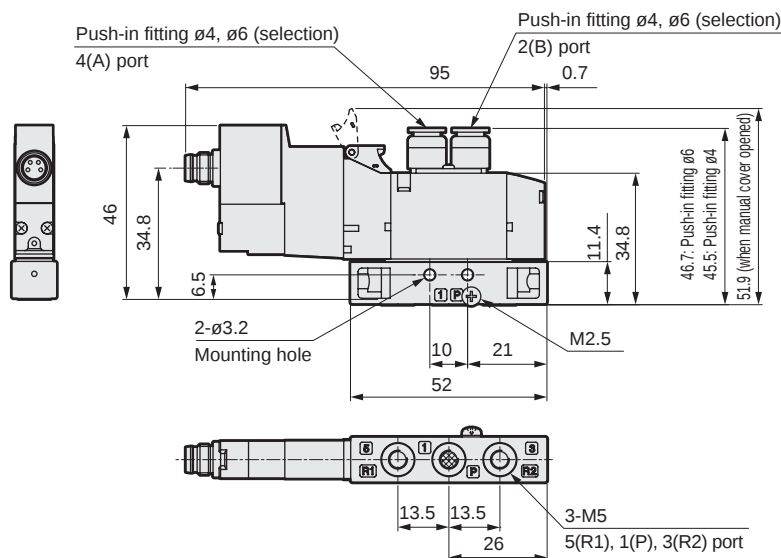
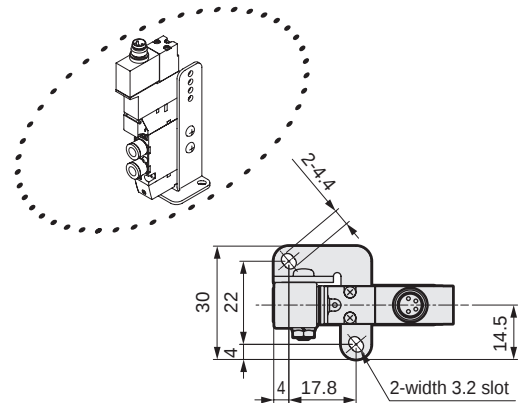
## Dimensions

### 4GD110EA

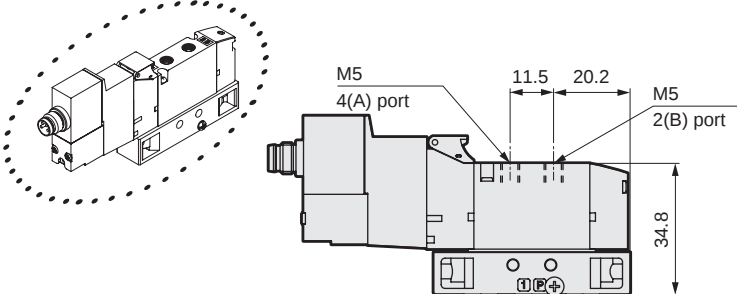
● 2-position single without connector (RN)



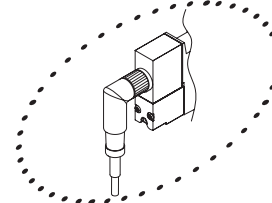
● Mounting plate (P)



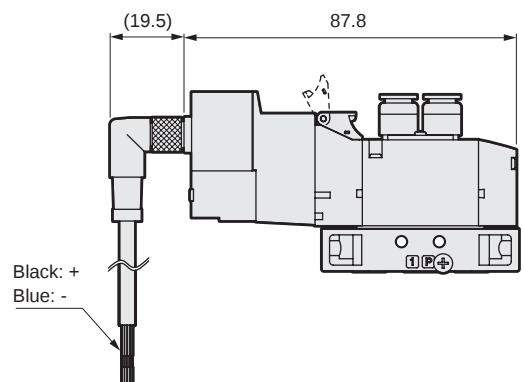
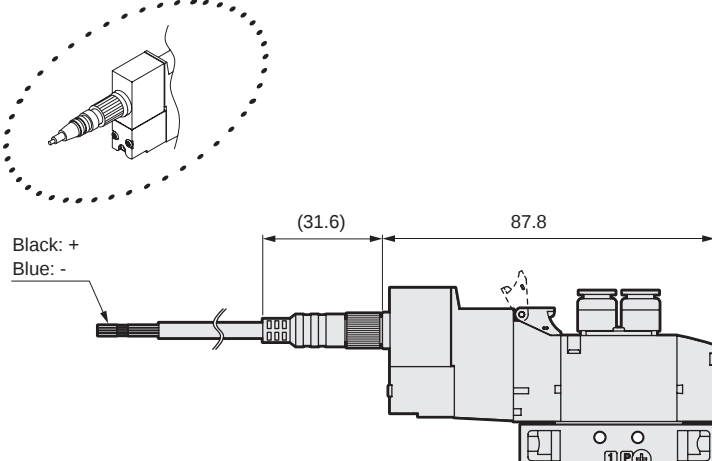
● M5 female thread (M5G)



● M8 connector/L-type cable (R2)



● M8 connector/straight cable (R1)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

# 4GD1\*0EA Series

Discrete valve; Body piping

## Dimensions

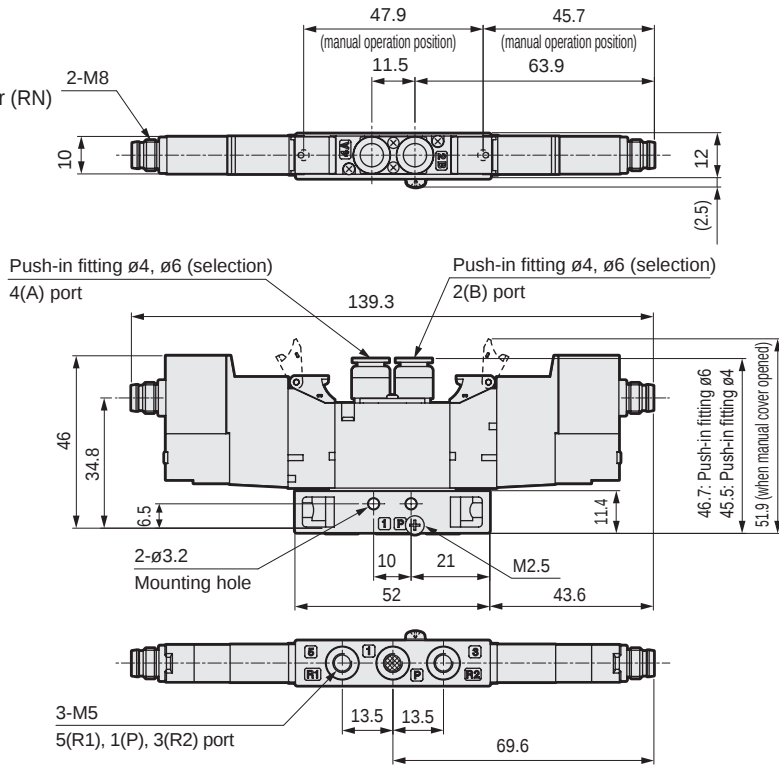
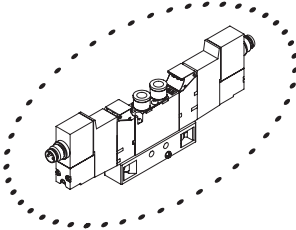
### 4GD120EA

- 2-position double without connector (RN)

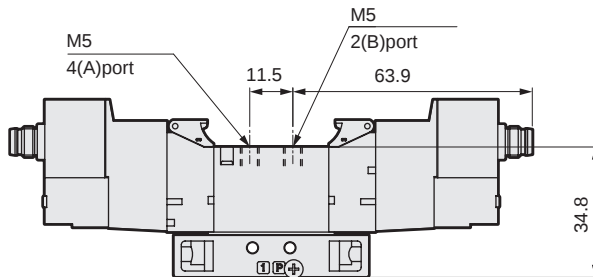
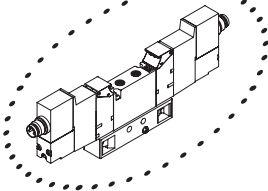
### 3GD1660EA

- Two 3-port valves integrated without connector (RN)

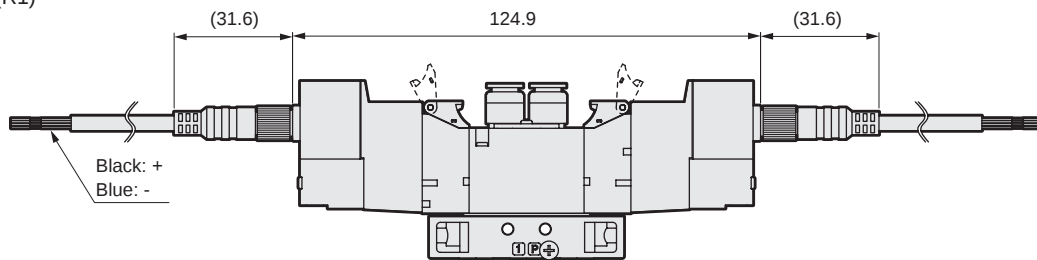
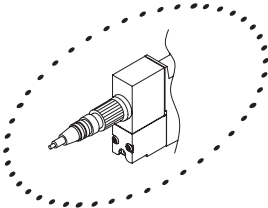
|                    |                    |                      |                      |                  |                                  |                    |
|--------------------|--------------------|----------------------|----------------------|------------------|----------------------------------|--------------------|
| 3GD*0EA<br>4GD*0EA | 3GE*0EA<br>4GE*0EA | M3GD*0EA<br>M4GD*0EA | M3GE*0EA<br>M4GE*0EA | Related products | Manifold<br>Specifications sheet | Safety precautions |
|--------------------|--------------------|----------------------|----------------------|------------------|----------------------------------|--------------------|



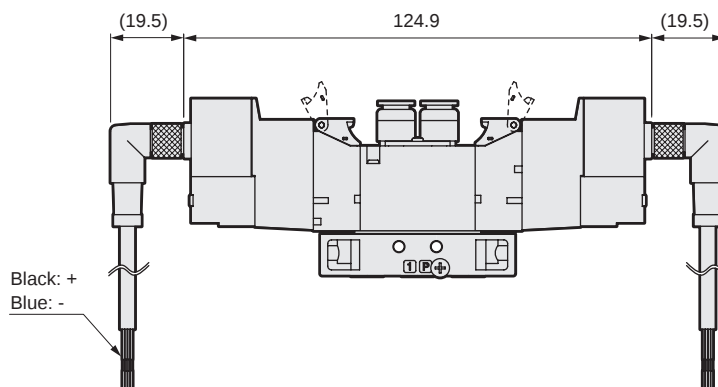
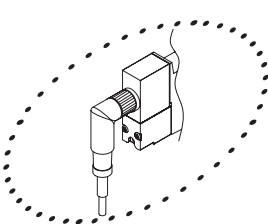
- M5 female thread (M5G)



- M8 connector/straight cable (R1)



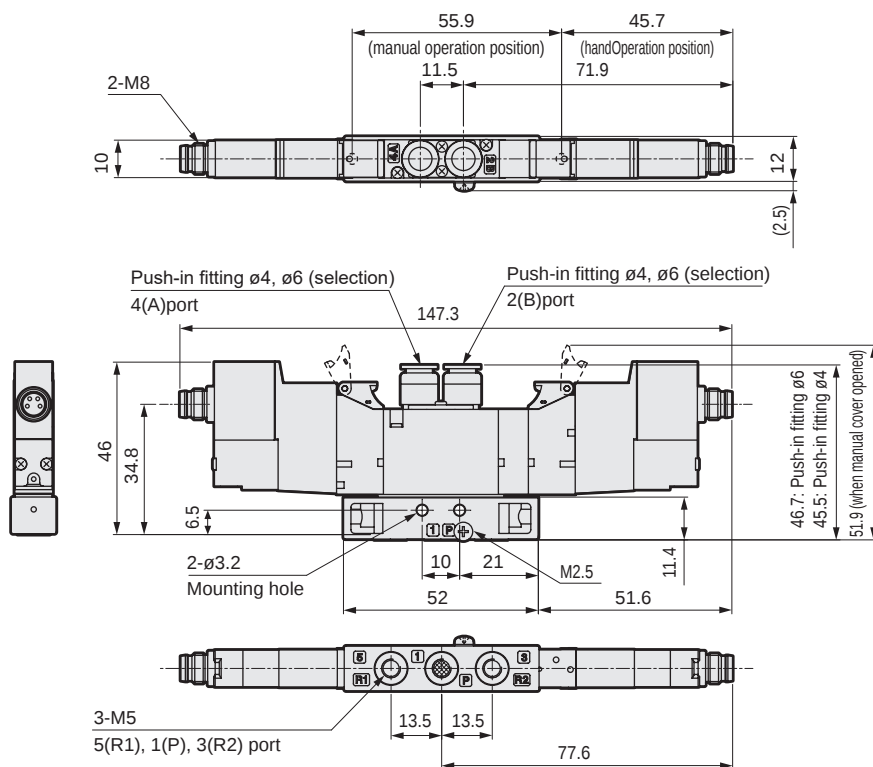
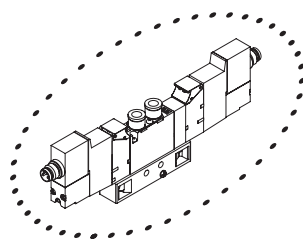
- M8 connector/L-type cable (R2)



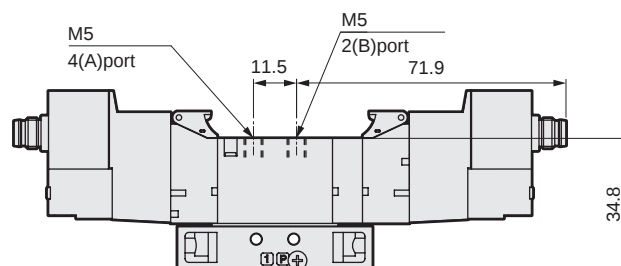
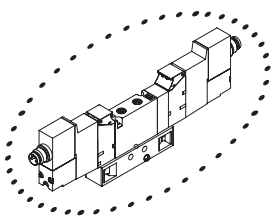
## Dimensions

### 4GD1\*0EA

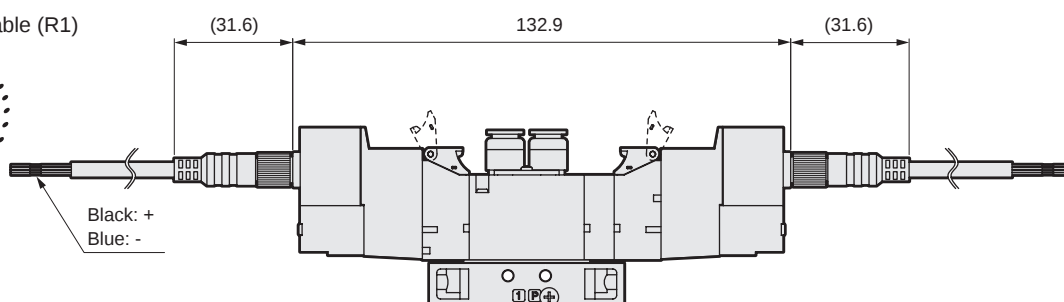
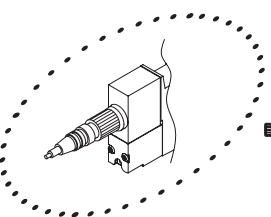
- 3-position without connector (RN)



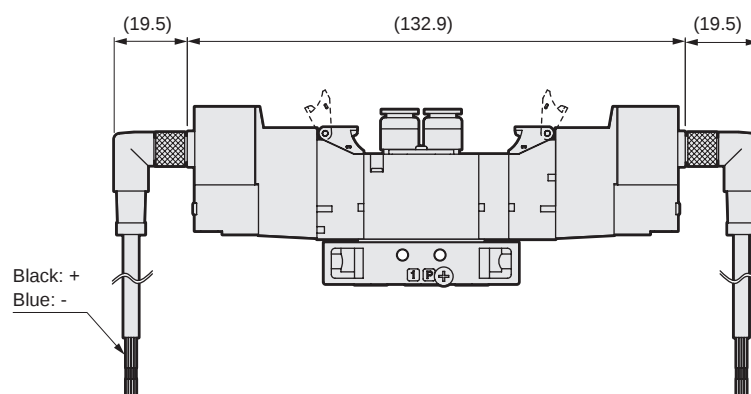
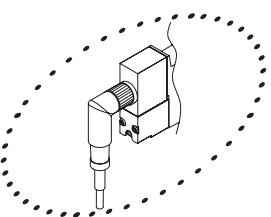
- M5 female thread (M5G)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

# 4GD2\*0EA Series

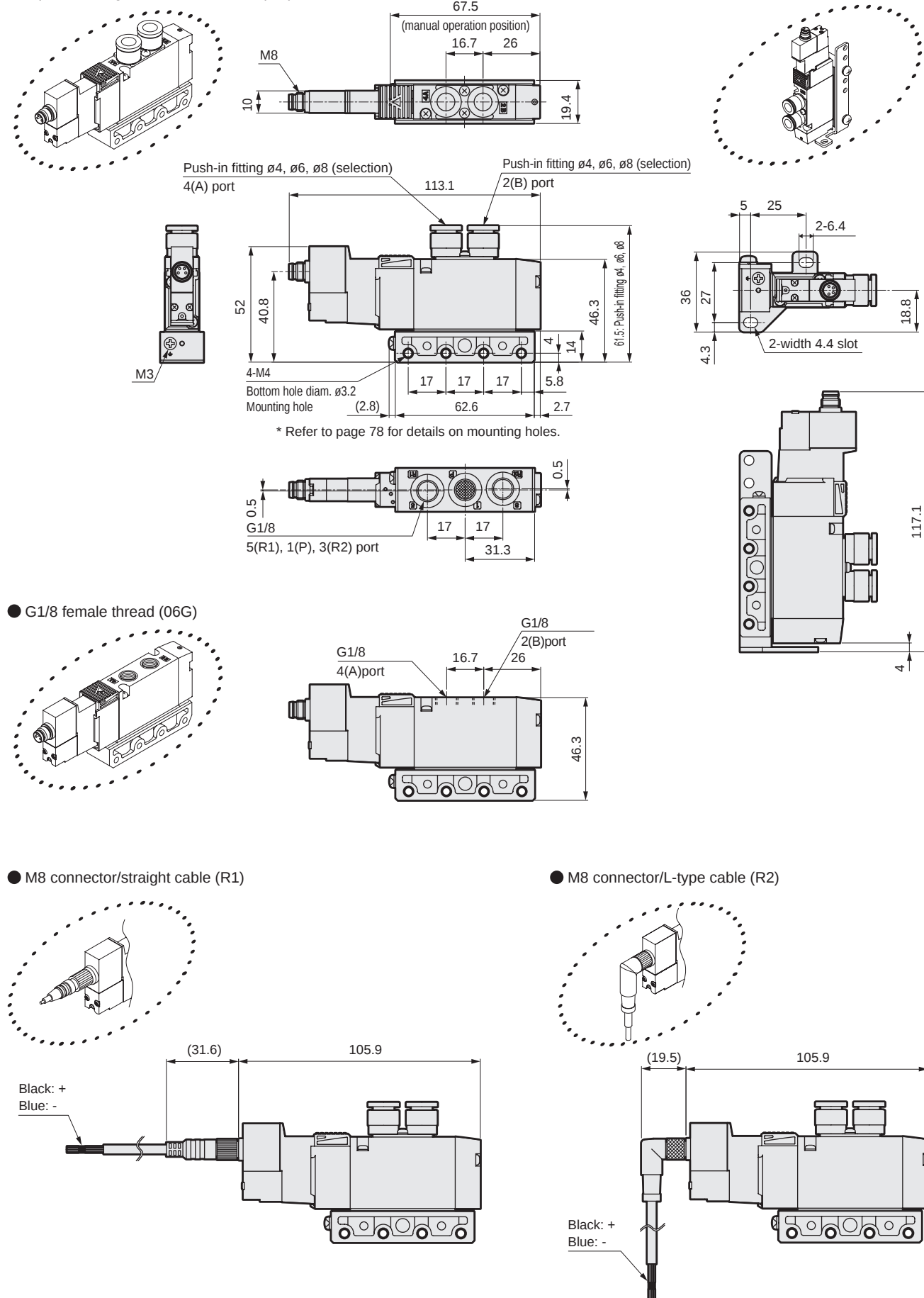
Discrete valve; Body piping

## Dimensions

### 4GD210EA

● 2-position single without connector (RN)

● Mounting plate (P)



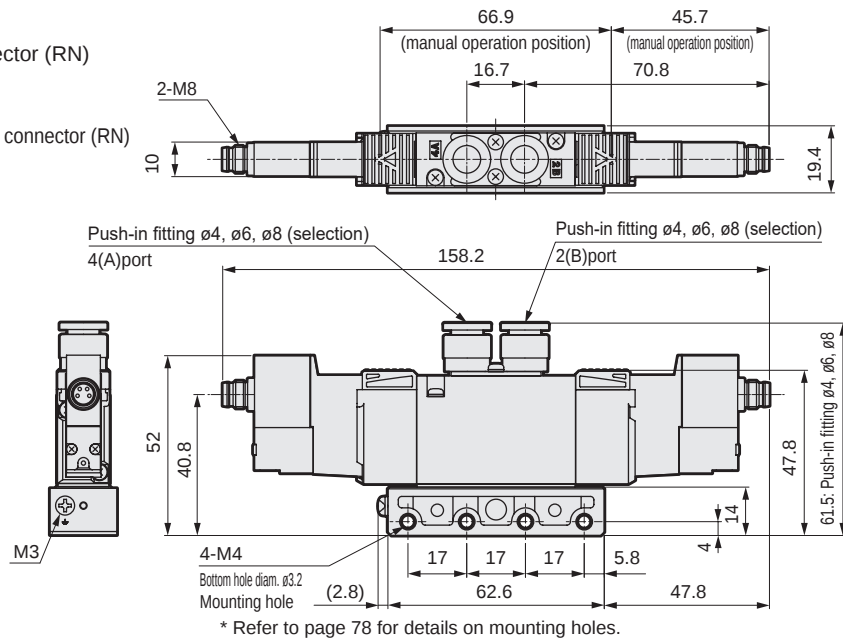
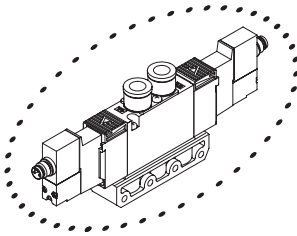
## Dimensions

## 4GD220EA

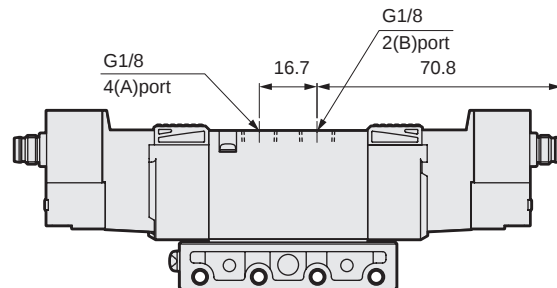
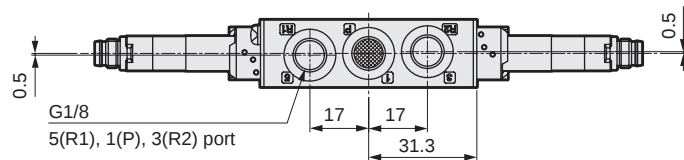
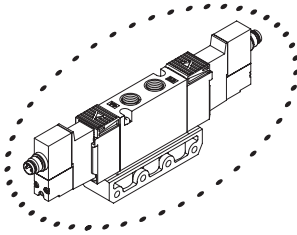
- 2-position double without connector (RN)

## 3GD2660EA

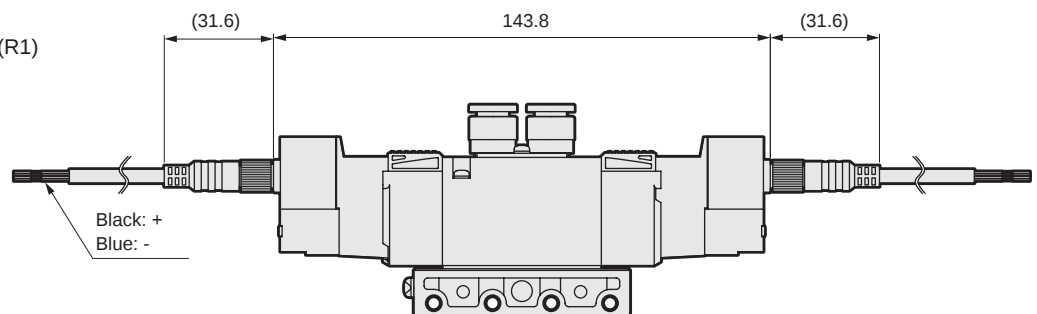
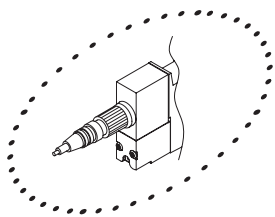
- Two 3-port valves integrated without connector (RN)



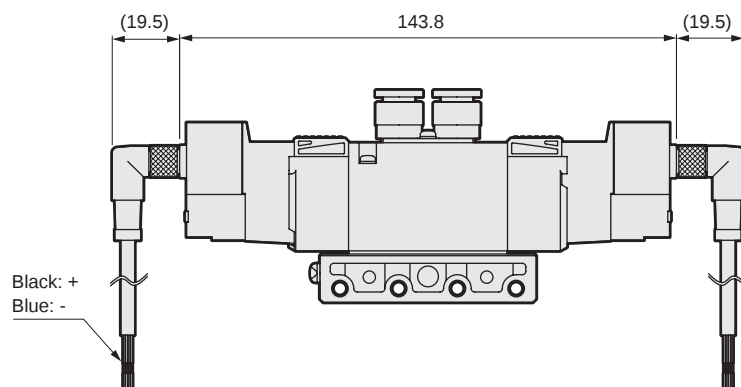
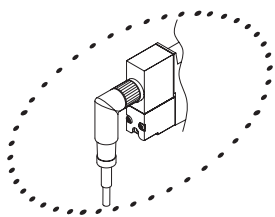
- G1/8 female thread (06G)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



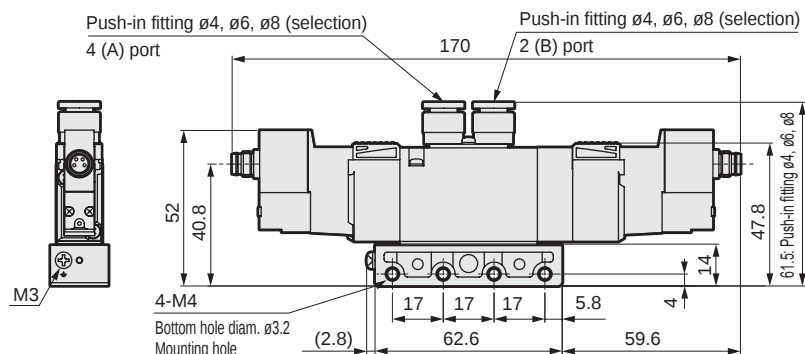
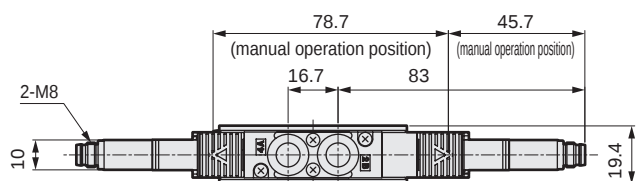
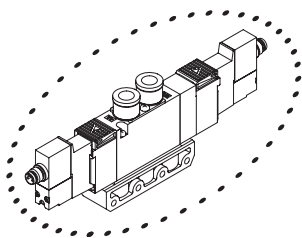
# 4GD2\*0EA Series

Discrete valve; Body piping

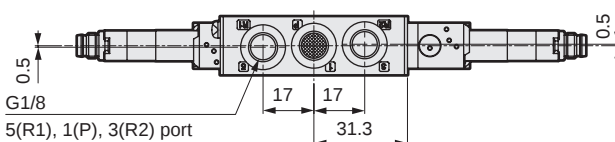
## Dimensions

### 4GD2\*0EA

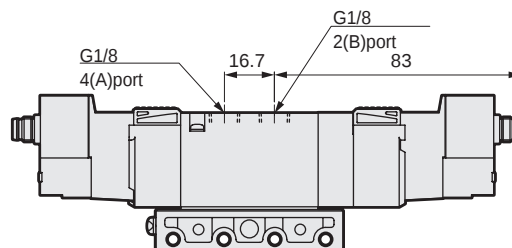
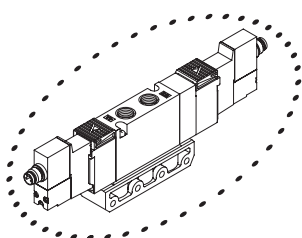
- 3-position without connector (RN)



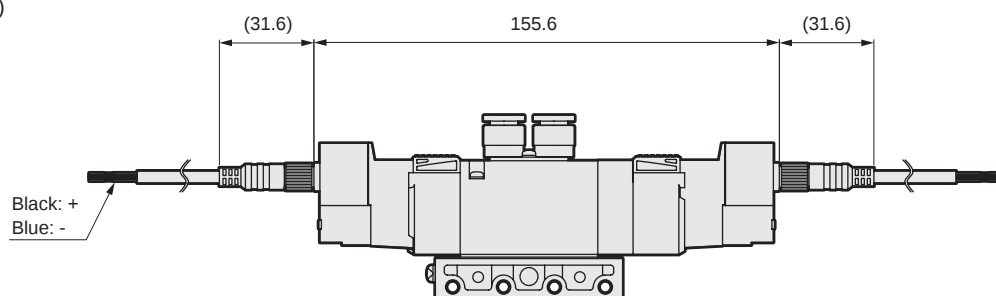
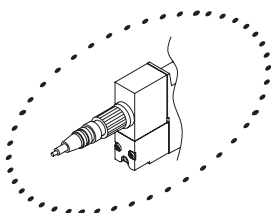
\* Refer to page 78 for details on mounting holes.



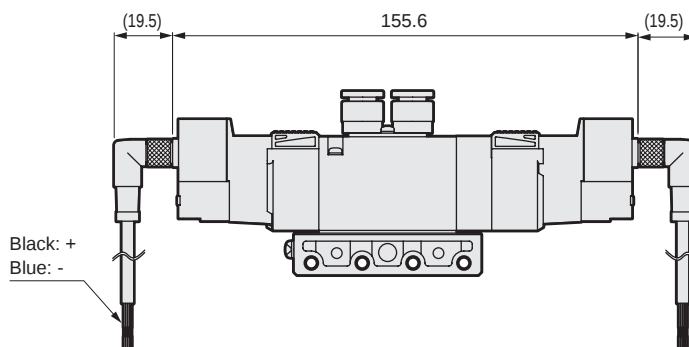
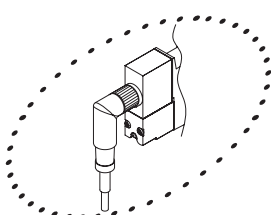
- G1/8 female thread (06G)



- M8 connector/straight cable (R1)



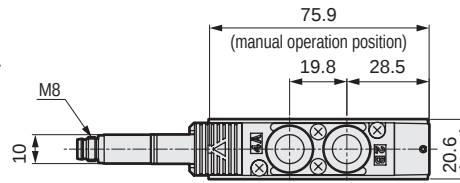
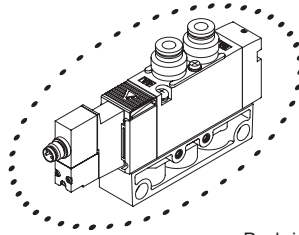
- M8 connector/L-type cable (R2)



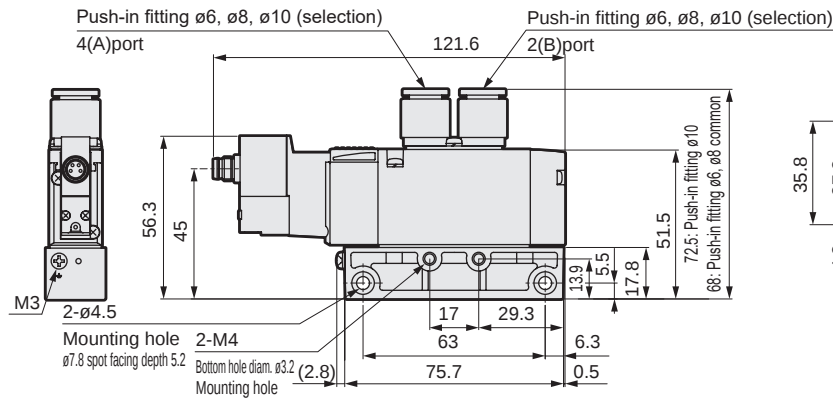
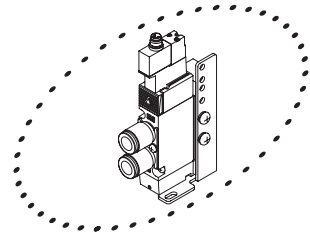
## Dimensions

### 4GD310EA

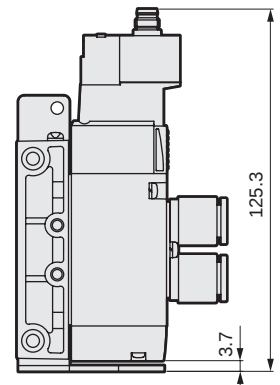
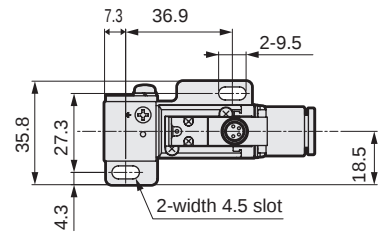
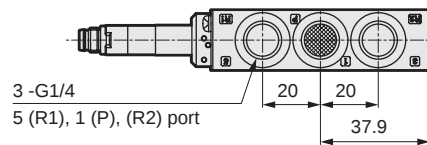
- 2-position single without connector (RN)



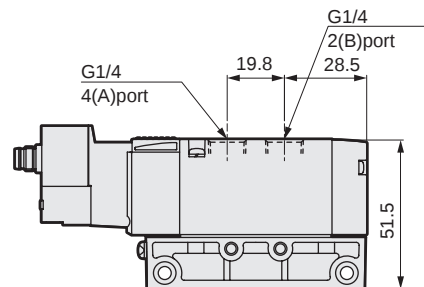
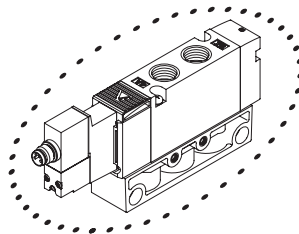
- Mounting plate (P)



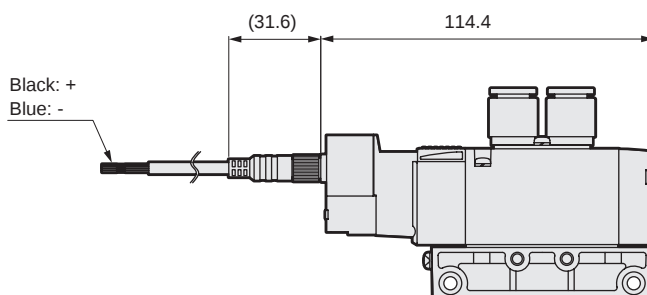
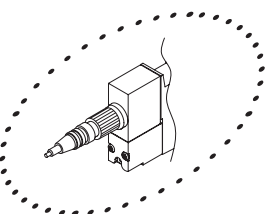
\* Refer to page 78 for details on mounting holes.



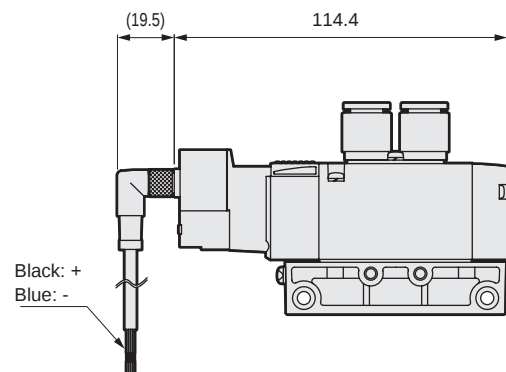
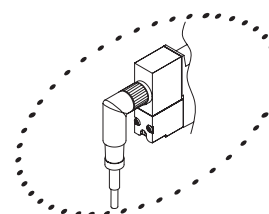
- G1/4 female thread (08G)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

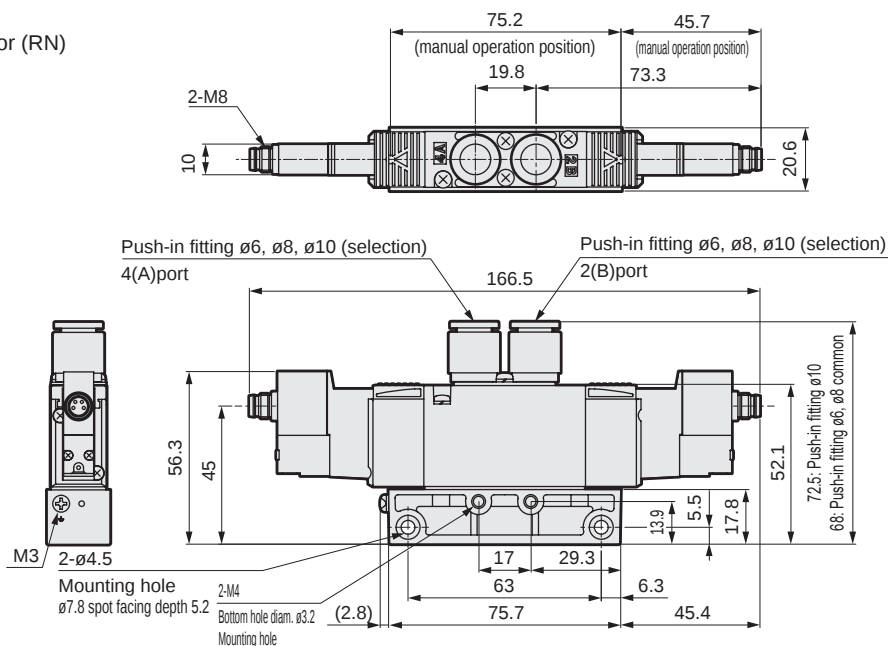
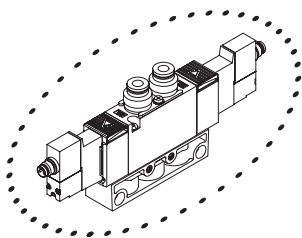
# 4GD3\*0EA Series

Discrete valve; Body piping

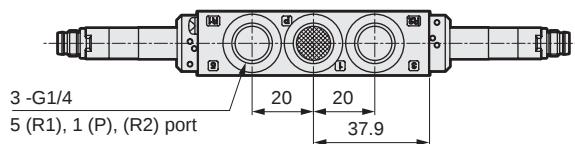
## Dimensions

### 4GD320EA

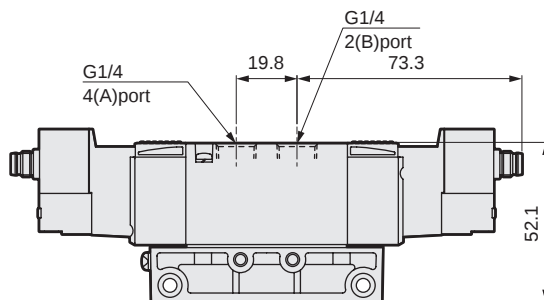
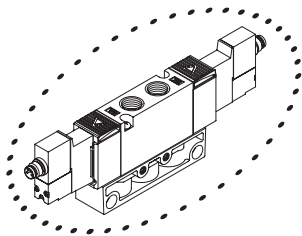
- 2-position double without connector (RN)



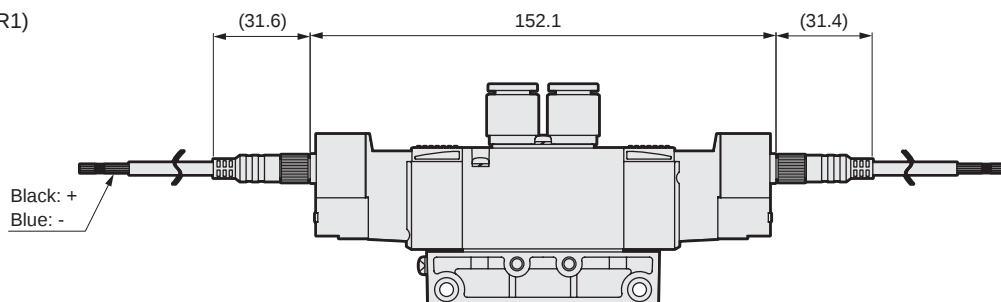
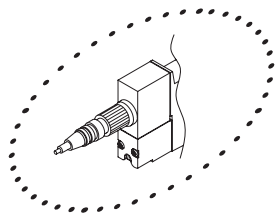
\* Refer to page 78 for details on mounting holes.



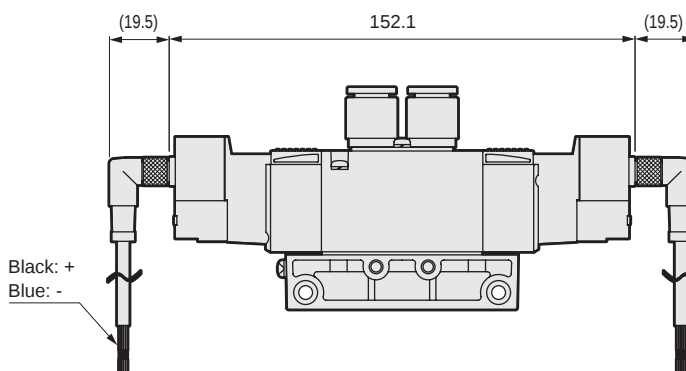
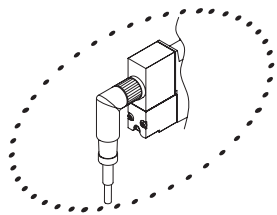
- G1/4 female thread (08G)



- M8 connector/straight cable (R1)



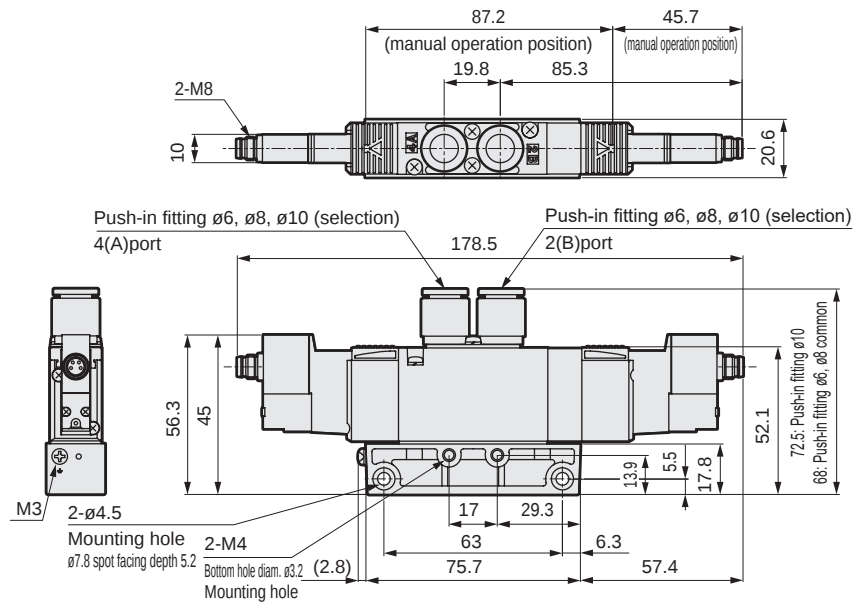
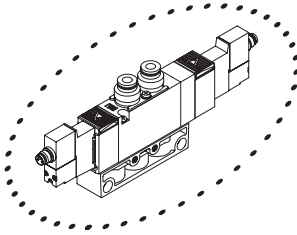
- M8 connector/L-type cable (R2)



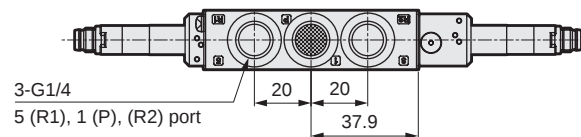
## Dimensions

### 4GD3<sup>3/8</sup>\*0EA

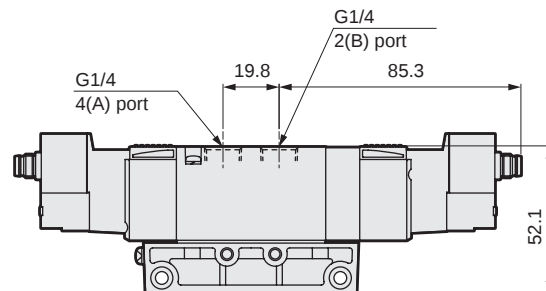
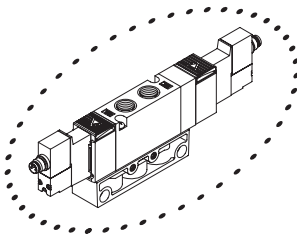
- 3-position without connector (RN)



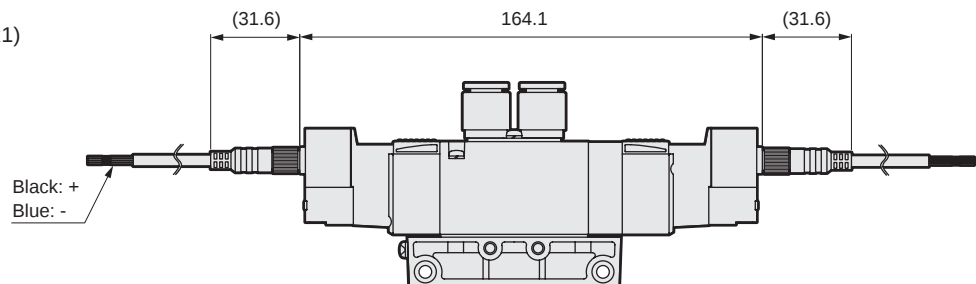
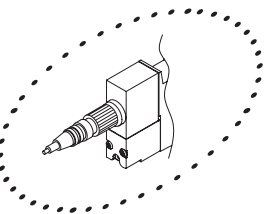
\* Refer to page 78 for details on mounting holes.



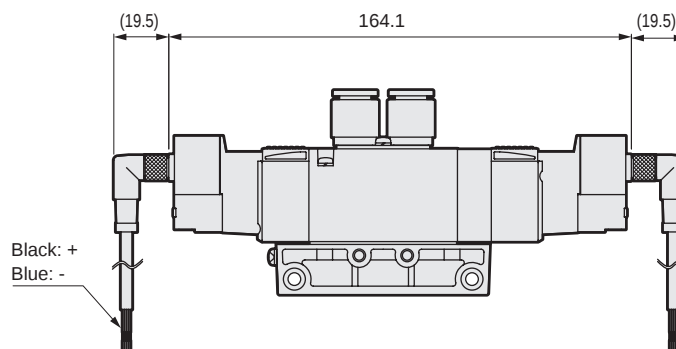
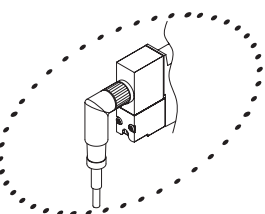
- G1/4 female thread (08G)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

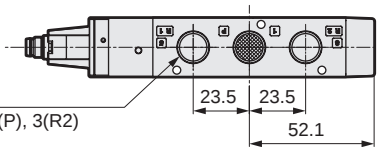
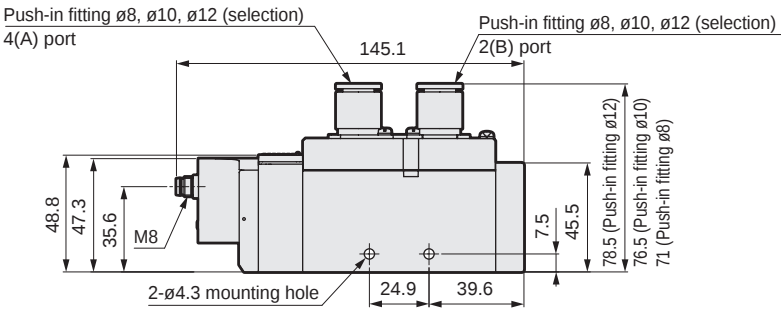
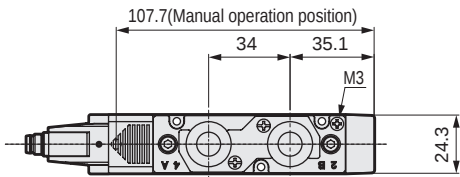
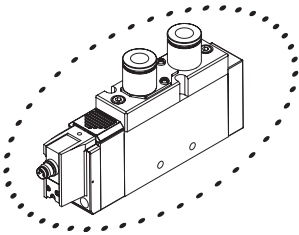
# 4GD4\*0EA Series

Discrete valve; Body piping

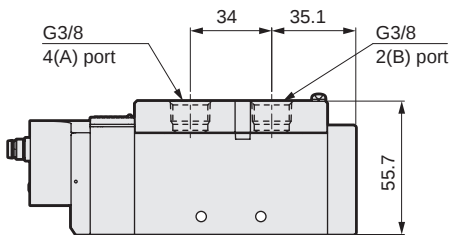
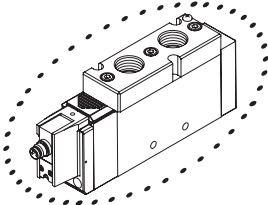
## Dimensions

### 4GD410EA

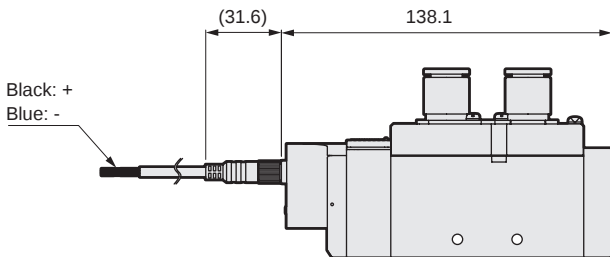
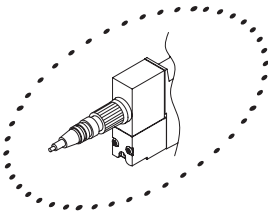
- 2-position single Without connector (RN)



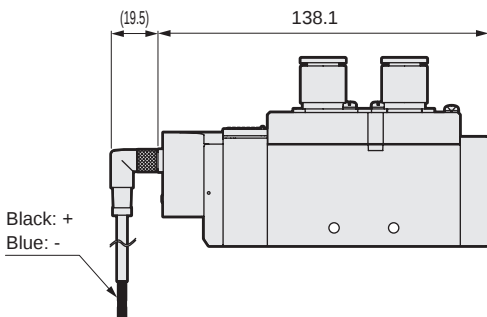
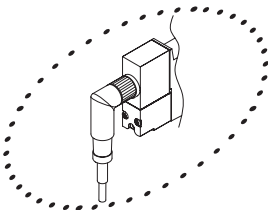
- G3/8 female thread (10G)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

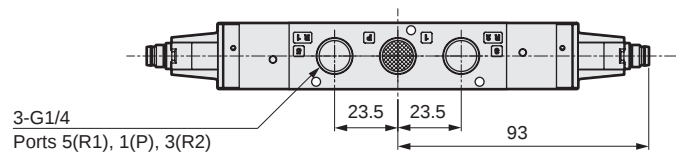
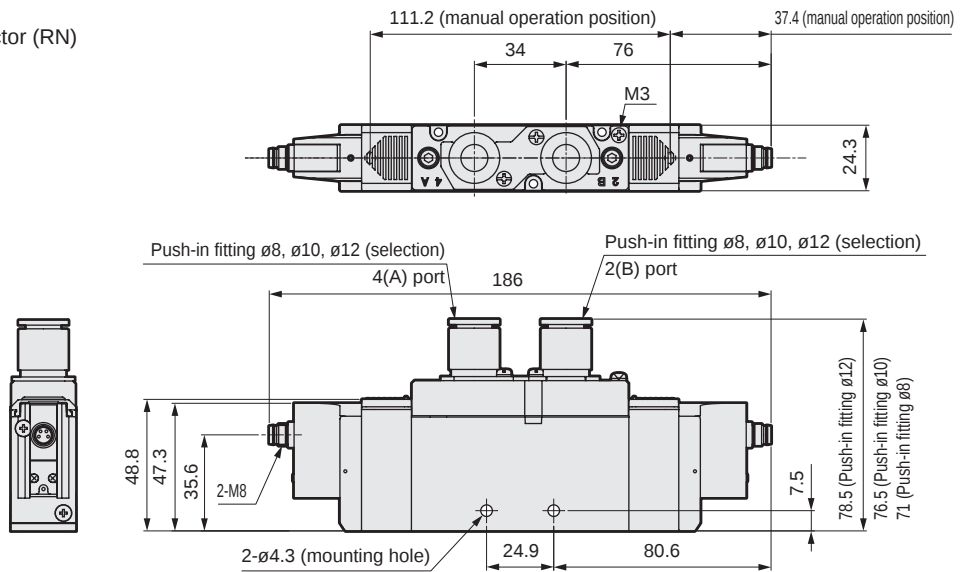
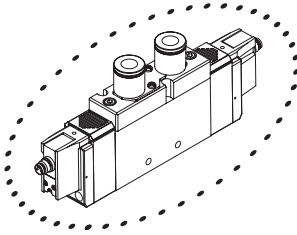
Manifold  
Specifications sheet

Safety precautions

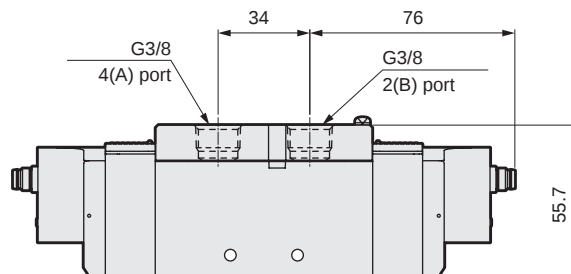
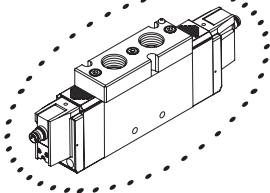
## Dimensions

### 4GD420EA

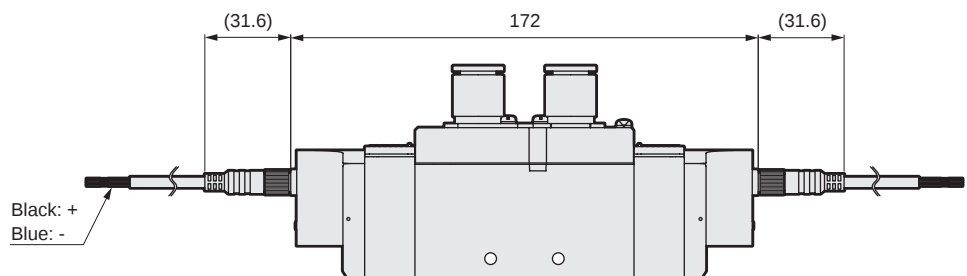
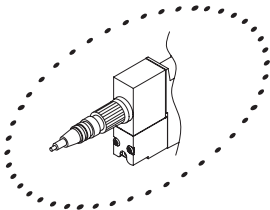
- 2-position double Without connector (RN)



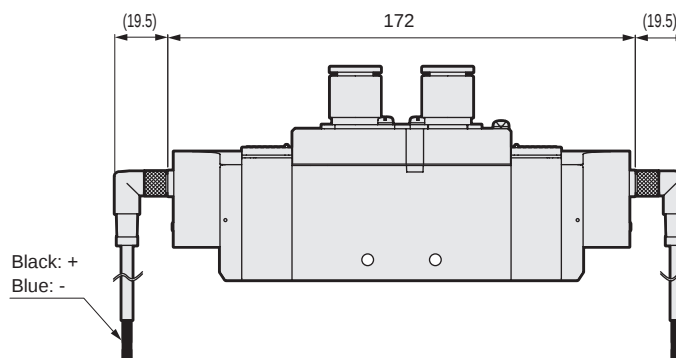
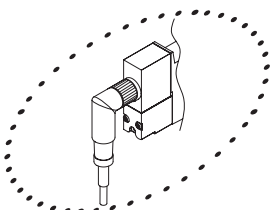
- G3/8 female thread (10G)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

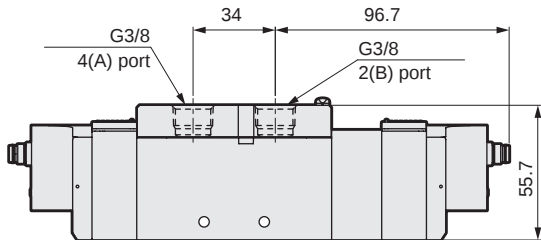
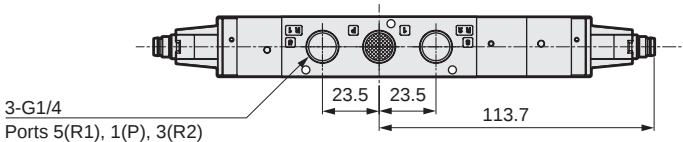
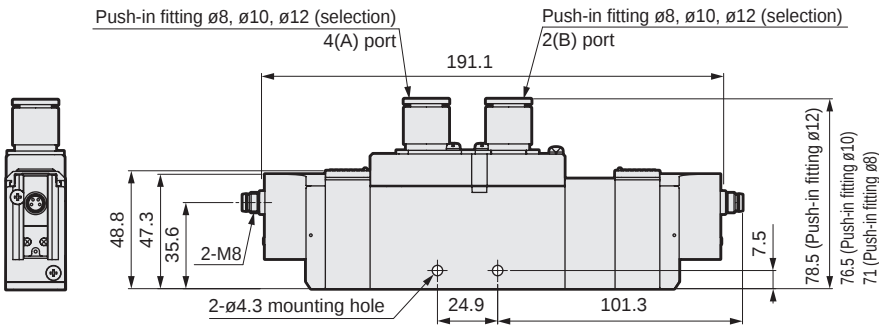
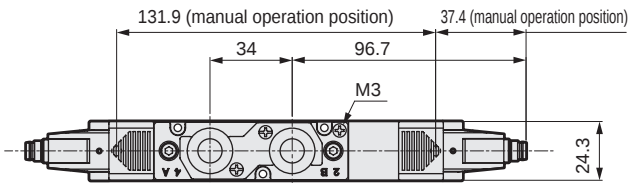
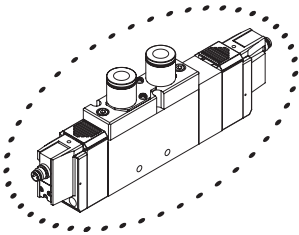
# 4GD4\*0EA Series

Discrete valve; Body piping

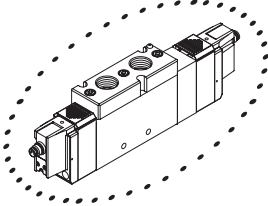
## Dimensions

### 4GD4<sup>3</sup><sub>5</sub>0EA

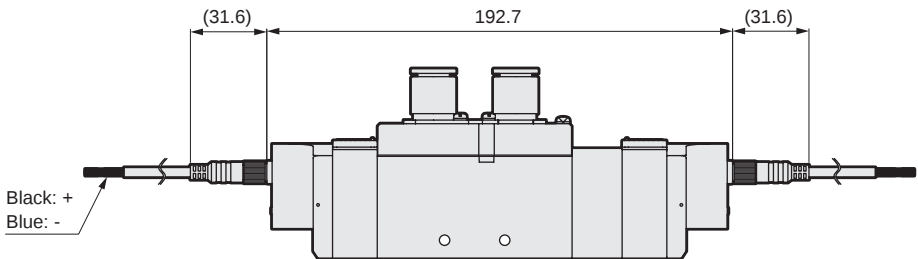
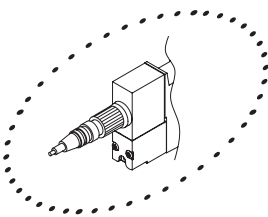
- 3-position without connector (RN)



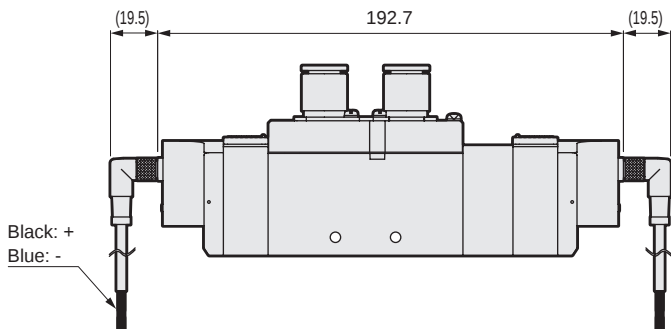
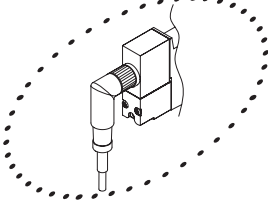
- G3/8 female thread (10G)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



| 3GD*0EA<br>4GD*0EA | 3GE*0EA<br>4GE*0EA | M3GD*0EA<br>M4GD*0EA | M3GE*0EA<br>M4GE*0EA | Related products | Manifold<br>Specifications sheet | Safety precautions |
|--------------------|--------------------|----------------------|----------------------|------------------|----------------------------------|--------------------|
|--------------------|--------------------|----------------------|----------------------|------------------|----------------------------------|--------------------|

MEMO



Discrete valve  
Base piping

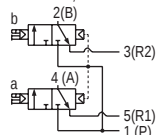
# 3GE1/2 / 4GE1/2/3/4\*0EA Series

● Applicable cylinder bore size: ø20 to ø160

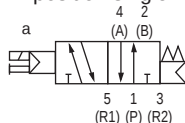


## JIS symbol

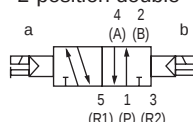
- Two 3-port valves integrated  
(A side valve: NC, B side valve: NC)



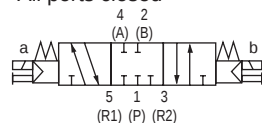
- 5-port valve  
2-position single



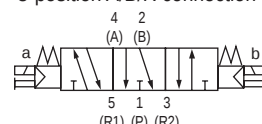
### 2-position double



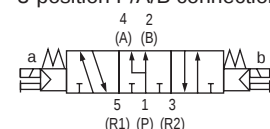
### 3 Position Mounting All ports closed



### 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                                          |
| Min. working pressure MPa             | 0.2                                          |
| Proof pressure MPa                    | 1.05                                         |
| Ambient temperature °C                | -5 to 55 (no freezing)                       |
| Fluid temperature °C                  | 5 to 55                                      |
| Manual override                       | NNlock/lock common (standard)                |
| Pilot exhaust method                  | Internal pilot                               |
|                                       | Main valve/pilot valve common exhaust        |
| Lubrication *1                        | Not required                                 |
| Degree of protection *2               | IP67                                         |
| Vibration resistance m/s <sup>2</sup> | 50 or less                                   |
| Shock resistance m/s <sup>2</sup>     | 300 or less                                  |
| Atmosphere                            | Cannot be used in corrosive gas environments |

## Solenoid specifications

| Item                      | Description  |
|---------------------------|--------------|
| Rated voltage V           | DC12         |
| Voltage fluctuation range | +10%<br>-20% |
| Rated current A           | 0.05         |
| Power consumption W (*3)  | 0.6          |
| Thermal class             | B            |

\*1 Use turbine oil Class 1 ISO VG32 for lubrication. Excessive or intermittent lubrication results in unstable operation.

\*2 Tested according to the test method for IP67 (IEC60529) standards. Note that while the unit is protected from dust and water, it cannot be used immersed in water. Countermeasures such as covering the unit should also be taken if using in environments where it will be constantly exposed to dust or water.

## Intrinsic safety explosion-proof specifications

| Item                                                          | Description                                     |
|---------------------------------------------------------------|-------------------------------------------------|
| Types of explosion-proof structures                           | Intrinsic safety explosion-proof structure (ib) |
| Target gas or above listed ignitability and flame-proof grade | II 2G Ex ib IIC T4 Gb                           |
| Barrier input voltage                                         | 24 VDC                                          |
| Intrinsic safety circuit allowable voltage Ui                 | 30V DC                                          |
| Intrinsic safety circuit allowable current Ii                 | 200mA                                           |
| Intrinsic safety circuit allowable power Pi                   | 0.68 W                                          |
| Internal inductance Li                                        | Value that can be ignored                       |
| Internal capacitance Ci                                       | Value that can be ignored                       |

## Individual specifications

| Port size                      | 3GE1/4GE1 | 3GE2/4GE2 | 4GE3       | 4GE4       |
|--------------------------------|-----------|-----------|------------|------------|
| 2/4-port<br>(port A/B)         | G1/8      | G1/4      | G1/4, G3/8 | G3/8, G1/2 |
| 1, 3, 5-port<br>(Port P/R1/R2) | G1/8      | G1/4      | G1/4, G3/8 | G3/8, G1/2 |

## Performance/characteristics by model

| Item                |                              | 3GE1           |     | 3GE2 |     | 4GE1 |     | 4GE2 |     | 4GE3 |     | 4GE4 |     |
|---------------------|------------------------------|----------------|-----|------|-----|------|-----|------|-----|------|-----|------|-----|
|                     |                              | ON             | OFF | ON   | OFF | ON   | OFF | ON   | OFF | ON   | OFF | ON   | OFF |
| Response time<br>ms | Two 3-port valves integrated | 15             | 35  | 20   | 50  | -    | -   | -    | -   | -    | -   | -    | -   |
|                     | 2-position                   | Single         | -   | -    | -   | 15   | 35  | 20   | 40  | 25   | 60  | 100  | 110 |
|                     |                              |                | -   | -    | -   | 25   | 25  | 30   | 30  | 35   | 35  | 110  | 110 |
|                     | 3-position                   | ABR connection | -   | -    | -   | 20   | 40  | 25   | 45  | 35   | 60  | 100  | 160 |

The response times are values under continuous operation at supply pressure of 0.5 MPa, at rated voltage and at 20°C without lubrication. They depend on the pressure and the lubricant quality.

## Weight

| Item     |            |                | 4GE1 | 4GE2     | 4GE3     | 4GE4     |
|----------|------------|----------------|------|----------|----------|----------|
| Weight g | 2-position | Single         | 97   | 173      | 246      | 551(241) |
|          |            | Double         | 118  | 194      | 267(138) | 584(275) |
|          | 3-position | ABR connection | 120  | 202(120) | 277(148) | 616(306) |

· ( ) Values in the do not include the pipe adaptor. These values include the M8 connector (straight).

· The weight of the two 3-port valves integrated type 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 |                  | 0.8                         | 0.20 | 1.0                         | 0.13 |
|           | 2-position                   |                  | 1.1                         | 0.16 | 1.1                         | 0.10 |
|           | 3-position                   | All ports closed | 1.0                         | 0.15 | 1.1                         | 0.10 |
|           |                              | ABR connection   | 1.0                         | 0.15 | 1.2                         | 0.09 |
|           |                              | PAB connection   | 1.2                         | 0.20 | 1.1                         | 0.10 |
| 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 |
| 4GE4      | 2-position                   |                  | 11.0                        | 0.19 | 13.0                        | 0.19 |
|           | 3-position                   | All ports closed | 9.1                         | 0.11 | 12.0                        | 0.27 |
|           |                              | ABR connection   | 8.8                         | 0.28 | 13.9                        | 0.25 |
|           |                              | PAB connection   | 10.0                        | 0.06 | 12.0                        | 0.24 |

\*1: Formula for converting effective cross-sectional area S and sonic conductance C is  $S \approx 5.0 \times C$ .

3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

# 3GE1/2 / 4GE1/2/3/4\*0EA Series

Discrete valve; Base piping

How to order (solenoid valve single unit)

● Single unit

4GE1 1 0 EA - 06G - RN - 4  
3GE2 66 0 EA - 08G - RN - 4

| A Model No. |      |      |      |      |      |
|-------------|------|------|------|------|------|
| 3GE1        | 3GE2 | 4GE1 | 4GE2 | 4GE3 | 4GE4 |

|                    |                    |                      |                      |                  |                                  |                    |
|--------------------|--------------------|----------------------|----------------------|------------------|----------------------------------|--------------------|
| 3GD*0EA<br>4GD*0EA | 3GE*0EA<br>4GE*0EA | M3GD*0EA<br>M4GD*0EA | M3GE*0EA<br>M4GE*0EA | Related products | Manifold<br>Specifications sheet | Safety precautions |
|--------------------|--------------------|----------------------|----------------------|------------------|----------------------------------|--------------------|

A Model No.

B Solenoid position

C Explosion-proof Series

D Port size

E Electrical connections

F Option

G Voltage

| Code                                  | Description                                                    | 3GE1                                                             | 3GE2 | 4GE1 | 4GE2 | 4GE3 | 4GE4 |
|---------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------|------|------|------|------|------|
| <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                                    | 3-port valve<br>Two valves integrated *1                       | ●                                                                | ●    |      |      |      |      |
|                                       | A valve side: Normally closed<br>B valve side: Normally closed |                                                                  |      |      |      |      |      |
| <b>C Explosion-proof Series</b>       |                                                                |                                                                  |      |      |      |      |      |
| EA                                    | ATEX Directive compliant product                               | ●                                                                | ●    | ●    | ●    | ●    | ●    |
| <b>D Port size {ports 4(A), 2(B)}</b> |                                                                |                                                                  |      |      |      |      |      |
| Port                                  | 4(A)/2(B) port                                                 | Port P/R1/R2<br>(2)=G1/8<br>(3)=G1/4<br>(4)=G3/8<br>(1/2) = G1/4 |      |      |      |      |      |
| 06G                                   | G1/8                                                           | (2)                                                              | (2)  |      |      |      |      |
| 08G                                   | G1/4                                                           |                                                                  | (3)  | (3)  | (3)  |      |      |
| 10G                                   | G3/8                                                           |                                                                  |      |      | (4)  | (4)  |      |
| 15G                                   | G1/2                                                           |                                                                  |      |      |      | (5)  |      |
| 00                                    | Valve for base mounting                                        | ●                                                                | ●    | ●    | ●    | ●    | ●    |
| <b>E Electrical connections</b>       |                                                                |                                                                  |      |      |      |      |      |
| RN                                    | M8 connector without cable                                     | ●                                                                | ●    | ●    | ●    | ●    | ●    |
| R 1                                   | M8 connector straight cable                                    | ●                                                                | ●    | ●    | ●    | ●    | ●    |
| R 2                                   | M8 connector L-type cable                                      | ●                                                                | ●    | ●    | ●    | ●    | ●    |
| <b>F Option</b>                       |                                                                |                                                                  |      |      |      |      |      |
| Blank                                 | Manual override of non-locking/locking common (standard)       | ●                                                                | ●    | ●    | ●    | ●    | ●    |
| H                                     | With exhaust check valve *3                                    | ●                                                                | ●    | ●    | ●    | ●    | ●    |
| F                                     | Port A/B filter *4                                             | ●                                                                | ●    | ●    | ●    | ●    | ●    |
| <b>G Voltage</b>                      |                                                                |                                                                  |      |      |      |      |      |
| 4                                     | 12 VDC                                                         | ●                                                                | ●    | ●    | ●    | ●    | ●    |

## ⚠ Precautions for model No. selection

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

\*2 M8 connector length is 300mm. Select other lengths from page 63 as needed.

\*3 The 3-position all ports closed and PAB connection are not provided with exhaust check valve specifications (H).

\*4 A filter is built into port P as standard.

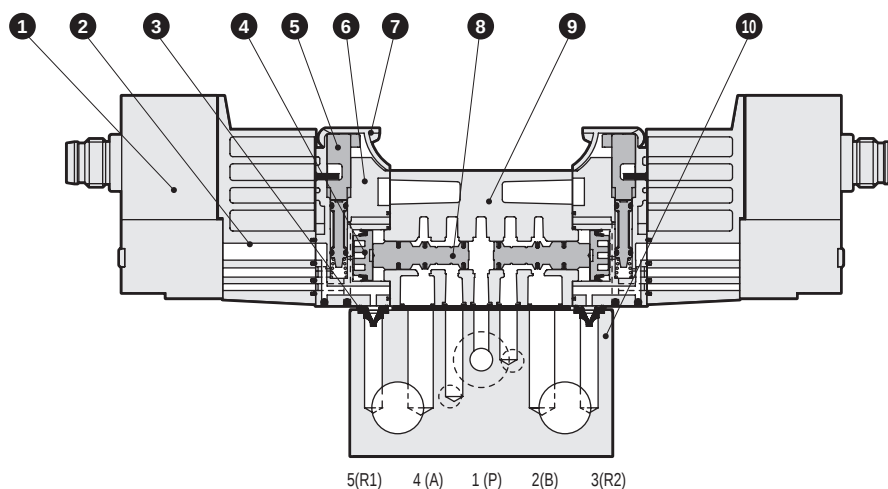
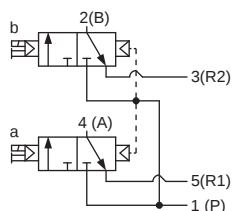
\*5 Explosion-proof barrier sold separately. Select from page 67.

## Internal structure diagram and parts list

### 3GE1660EA

- Two 3-port valves integrated  
M8 connector without cable (RN)

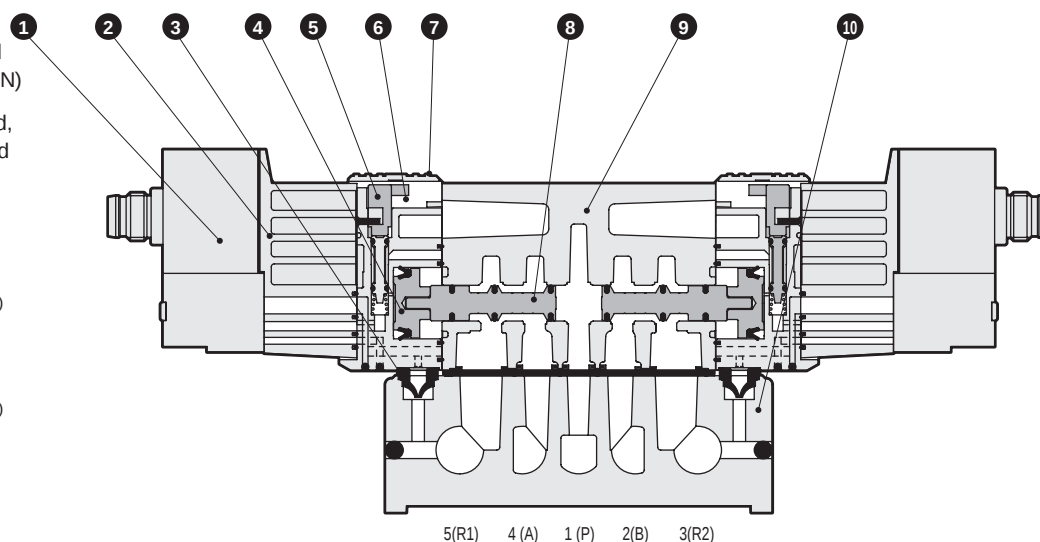
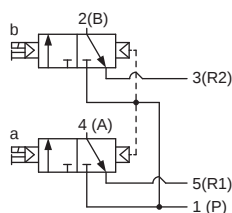
A side valve: Normally closed,  
B side valve: Normally closed  
NC/NC



### 3GE2660EA

- Two 3-port valves integrated  
M8 connector without cable (RN)

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



## Main parts list

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

3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

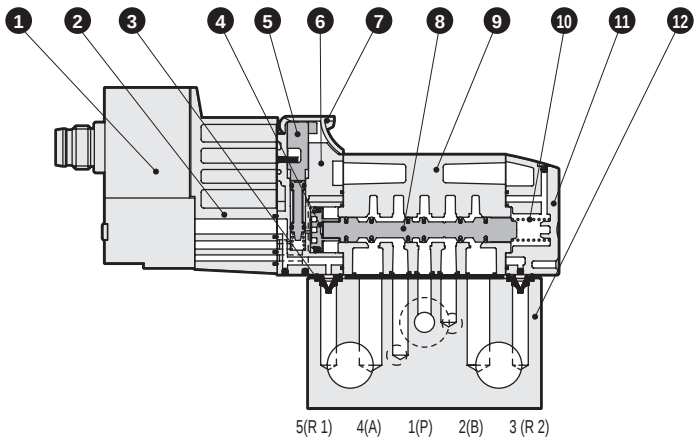
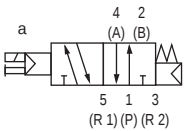
# 4GE1\*0EA Series

Discrete valve; Base piping

Internal structure diagram and parts list

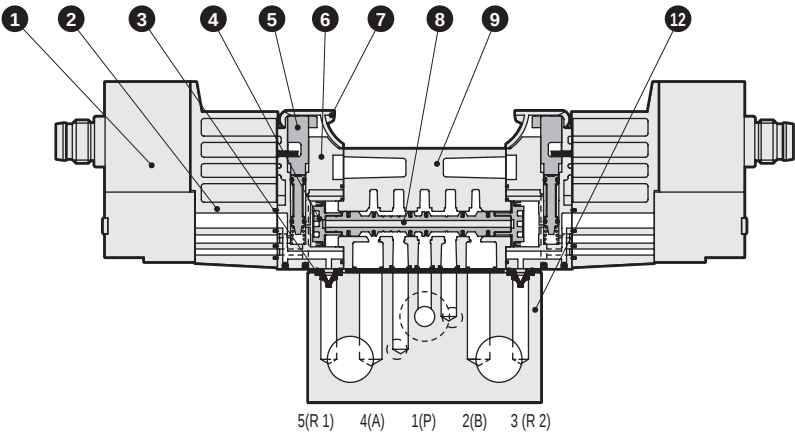
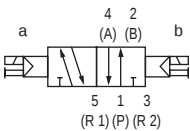
## 4GE110EA

- 2-position single
- M8 connector without cable (RN)



## 4GE120EA

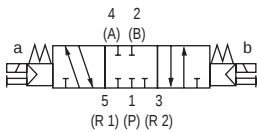
- 2-position double
- M8 connector without cable (RN)



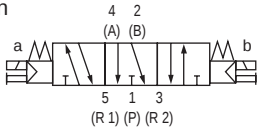
## 4GE1<sup>3</sup>0EA

- 3-position
- M8 connector without cable (RN)

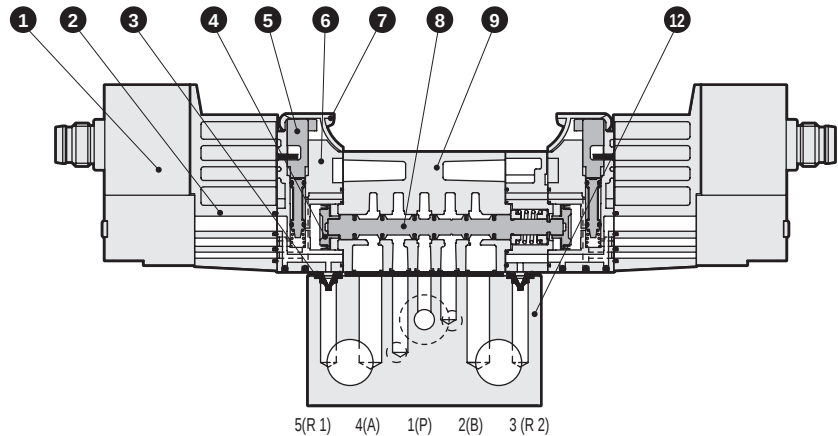
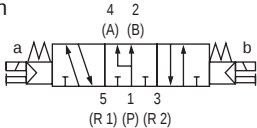
All ports closed



A/B/R connection



P/A/B connection



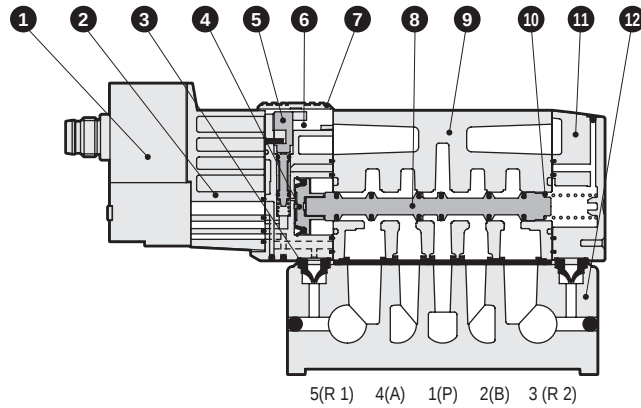
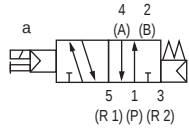
## Main parts list

| Part No. | Part name                 | Material                    | Part No. | Part name               | Material                   |
|----------|---------------------------|-----------------------------|----------|-------------------------|----------------------------|
| 1        | Coil assembly             | -                           | 7        | Manual protection cover | Resin                      |
| 2        | Adapter                   | Resin                       | 8        | Spool assembly          | -                          |
| 3        | Pilot exhaust check valve | Hydrogenated nitrile rubber | 9        | Body                    | Aluminum alloy die-casting |
| 4        | Piston D assembly         | -                           | 10       | Spool spring            | Stainless steel            |
| 5        | Manual override           | Resin                       | 11       | Cap                     | Resin                      |
| 6        | Piston chamber            | Resin                       | 12       | Sub-plate               | Aluminum alloy             |

## Internal structure diagram and parts list

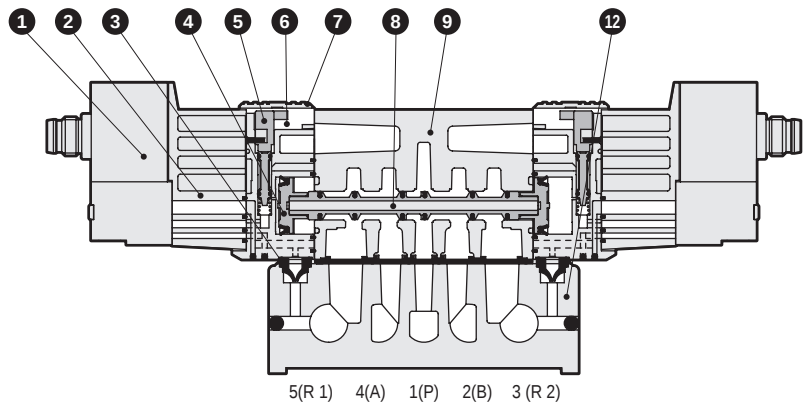
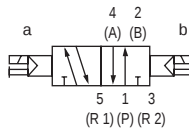
### 4GE210EA/4GE310EA

- 2-position single
- M8 connector without cable (RN)



### 4GE220EA/4GE320EA

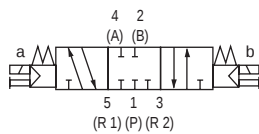
- 2-position double
- M8 connector without cable (RN)



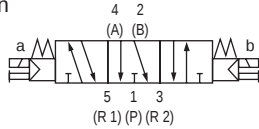
### 4GE2<sup>3</sup>0EA/4GE3<sup>3</sup>0EA

- 3-position
- M8 connector without cable (RN)

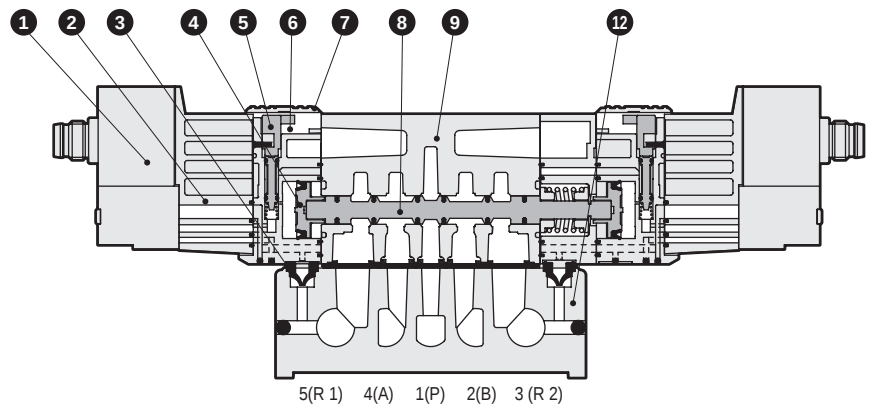
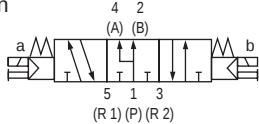
All ports closed



A/B/R connection



P/A/B connection



## Main parts list

| Part No. | Part name                 | Material                    | Part No. | Part name               | Material                   |
|----------|---------------------------|-----------------------------|----------|-------------------------|----------------------------|
| 1        | Coil assembly             | -                           | 7        | Manual protection cover | Resin                      |
| 2        | Adapter                   | Resin                       | 8        | Spool assembly          | -                          |
| 3        | Pilot exhaust check valve | Hydrogenated nitrile rubber | 9        | Body                    | Aluminum alloy die-casting |
| 4        | Piston D assembly         | -                           | 10       | Spool spring            | Stainless steel            |
| 5        | Manual override           | Resin                       | 11       | Cap                     | Resin                      |
| 6        | Piston chamber            | Resin                       | 12       | Sub-plate               | Aluminum alloy die-casting |

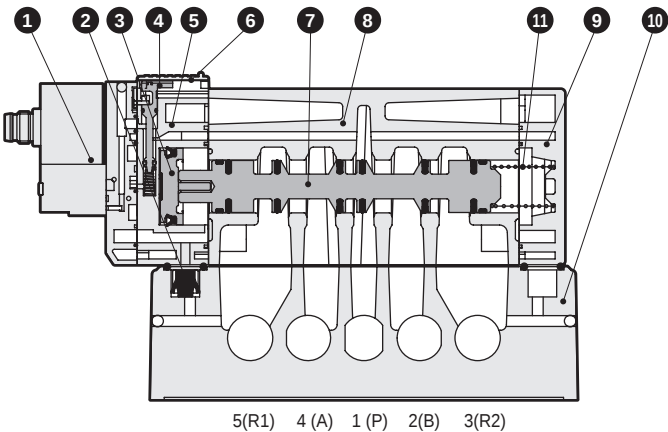
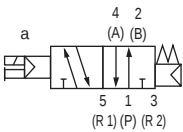
# 4GE4\*0EA Series

Discrete valve; Base piping

Internal structure diagram and parts list

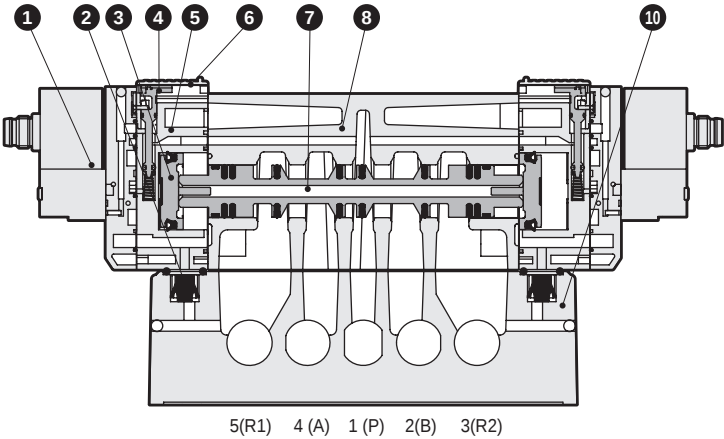
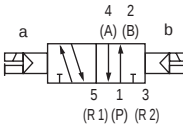
## 4GE410EA

- 2-position single
- M8 connector without cable (RN)



## 4GE420EA

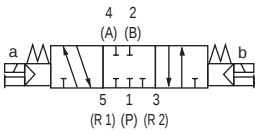
- 2-position double
- M8 connector without cable (RN)



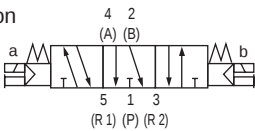
## 4GE430EA

- 3-position
- M8 connector without cable (RN)

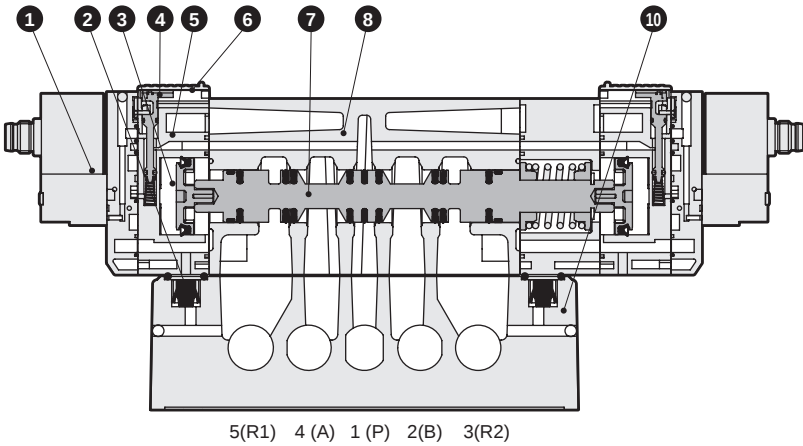
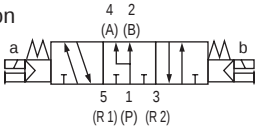
All ports closed



A/B/R connection



P/A/B connection



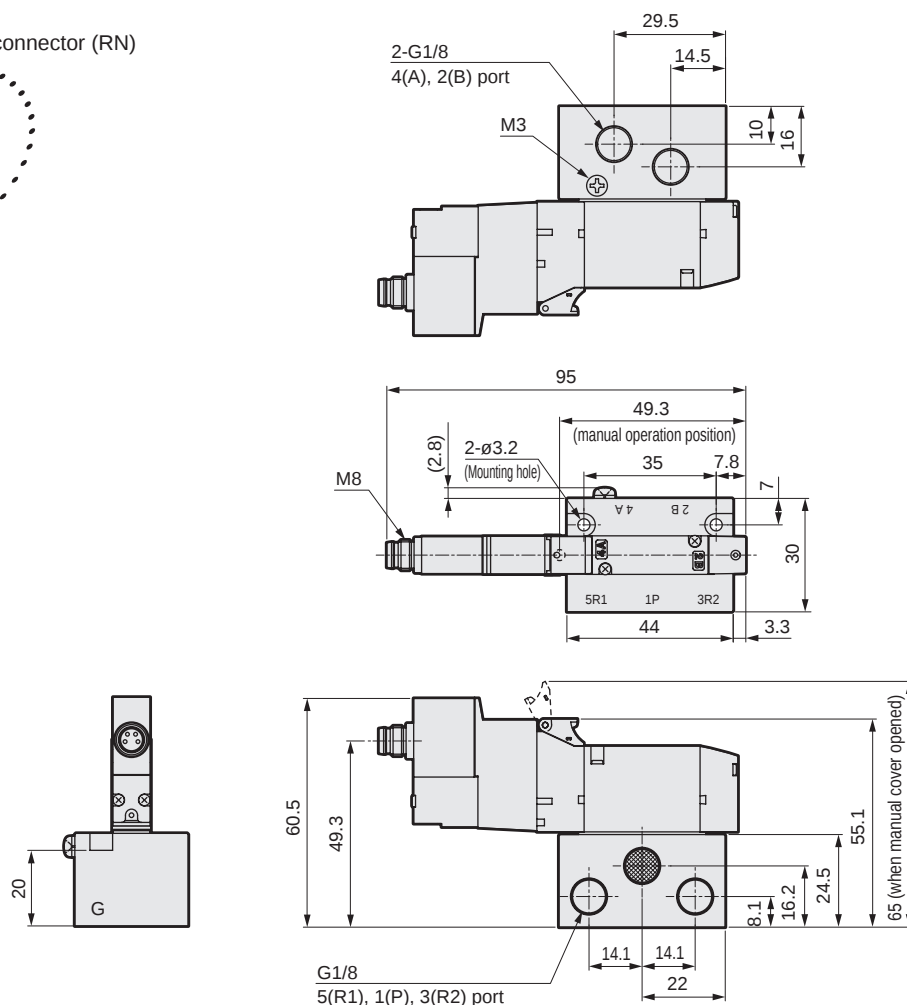
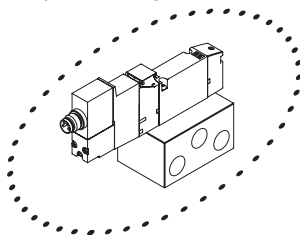
## Main parts list

| Part No. | Part name       | Material                    | Part No. | Part name               | Material                   |
|----------|-----------------|-----------------------------|----------|-------------------------|----------------------------|
| 1        | Coil assembly   | -                           | 6        | Manual protection cover | Resin                      |
| 2        | Check valve     | Hydrogenated nitrile rubber | 7        | Spool assembly          | -                          |
| 3        | Piston assembly | -                           | 8        | Body                    | Aluminum alloy die-casting |
| 4        | Manual override | Resin                       | 9        | Cap                     | Resin                      |
| 5        | Piston chamber  | Resin                       | 10       | Discrete sub-plate      | Aluminum alloy die-casting |
|          |                 |                             | 11       | Spool spring            | Stainless steel            |

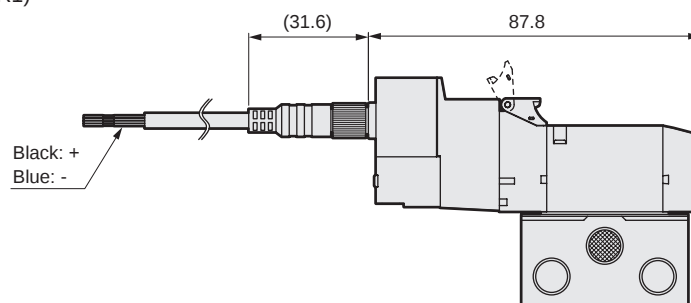
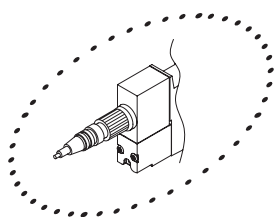
## Dimensions

### 4GE110EA

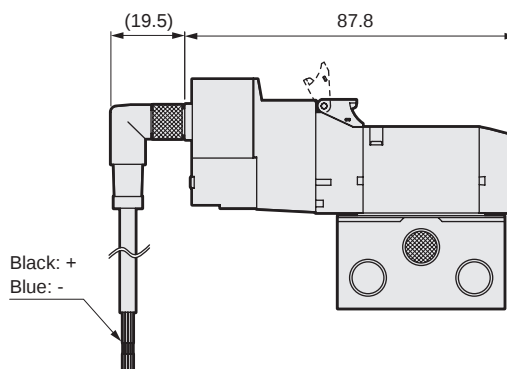
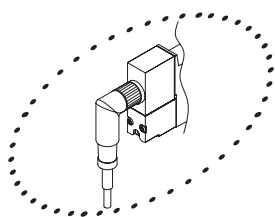
- 2-position single without connector (RN)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

# 4GE1\*0EA Series

Discrete valve; Base piping

## Dimensions

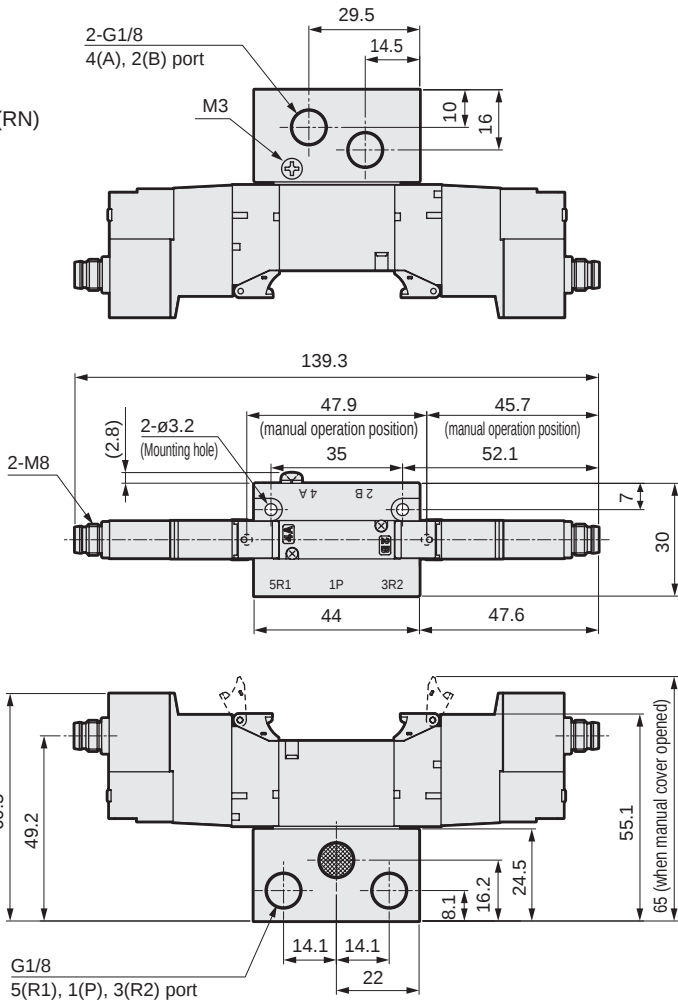
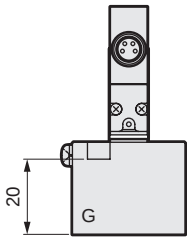
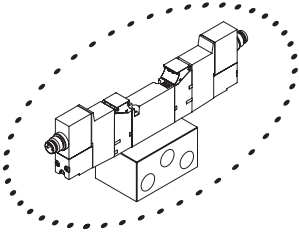
### 4GE120EA

- 2-position double without connector (RN)

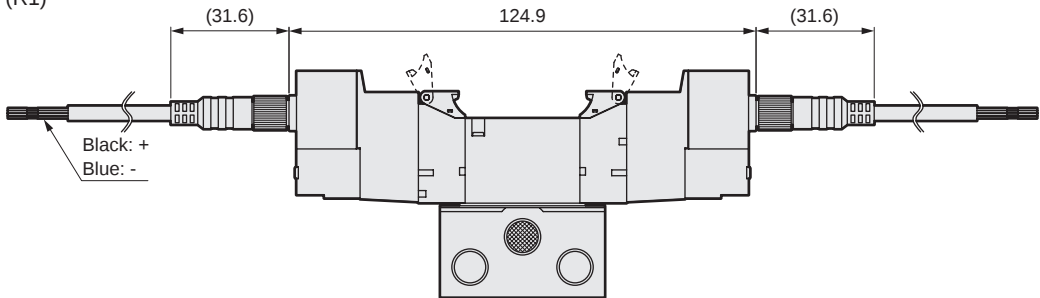
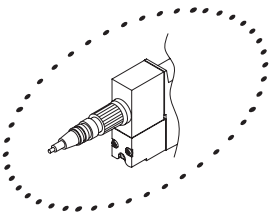
### 3GE1660EA

- Two 3-port valves integrated without connector (RN)

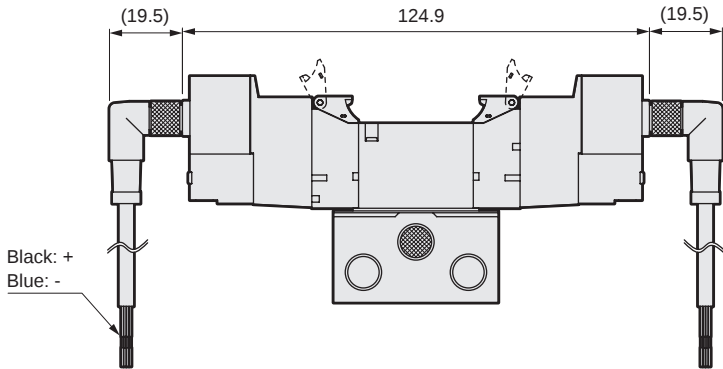
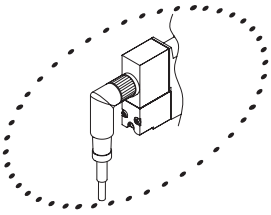
|                    |                    |                      |                      |                  |                               |                    |
|--------------------|--------------------|----------------------|----------------------|------------------|-------------------------------|--------------------|
| 3GD*0EA<br>4GD*0EA | 3GE*0EA<br>4GE*0EA | M3GD*0EA<br>M4GD*0EA | M3GE*0EA<br>M4GE*0EA | Related products | Manifold Specifications sheet | Safety precautions |
|--------------------|--------------------|----------------------|----------------------|------------------|-------------------------------|--------------------|



- M8 connector/straight cable (R1)



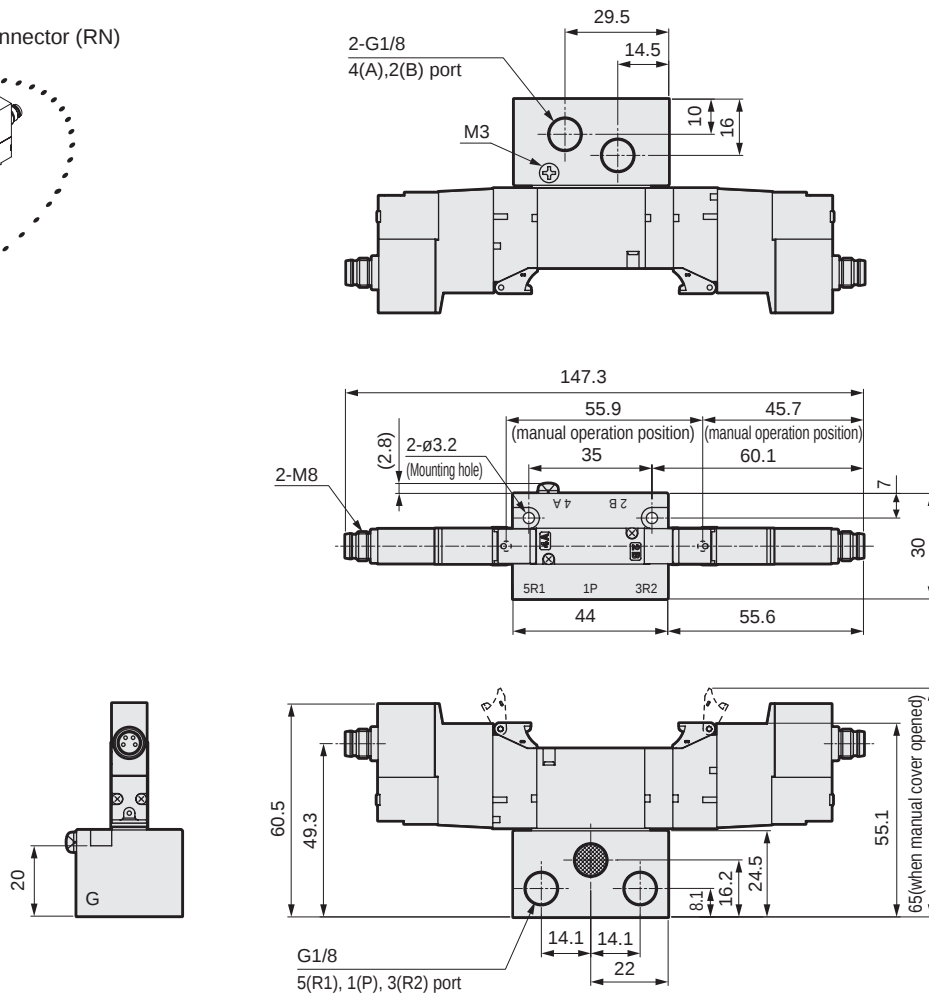
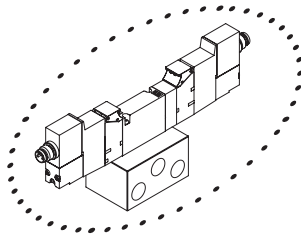
- M8 connector/L-type cable (R2)



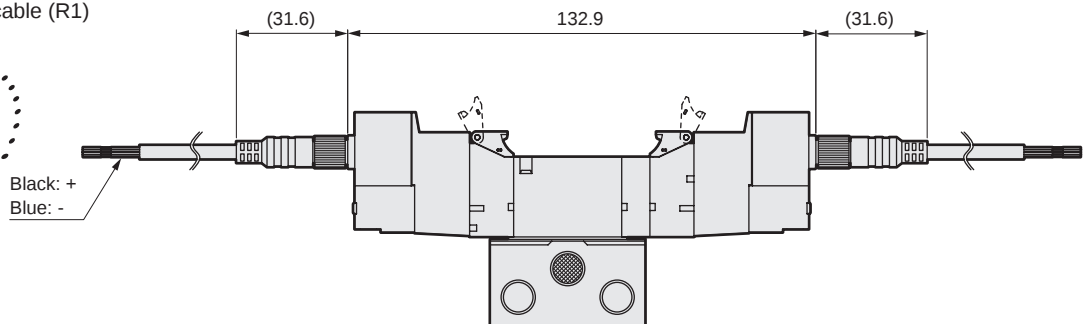
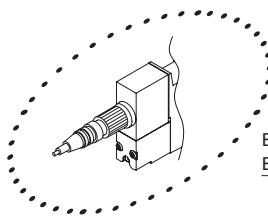
## Dimensions

### 4GE1<sub>5</sub>0EA

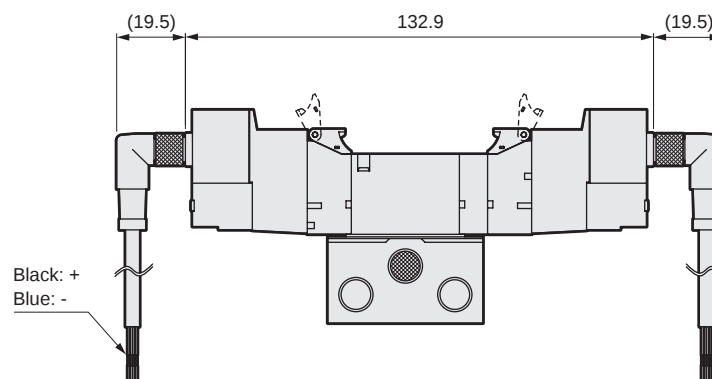
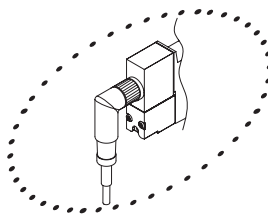
- 3-position without connector (RN)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

# 4GE2\*0EA Series

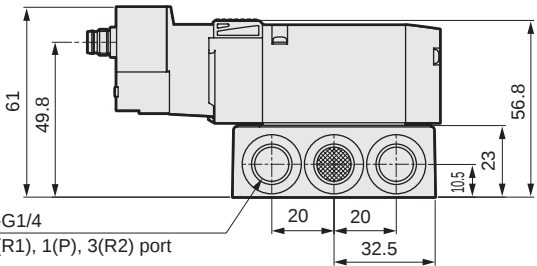
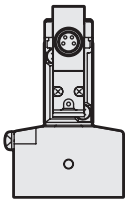
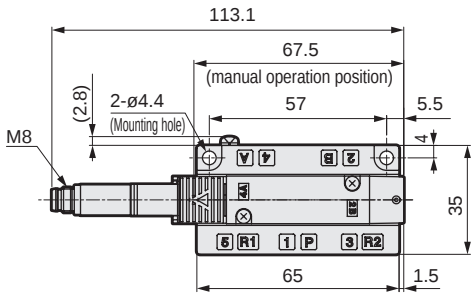
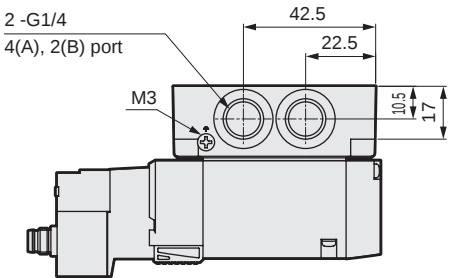
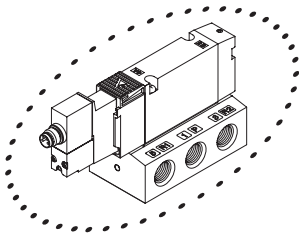
Discrete valve; Base piping

## Dimensions

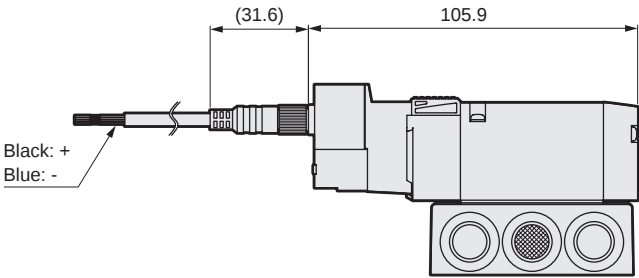
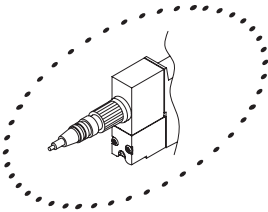
### 4GE210EA

- 2-position single without connector (RN)

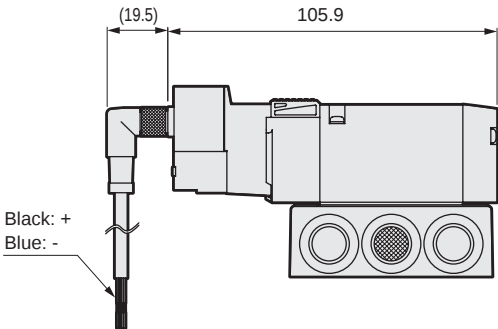
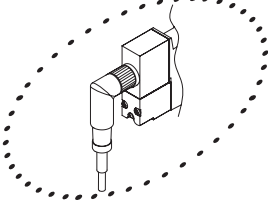
|                               |
|-------------------------------|
| 3GD*0EA<br>4GD*0EA            |
| 3GE*0EA<br>4GE*0EA            |
| M3GD*0EA<br>M4GD*0EA          |
| M3GE*0EA<br>M4GE*0EA          |
| Related products              |
| Manifold Specifications sheet |
| Safety precautions            |



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



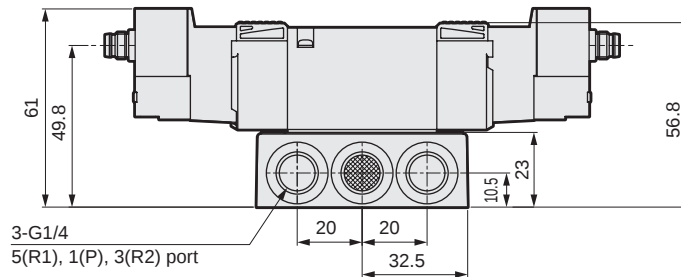
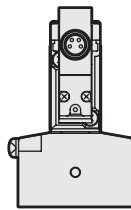
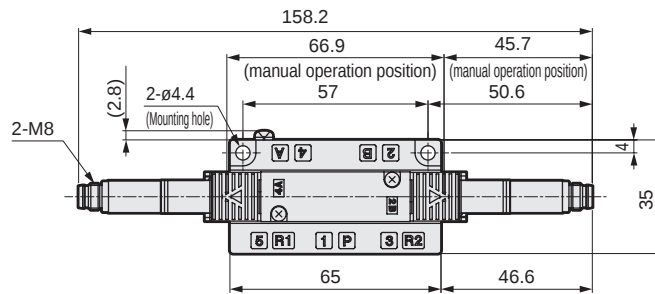
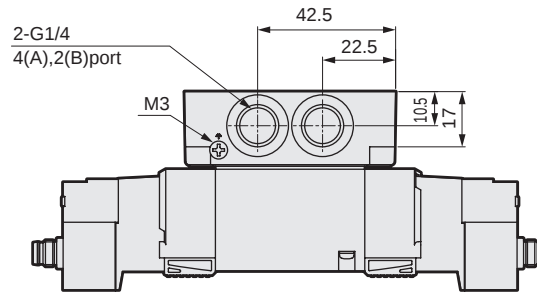
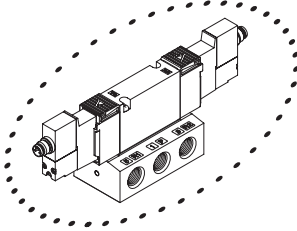
## Dimensions

### 4GE220EA

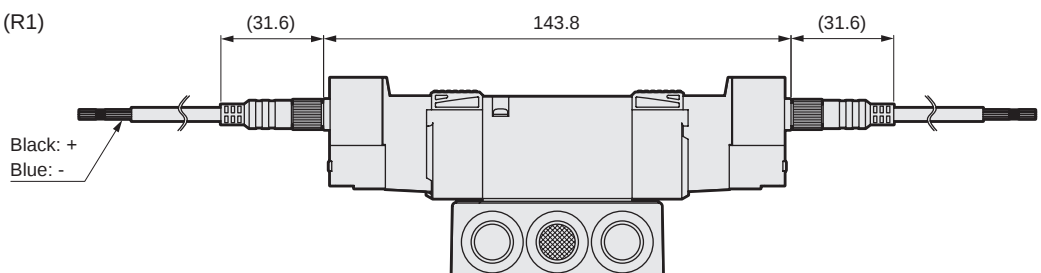
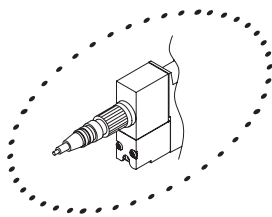
- 2-position double without connector (RN)

### 3GE2660EA

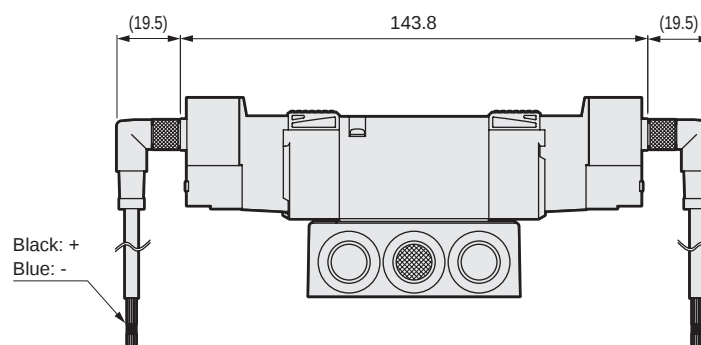
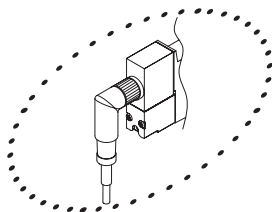
- Two 3-port valves integrated without connector (RN)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

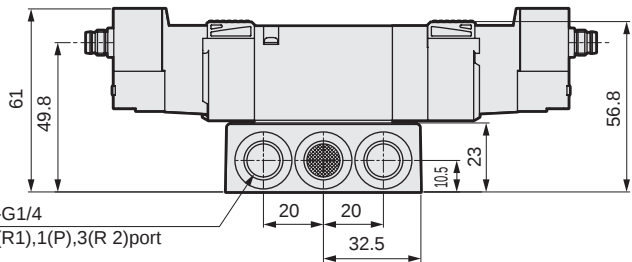
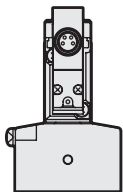
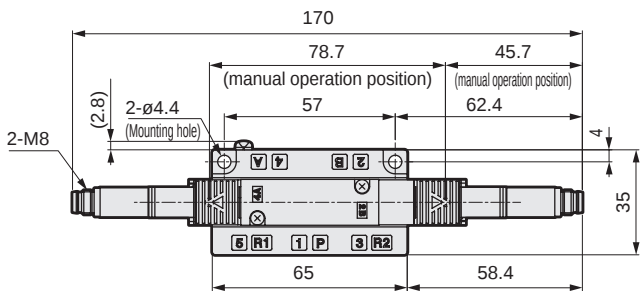
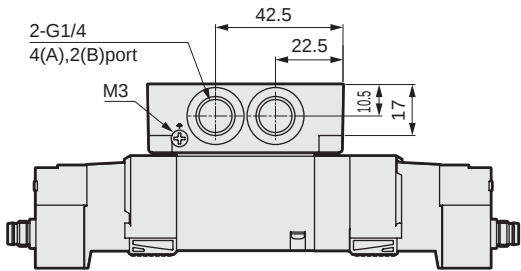
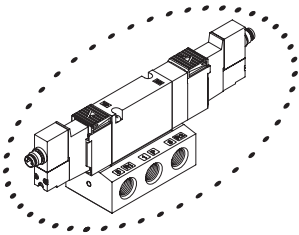
# 4GE2\*0EA Series

Discrete valve; Base piping

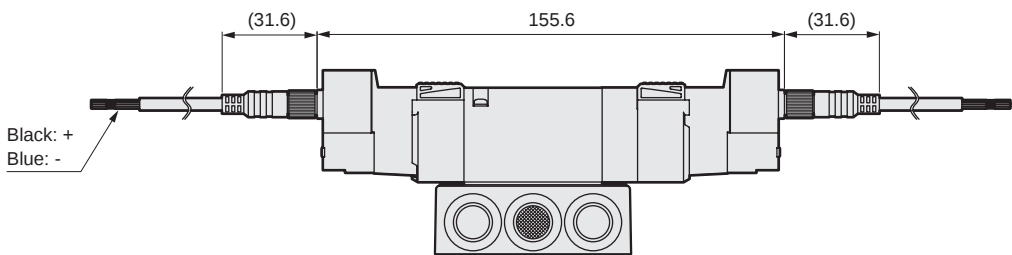
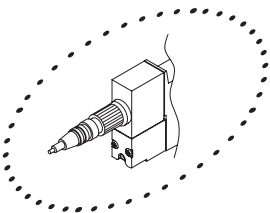
## Dimensions

### 4GE2<sup>0EA</sup>

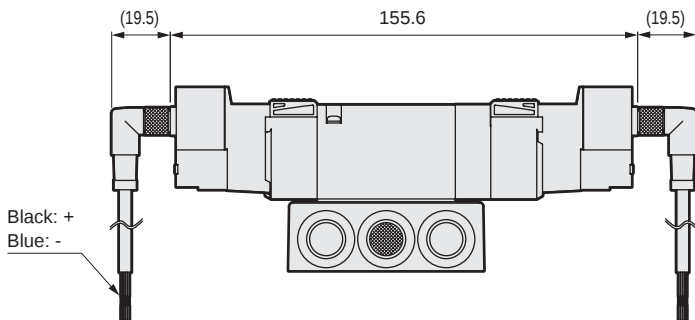
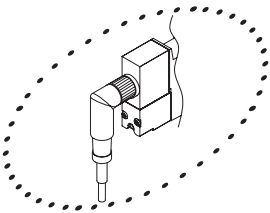
● 3-position without connector (RN)



● M8 connector/straight cable (R1)



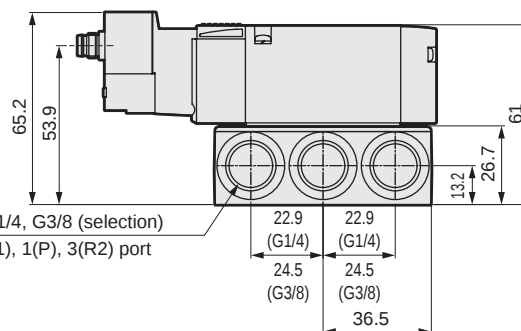
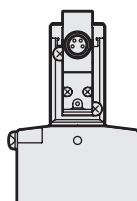
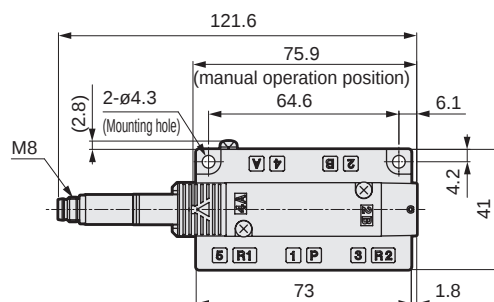
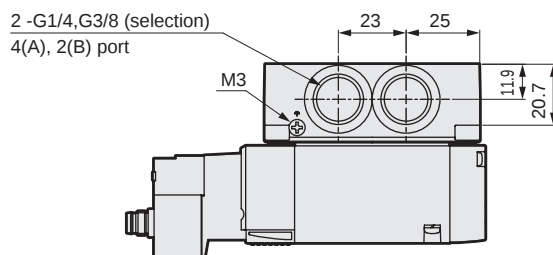
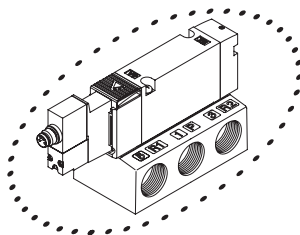
● M8 connector/L-type cable (R2)



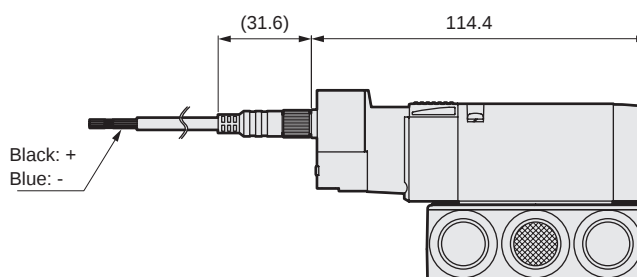
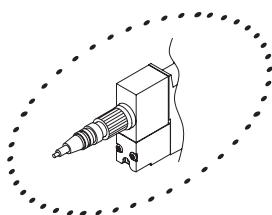
## Dimensions

### 4GE310EA

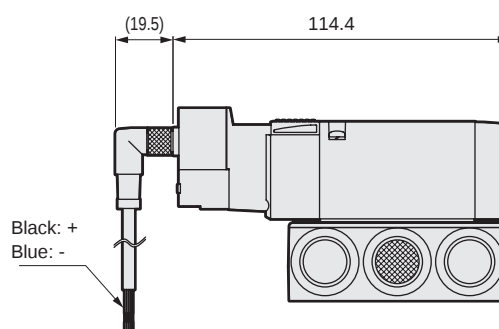
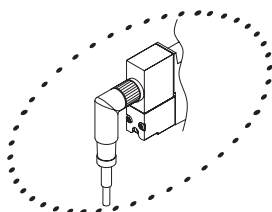
- 2-position single without connector (RN)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

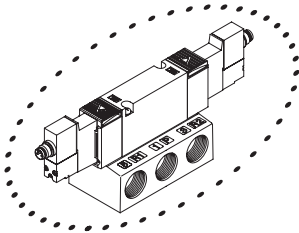
# 4GE3\*0EA Series

Discrete valve; Base piping

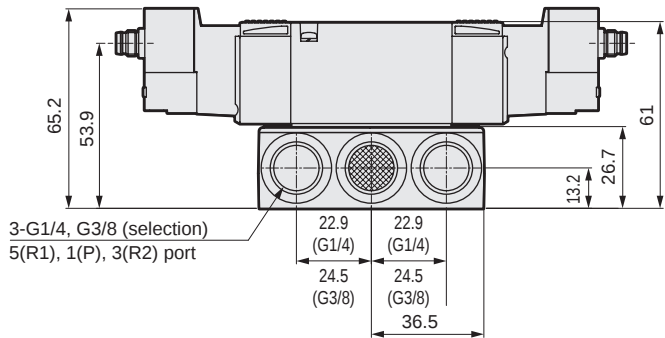
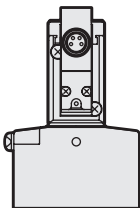
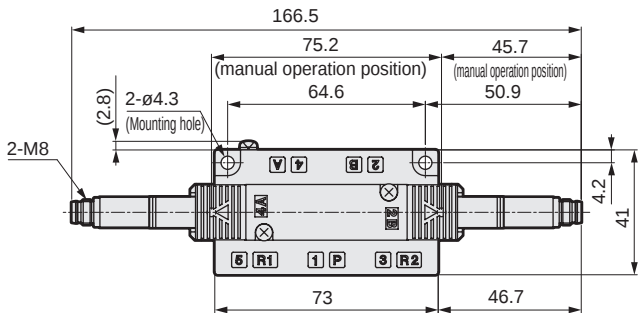
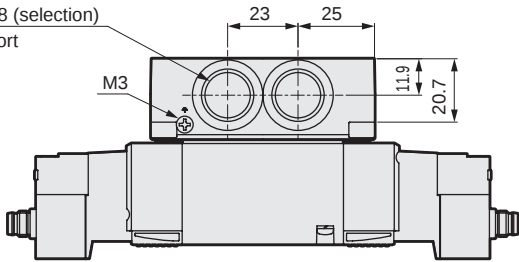
## Dimensions

### 4GE320EA

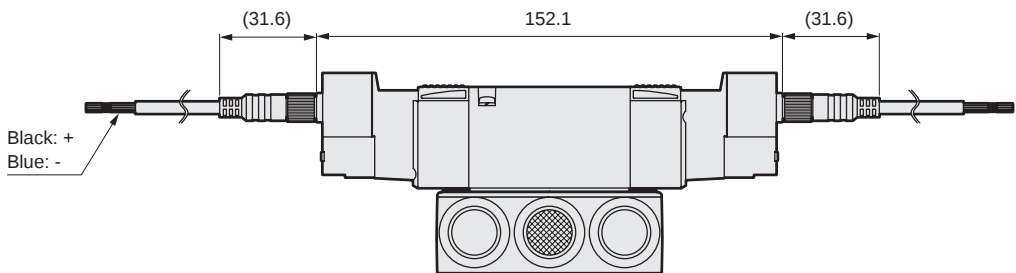
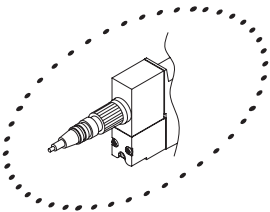
- 2-position double without connector (RN)



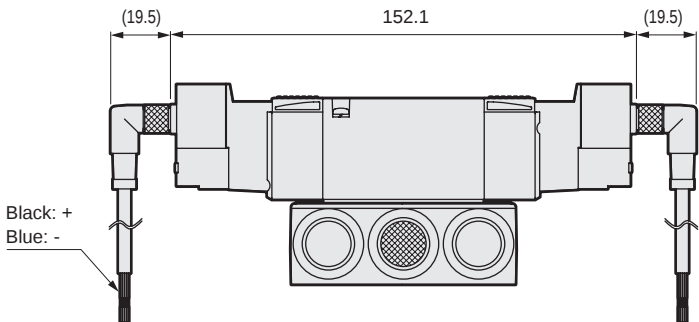
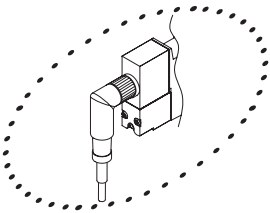
2-G1/4, G3/8 (selection)  
4(A), 2(B) port



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

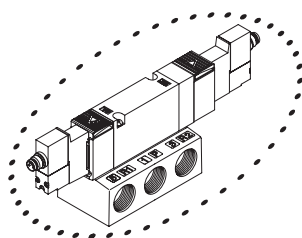
Manifold  
Specifications sheet

Safety precautions

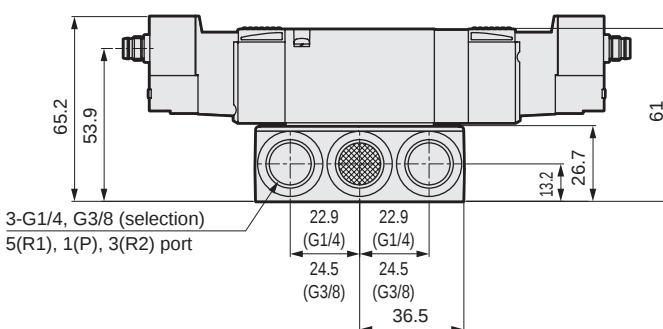
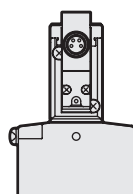
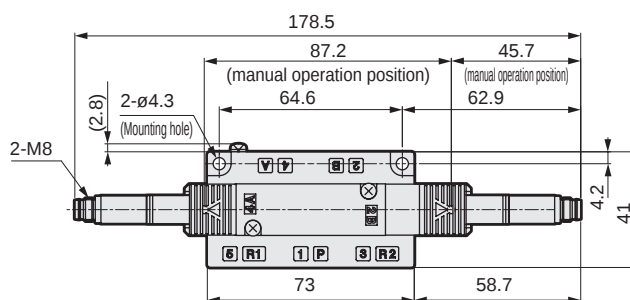
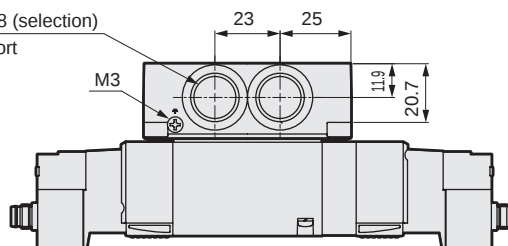
## Dimensions

### 4GE3<sub>3</sub>0EA

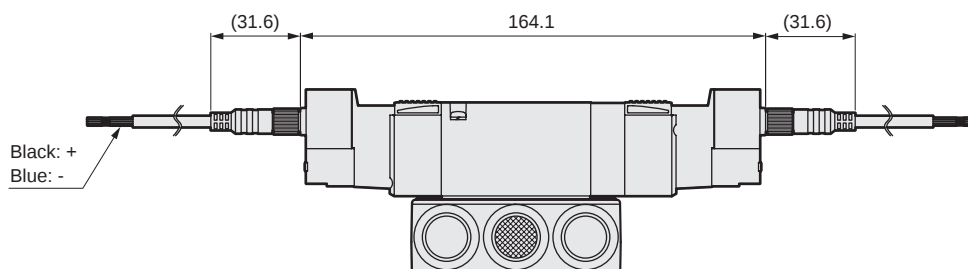
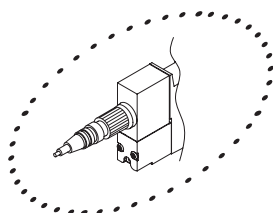
- 3-position without connector (RN)



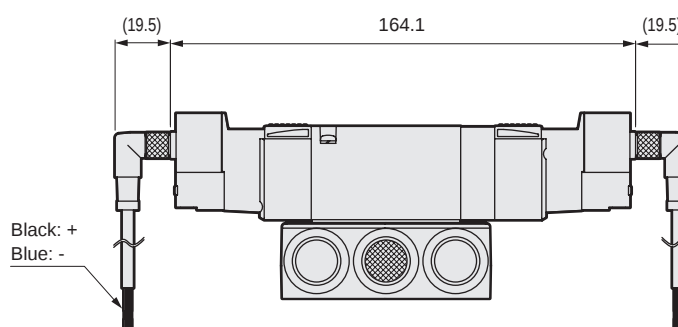
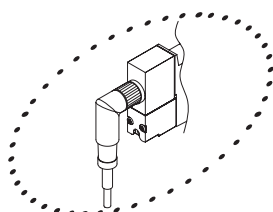
2-G1/4, G3/8 (selection)  
4(A), 2(B) port



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

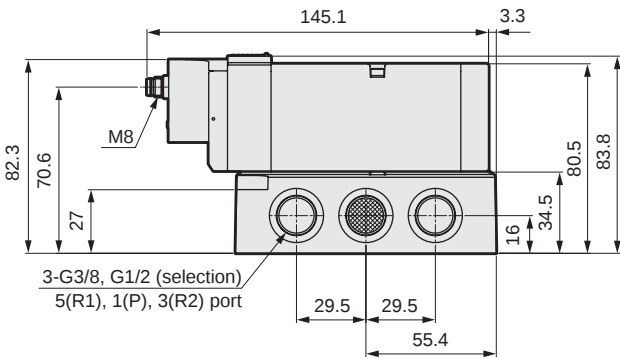
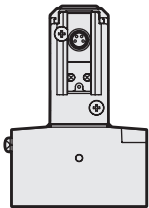
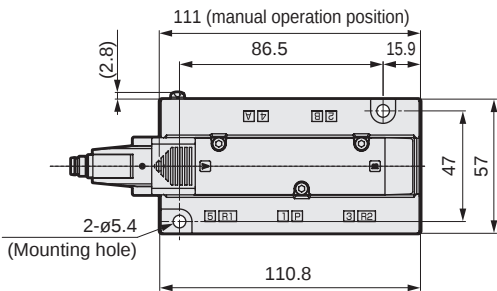
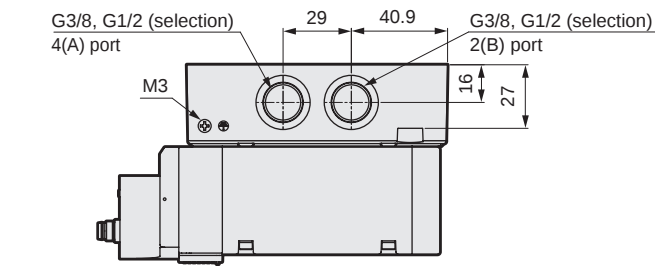
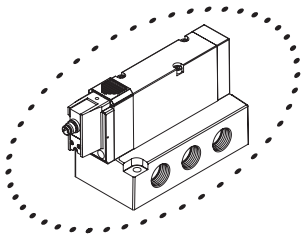
# 4GE4\*0EA Series

Discrete valve; Base piping

## Dimensions

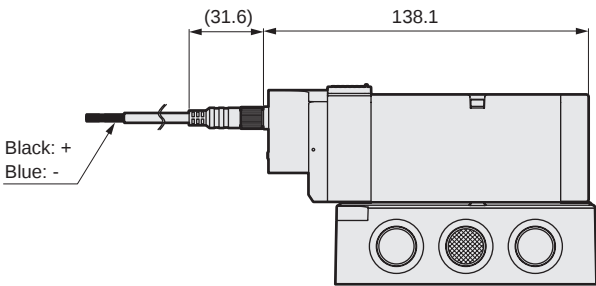
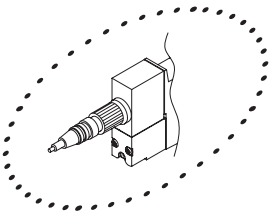
### 4GE410EA

- 2-position single without connector (RN)



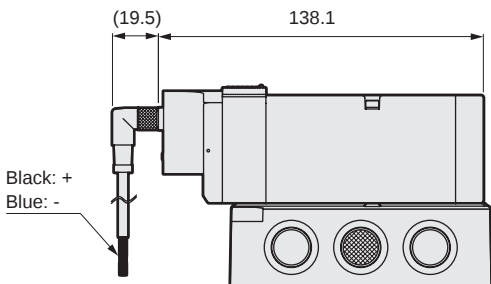
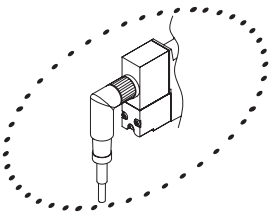
Related products

- M8 connector/straight cable (R1)



Manifold Specifications sheet

- M8 connector/L-type cable (R2)

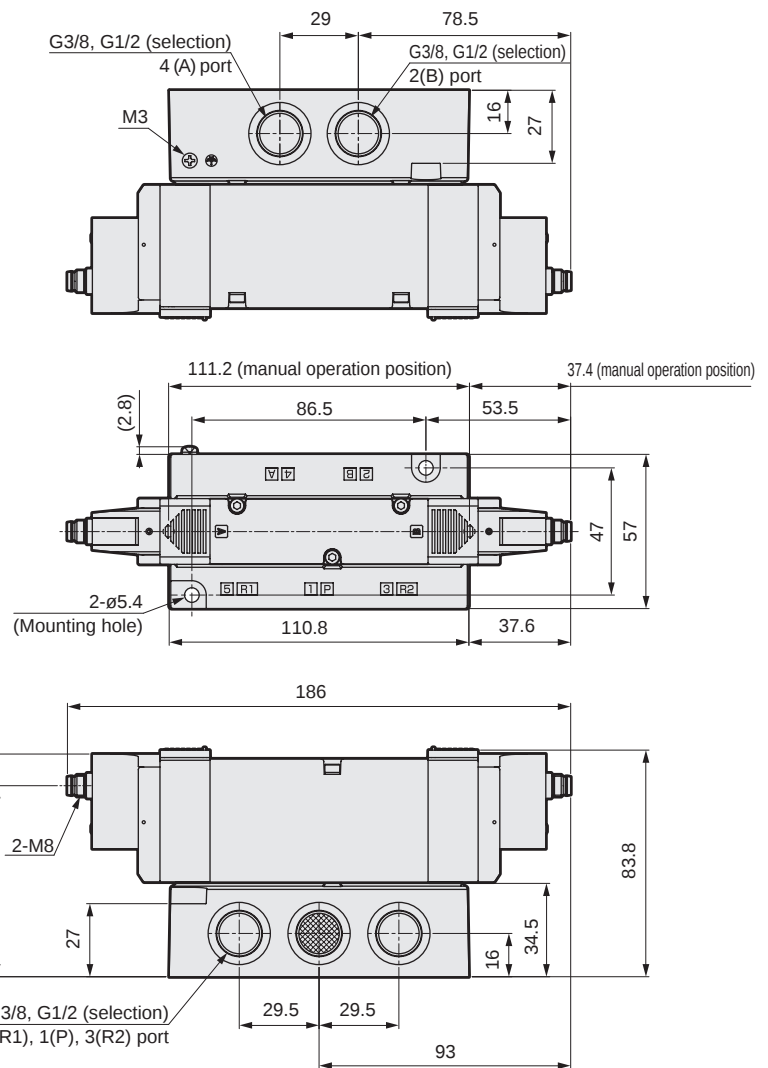
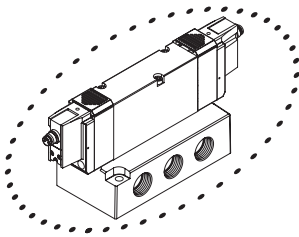


Safety precautions

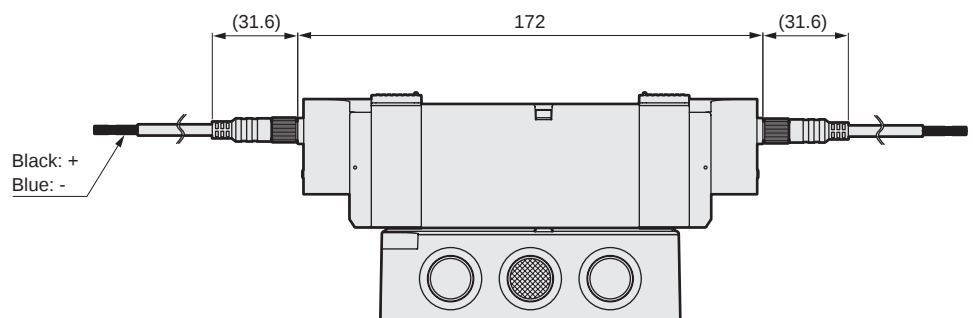
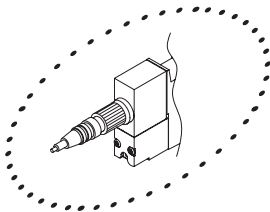
## Dimensions

### 4GE420EA

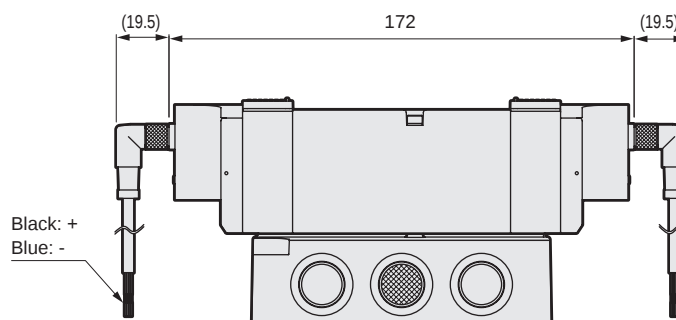
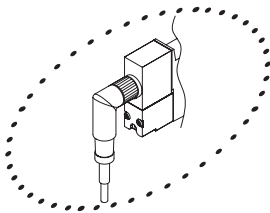
- 2-position double without connector (RN)



- M8 connector/straight cable (R1)



- M8 connector/L-type cable (R2)



3GD\*0EA  
4GD\*0EA

3GE\*0EA  
4GE\*0EA

M3GD\*0EA  
M4GD\*0EA

M3GE\*0EA  
M4GE\*0EA

Related products

Manifold  
Specifications sheet

Safety precautions

# 4GE4\*0EA Series

Discrete valve; Base piping

## Dimensions

### 4GE4<sup>3</sup><sub>4</sub><sup>0</sup><sub>5</sub>EA

● 3-position Without connector (RN)

