FESCOLO

# Solenoid Valve and mechanical valve


FESCOLO

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FESCOLO PNEUMATIC

Company
# Introduction

Fescolo Pneumatic, established in 2001, is a professional developer and manufacturer of customized cylinders and solenoid valves. We have an excellent R&D technical team, more than 200 sets of equipment, an annual production value of more than 10 million US dollars, and have 100+ employees, including 4 technical engineers and 8 technicians so far.

Our main product range consists of various standard cylinders, non-standard customized cylinders, standard solenoid valves, non-standard customized solenoid valves, 2/2 ways electromagnetic valves, air source treatment units, angle seat valves, air hose and tube fittings. Widely applied in industrial automation, robotic arms, medical treatment, sanitary ware, food machinery, automobile manufacturing and other scientific and technological industries.

If you are looking for non-standard customized cylinders and valves, if you encounter problems in pneumatic system, congratulations, we are just the exact supplier you need. Product customization and ODM are our core competencies. We are in a leading position on projects of customized cylinders and solenoid valves. We can also customize product labels, special inner and outer packaging for you. All our products include a one-year or six-month warranty. Most standard products are available in stock and can be shipped within 3-15 days after you place an order. Fescolo Pneumatic, looks forward to your cooperation sincerely!

FESCOLO

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# 3V Series 2positions/3ways Solenoid Valve

3V110-06
Lead wire type

3V210-08

3V310-10

## 1.Ordering Code :

| 3V | 2 | 10 | – | 08 | – | DC24V | – | □ |
|---|---|---|---|---|---|---|---|---|

**Solenoid Valve Type**
3V: Two positions Three ways solenoid valve

**Body size**
1: 100 series(M5, G1/8) 2: 200 sereis(G1/8,G1/4)
3: 300 series(G1/4,G3/8) 4: 400 sereis(G1/2)

**Coil and position**
10: Single-head (single coil) for two positions
20: Double-head (double coils) for two positions
30C: Double-head (double coils) center close type for three positions
30E: Double-head (double coils) center exhaust type for three positions
30P: Double-head (double coils) center pressure type for three positions

**Connecting port size**
06: G1/8 08: G1/4 M5: M5x0.8
10: G3/8 15: G1/2

**Voltage**
DC5V DC12V DC24V AC24V 50/60Hz
AC110V 50/60Hz AC220V 50/60Hz AC380V 50/60Hz

**Normal close or normal open**
Blank: Normal close
NO: Normal open

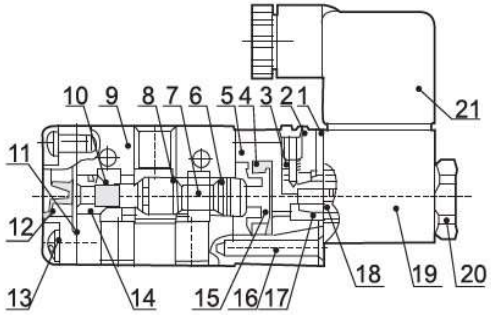




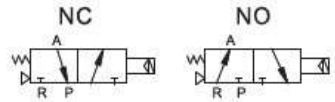
## 2.Characteristics:

1) The protection grade for this series solenoid valve is IP65.
2) Different voltages are available for coils.
3) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
4) Lead wire type is available, please remind when you order.
5) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

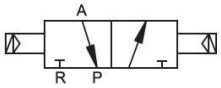
## 3.Internal Structure:

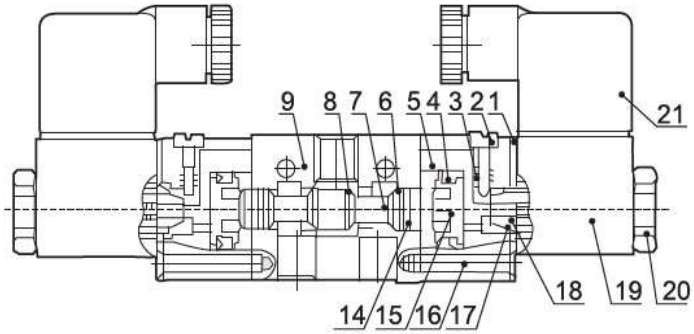



**Single-Head Type**




**Double-Head Type**




| No.: | Designation | No.: | Designation | No.: | Designation |
|---|---|---|---|---|---|
| 1. | Body of valve | 8. | Iron cover | 15. | Cord-locks |
| 2. | Sealing O ring | 9. | Cord-locks | 16. | Name plate |
| 3. | Assembly of iron core | 10. | Name plate | 17. | Cord-locks |
| 4. | Assembly of pilot head | 11. | Spring Gasket | 18. | Name plate |
| 5. | Magnetic plate | 12. | Head cover nut | 19. | Spring Gasket |
| 6. | Spring | 13. | Assembly of coil | 20. | Head cover nut |
| 7. | Assembly of coil | 14. | Iron cover | 21. | Head cover nut |

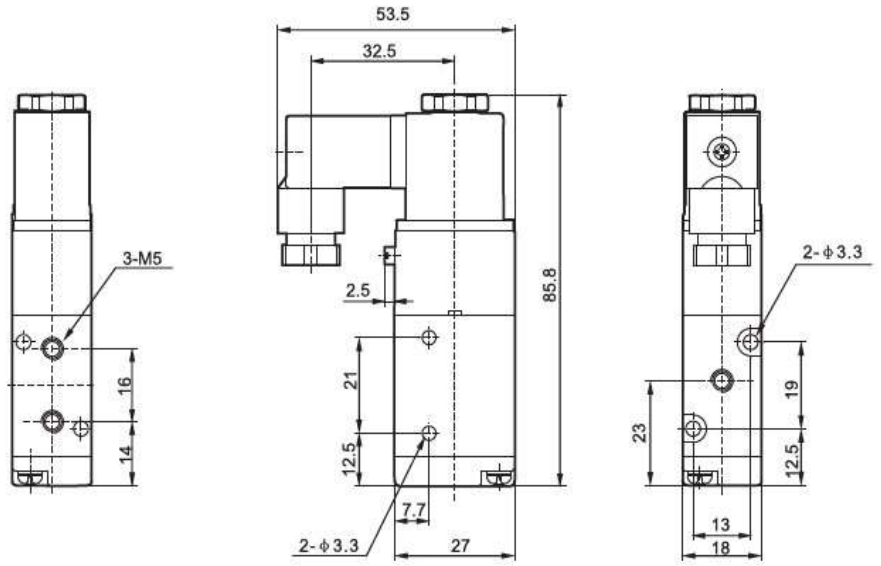
## 4.Specification:

| Model | Acting head | 3V100 Series | | 3V200 Series | | 3V300 Series | | 3V400 Series |
|---|---|---|---|---|---|---|---|---|
| | Single head | 3V110-M5 | 3V110-06 | 3V210-06 | 3V210-08 | 3V310-08 | 3V310-10 | 3V410-15 |
| | Double head | 3V120-M5 | 3V120-06 | 3V220-06 | 3V220-08 | 3V320-08 | 3V320-10 | 3V420-15 |
| Applicable medium | | ⩽40μ Filtered Air | | | | | | |
| Motion pattern | | Inner guide type | | | | | | |
| Working pressure | | 0.15~0.8 MPa | | | | | | |
| Proof Pressure | | 1.2MPa | | | | | | |
| Temperature range | | NBR: 5℃~50℃ | | | | | | |
| Port size | | M5x0.8 | G1/8 | G1/8 | G1/4 | G1/4 | G3/8 | G1/2 |
| Effective section area ($mm^2$) | | 10 | 12 | 14 | 16 | 25 | 30 | 50 |
| Cv Value | | 0.56 | 0.67 | 0.78 | 0.89 | 1.4 | 1.68 | 2.79 |
| Available Voltage | | DC5, DC12V,DC24V,AC24V,AC36V,AC110V,AC220V,AC380V | | | | | | |
| Power consumption | | AC220V:2W, AC110V:2.5W,AC24V:3.5W,DC24V:3W,DC12V:2.5W | | | | | | |
| Voltage range | | ±10% | | | | | | |
| Material of body | | Aluminum alloy | | | | | | |
| Highest action frequency | | 5 cycles/second | | | | | | |
| Shortest excitation time | | 0.05 s | | | | | | |
| Sealing material | | NBR or VITON | | | | | | |

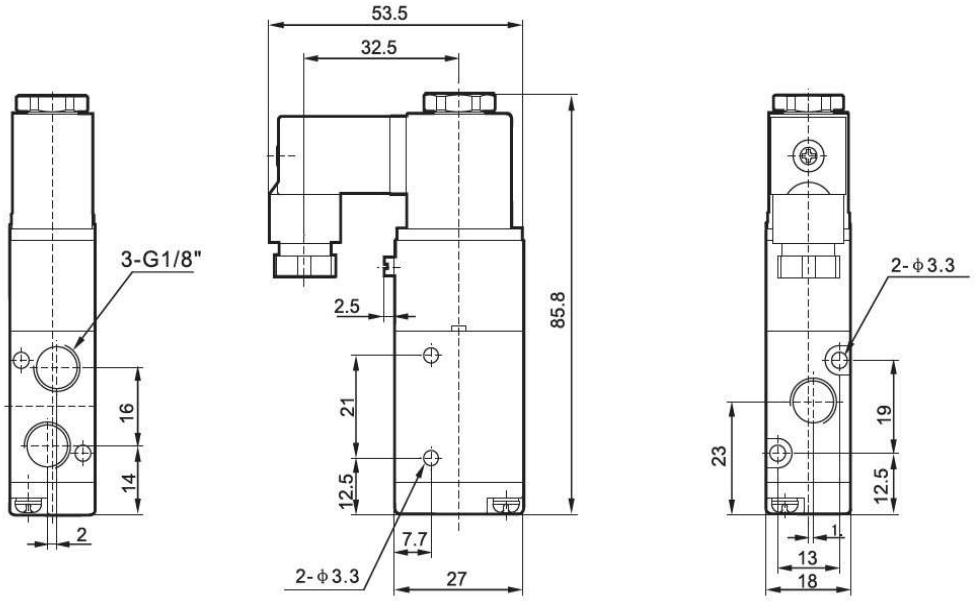
* 1 kgf/cm2 = 1 bar = 0.1 Mpa = 100KPa = 14.5psi

## 5. Overall and Dimension Sheet:

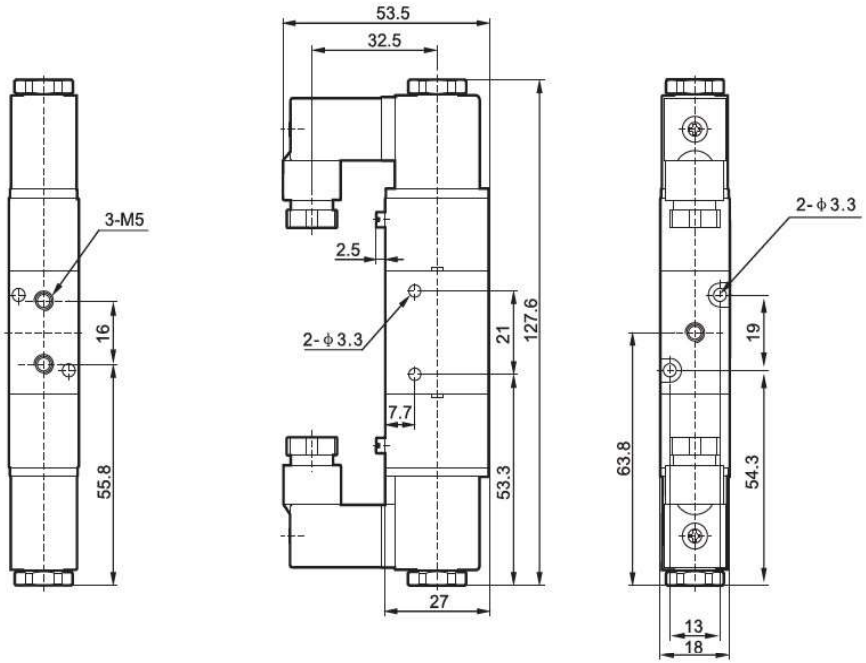
**3V110-M5**



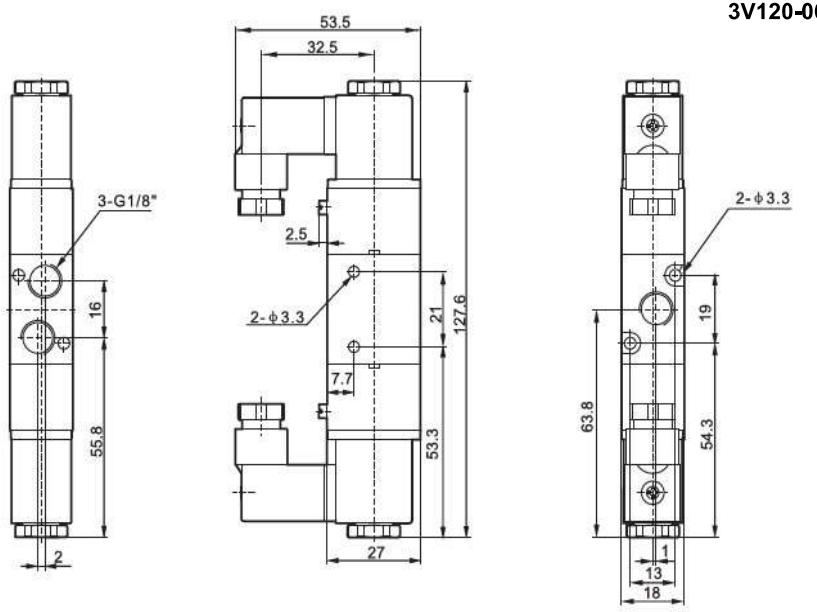

**3V110-06**



### 3V120-M5



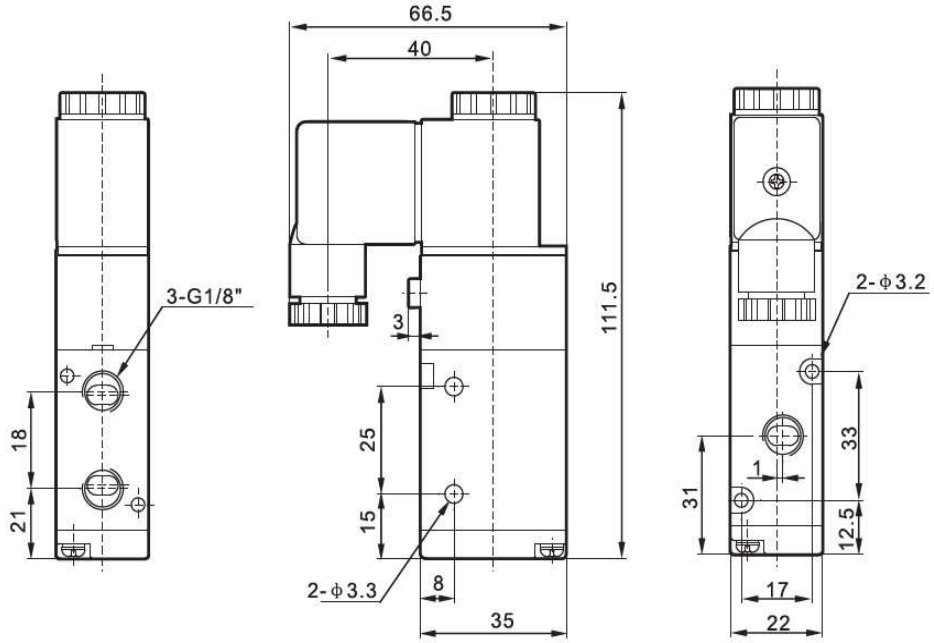

### 3V120-06



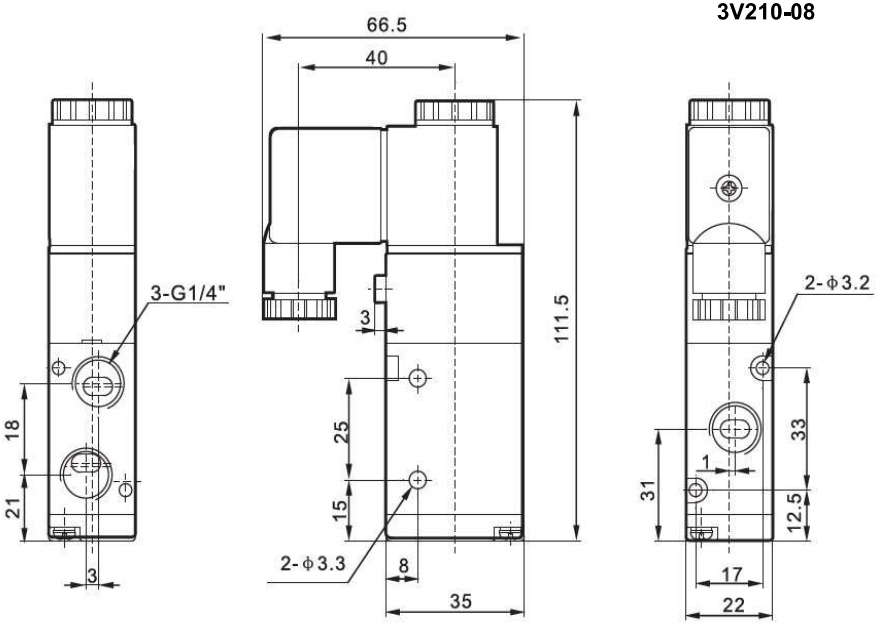




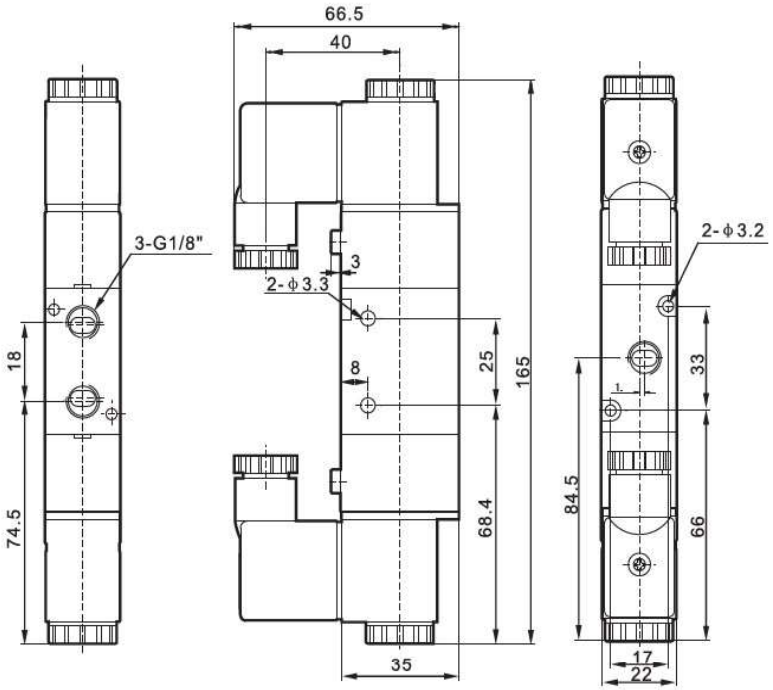

### 3V210-06



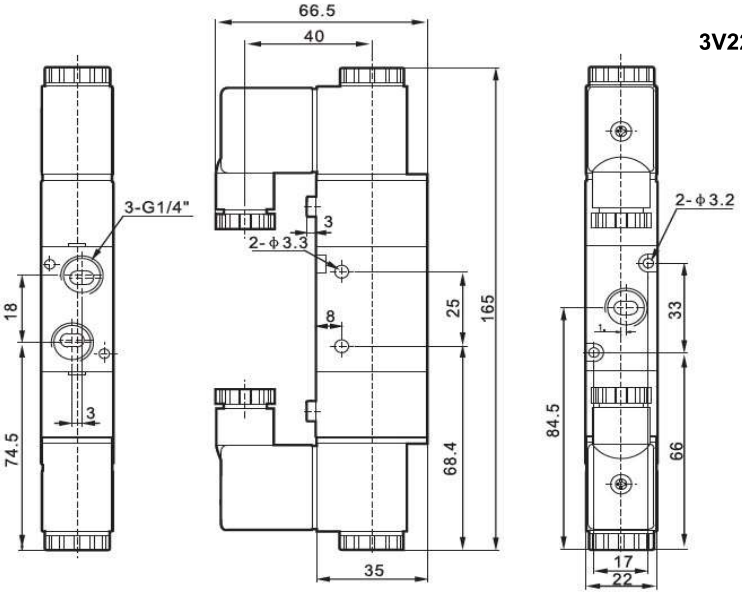

### 3V210-08



### 3V220-06



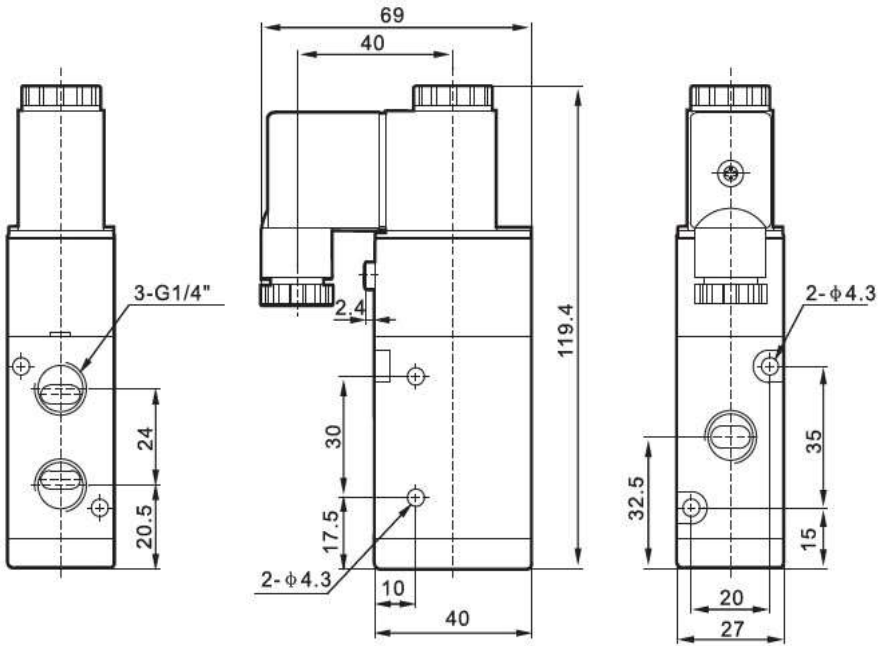

### 3V220-08



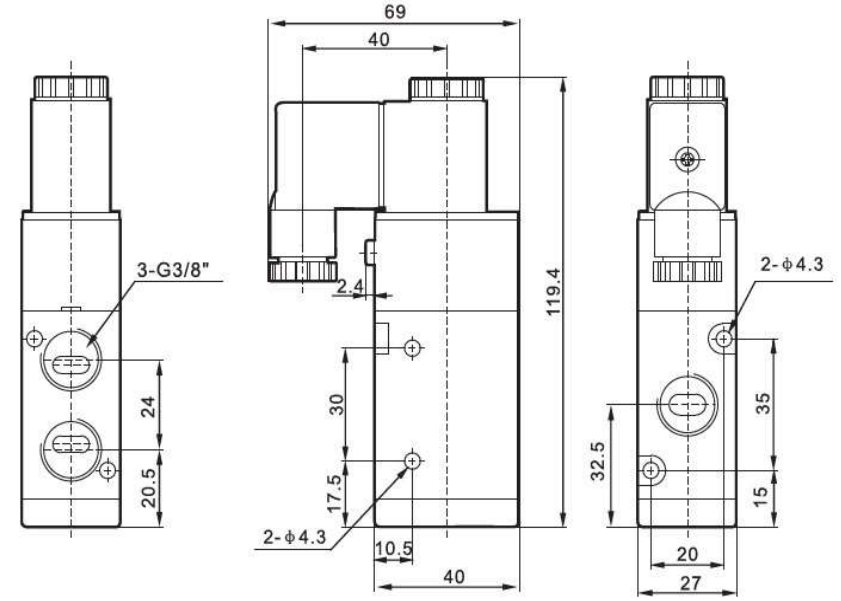




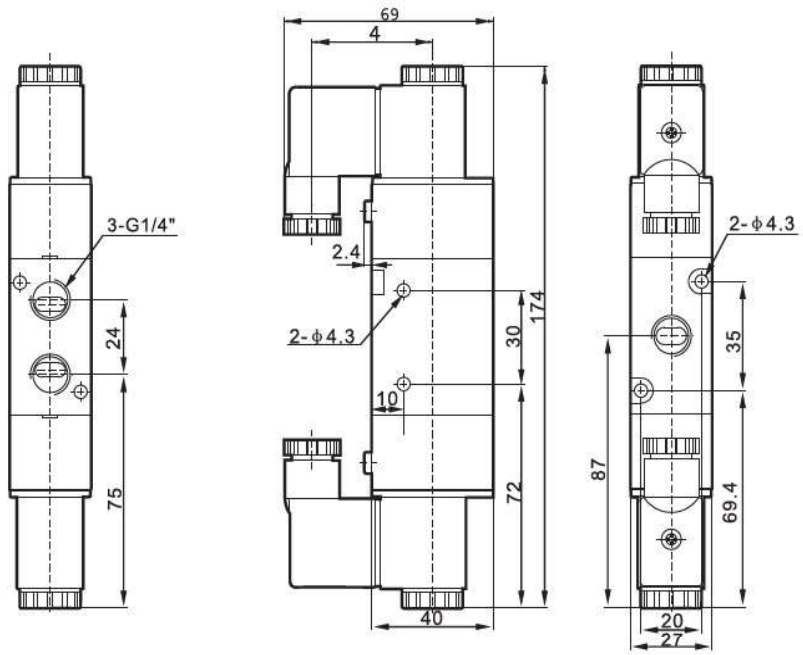

### 3V310-08



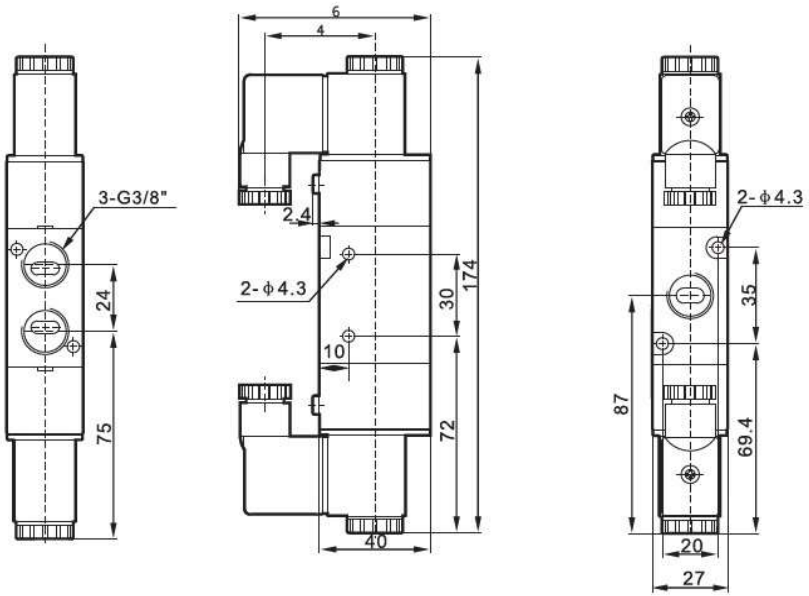

### 3V310-10



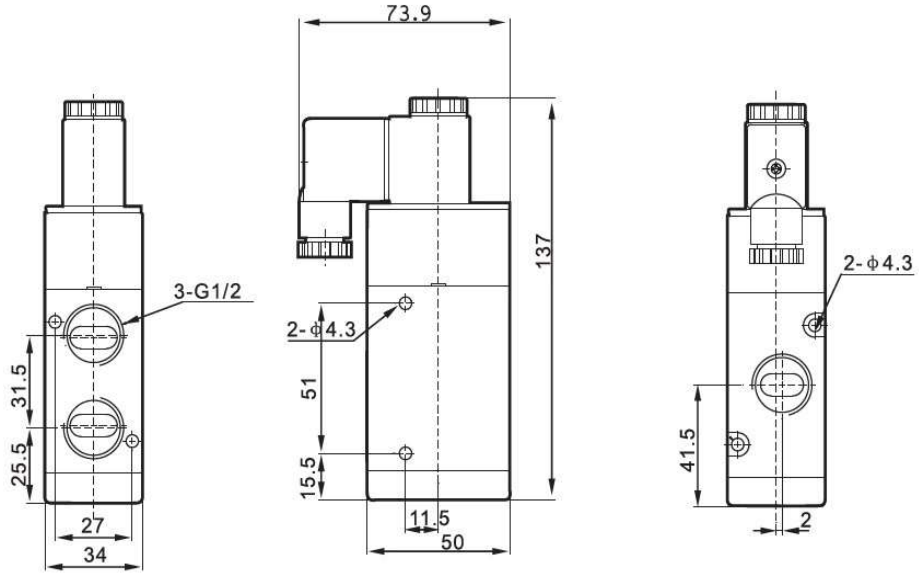
### 3V320-08



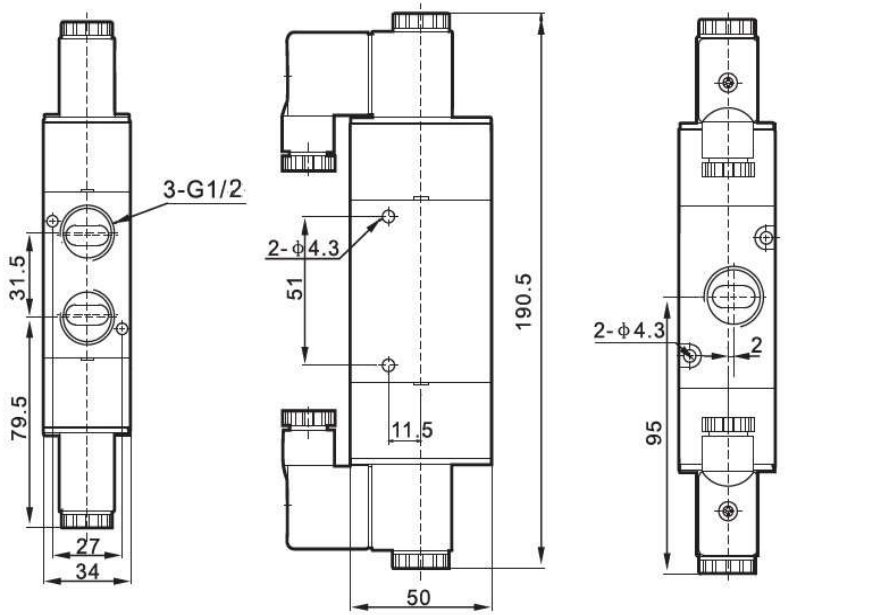

### 3V320-10




### 3V410-15




### 3V420-15



# 4V Series 2positions/5ways Solenoid Valve

4V210-08

4V220-08

4V430C-15

## 1.Ordering Code :

| 4V | 2 | 10 | – | 08 | – | AC220V |
|---|---|---|---|---|---|---|

**Solenoid Valve Type**
4V: Two positions Five ways solenoid valve

**Body size**
1: 100 series(M5, G1/8) 2: 200 sereis(G1/8,G1/4)
3: 300 series(G1/4,G3/8) 4: 400 sereis(G1/2)

**Coil and position**
10: Single-head (single coil) for two positions
20: Double-head (double coils) for two positions
30C: Double-head (double coils) center close type for three positions
30E: Double-head (double coils) center exhaust type for three positions
30P: Double-head (double coils) center pressure type for three positions

**Connecting port size**
06: G1/8 08: G1/4 M5: M5x0.8
10: G3/8 15: G1/2

**Voltage**
DC5V DC12V DC24V AC24V 50/60Hz
AC110V 50/60Hz AC220V 50/60Hz AC380V 50/60Hz

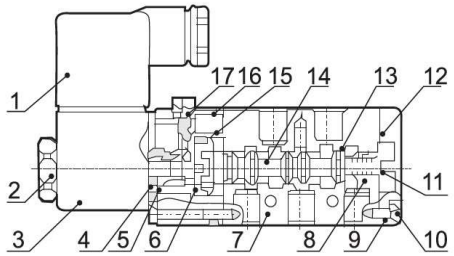




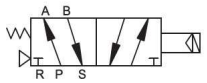
## 2.Characteristics:

1) The protection grade for this series solenoid valve is IP65.
2) Different voltages are available for coils.
3) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
4) Lead wire type is available, please remind when you order.
5) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

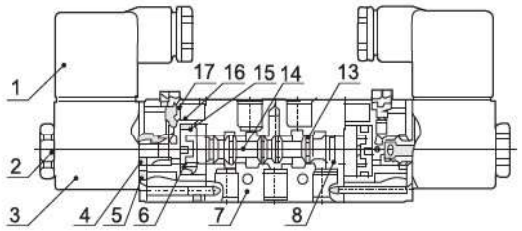
## 3.Internal Structure:



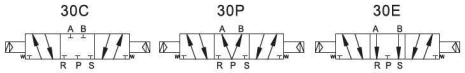

**Single-Head Type**
(4V110~4V410)

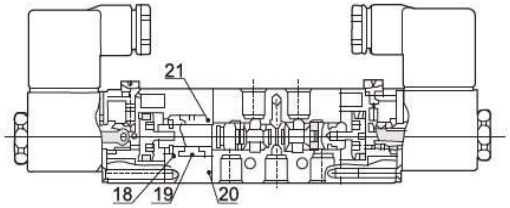



**Double-Head Type**
(4V120~4V420)




**Double-Head Type**
(4V130~4V430)




| No.: | Designation | No.: | Designation | No.: | Designation |
|---|---|---|---|---|---|
| 1. | Connector | 8. | Wearing | 15. | O ring |
| 2. | Nut | 9. | End cap | 16. | Spring |
| 3. | Coil | 10. | Screw | 17. | Pin |
| 4. | Active amature | 11. | Spring | 18. | Spring seat |
| 5. | Steel part | 12. | Sealing ring | 19. | Spring |
| 6. | Piston | 13. | O ring | 20. | Side cover |
| 7. | Valve body | 14. | Spool | 21. | Spring seat |

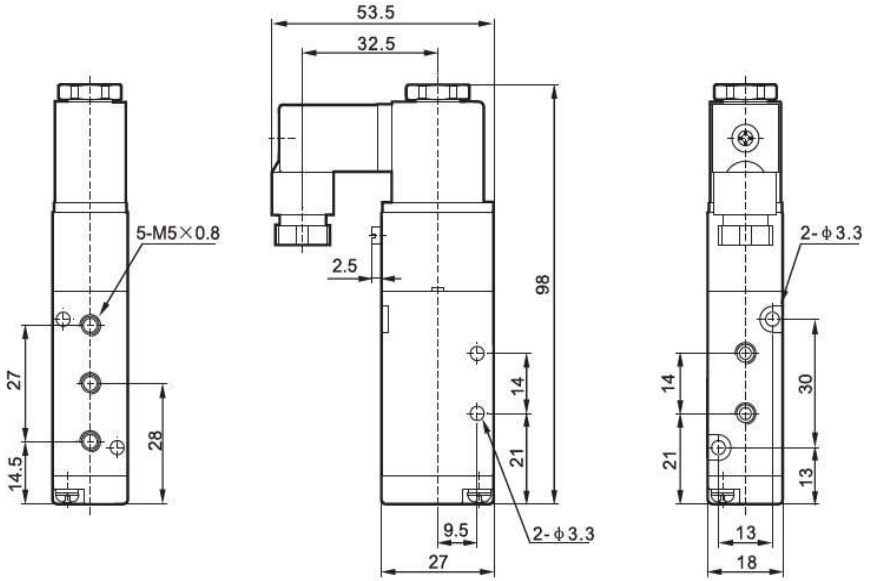
## 4.Specification:

| Model | Acting head | 4V100 Series | | 4V200 Series | | 4V300 Series | | 4V400 Series |
|---|---|---|---|---|---|---|---|---|
| | Single head | 4V110-M5 | 4V110-06 | 4V210-06 | 4V210-08 | 4V310-08 | 4V310-10 | 4V410-15 |
| | Double head | 4V120-M5 | 4V120-06 | 4V220-06 | 4V220-08 | 4V320-08 | 4V320-10 | 4V420-15 |
| | Center close | 4V130C-M5 | 4V130C-06 | 4V230C-06 | 4V230C-08 | 4V330C-08 | 4V330C-10 | 4V430C-15 |
| | Center exhaust | 4V130E-M5 | 4V130E-06 | 4V230E-06 | 4V230E-08 | 4V330E-08 | 4V330E-10 | 4V430E-15 |
| | Center pressure | 4V130P-M5 | 4V130P-06 | 4V230P-06 | 4V230P-08 | 4V330P-08 | 4V330P-10 | 4V430P-15 |
| Applicable medium | | ≤40μ Filtered Air | | | | | | |
| Motion pattern | | Inner guide type | | | | | | |
| Working pressure | | 0.15~0.8 MPa | | | | | | |
| Proof Pressure | | 1.2MPa | | | | | | |
| Temperature range | | NBR: 5℃~50℃ | | | | | | |
| Port size | | M5x0.8 | G1/8 | G1/8 | G1/4 | G1/4 | G3/8 | G1/2 |
| Effective section area ($mm^2$) | | 10 | 12 | 14 | 16 | 25 | 30 | 50 |
| Cv Value | | 0.56 | 0.67 | 0.78 | 0.89 | 1.4 | 1.68 | 2.79 |
| Available Voltage | | DC5, DC12V,DC24V,AC24V,AC36V,AC110V,AC220V,AC380V | | | | | | |
| Power consumption | | AC220V:2W, AC110V:2.5W,AC24V:3.5W,DC24V:3W,DC12V:2.5W | | | | | | |
| Voltage range | | ±10% | | | | | | |
| Material of body | | Aluminum alloy | | | | | | |
| Highest action frequency | | 5 cycles/second | | | | | | |
| Shortest excitation time | | 0.05 s | | | | | | |
| Sealing material | | NBR or VITON | | | | | | |

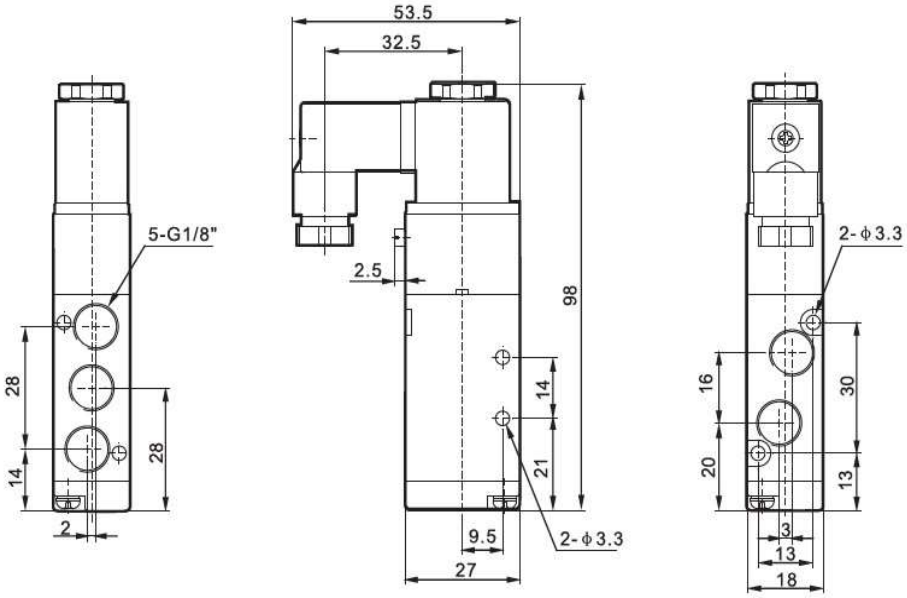
* 1 kgf/cm2 = 1 bar = 0.1 Mpa = 100KPa = 14.5psi

## 5. Overall and Dimension Sheet:

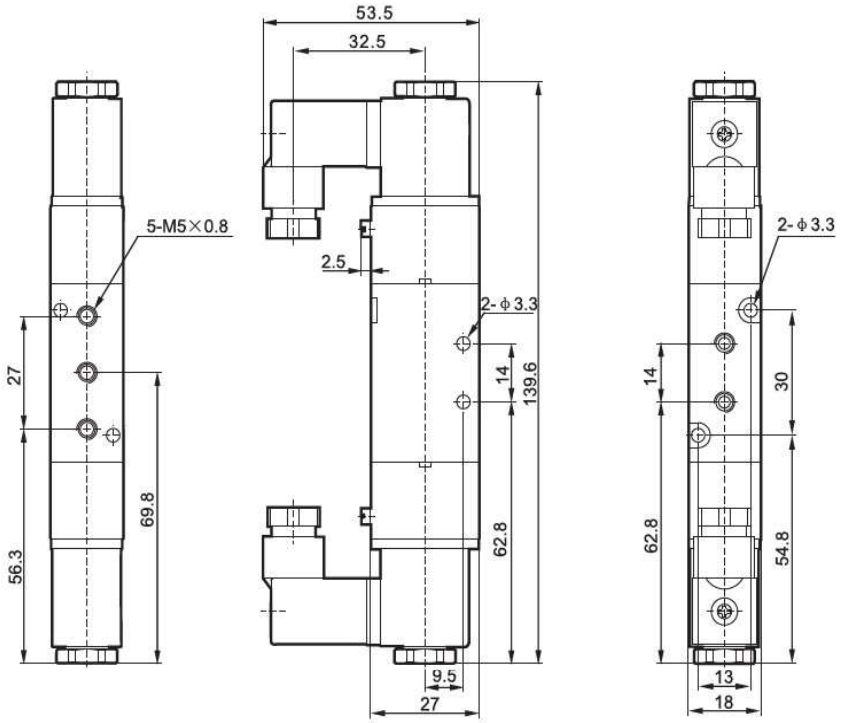
**4V110-M5**



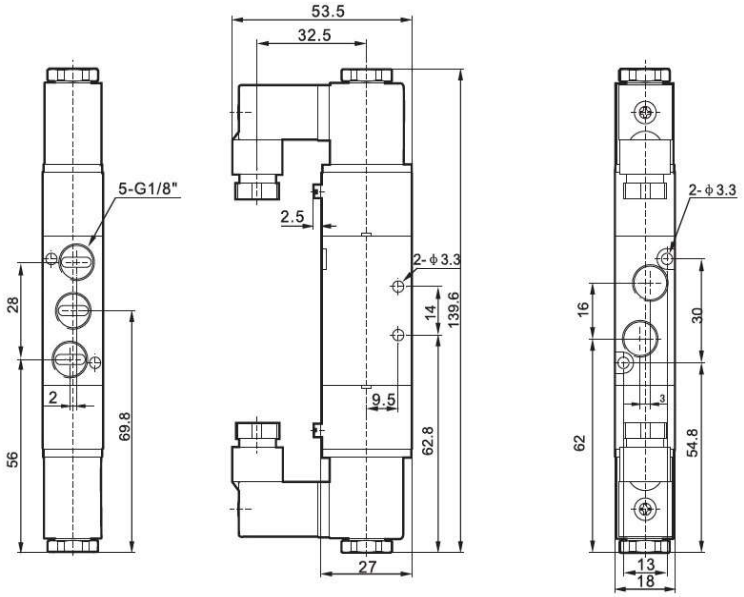

**4V110-06**



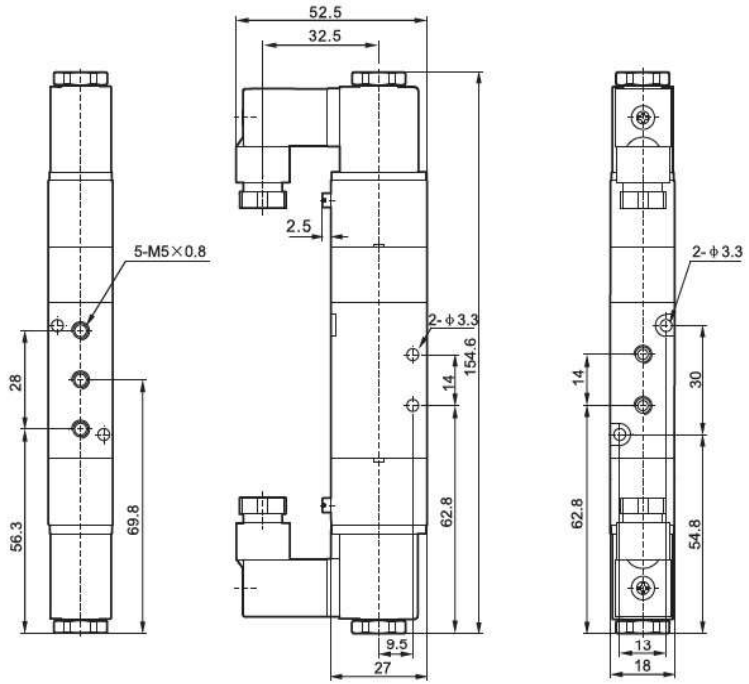
## 4V120-M5




## 4V120-06




## 4V130C-M5

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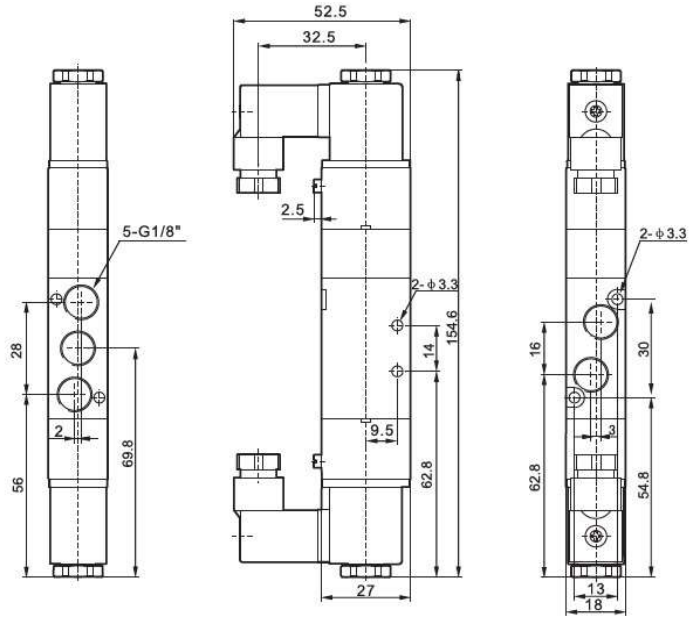

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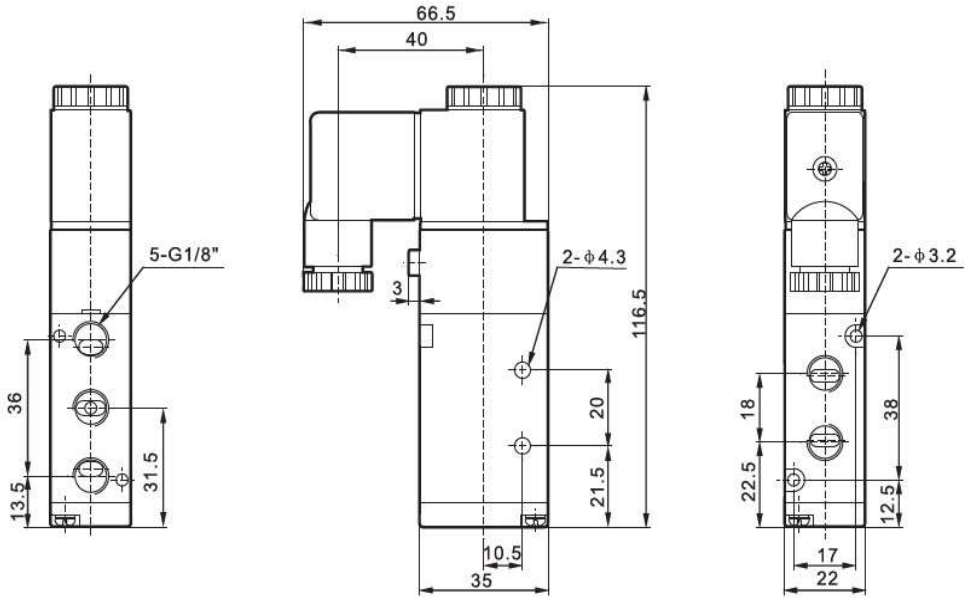


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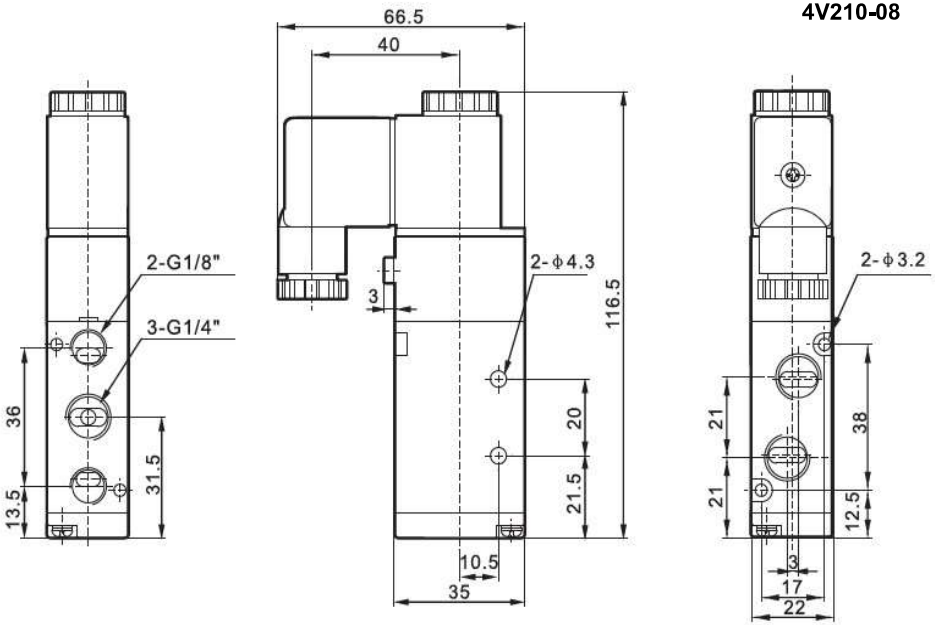






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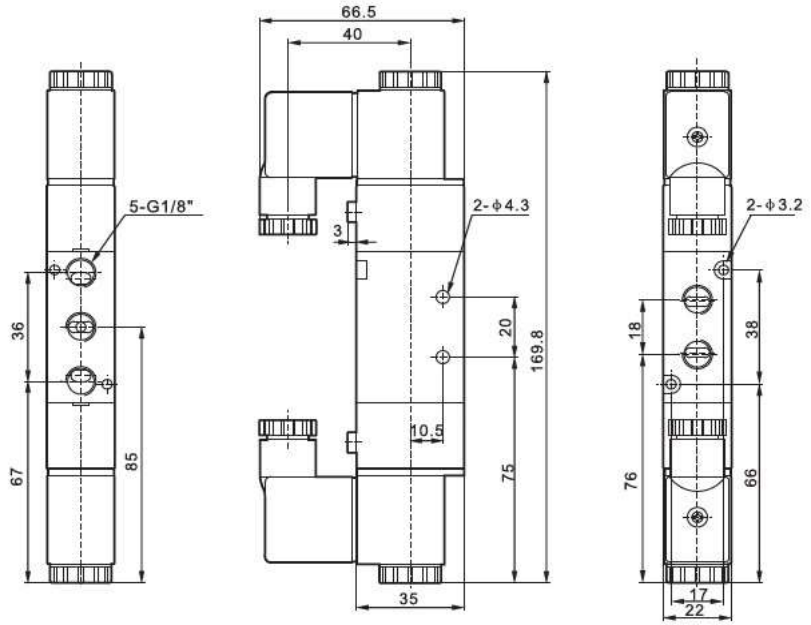
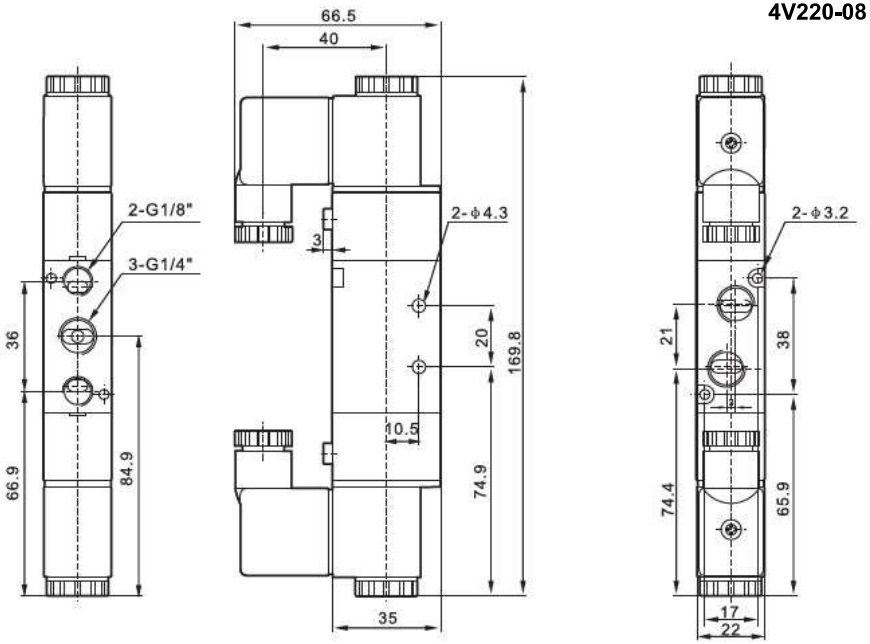
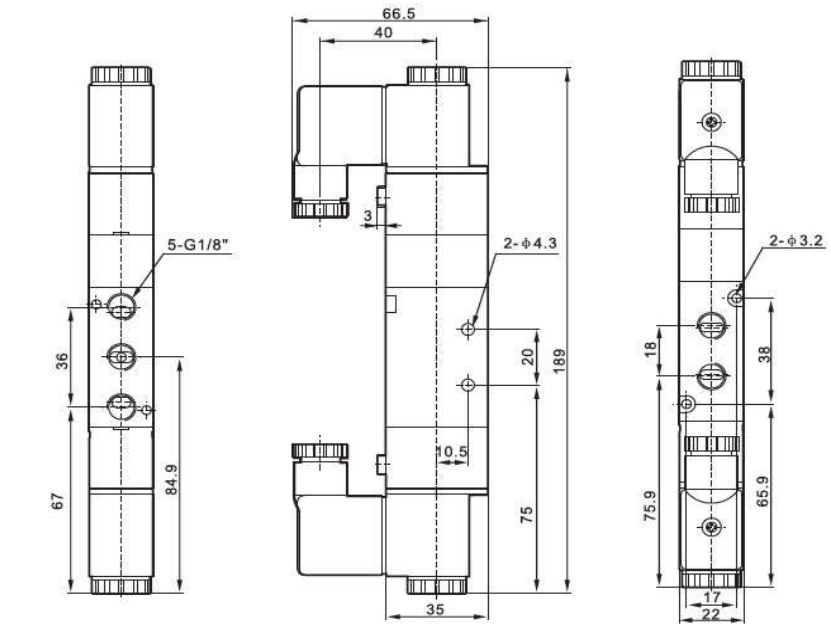


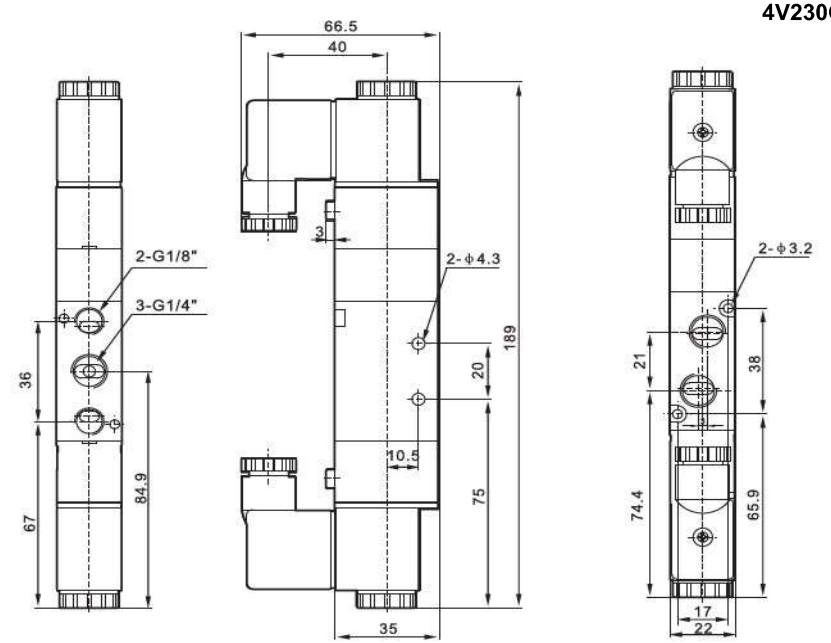

## 4V220-08



**4V230C-06**




**4V230C-08**





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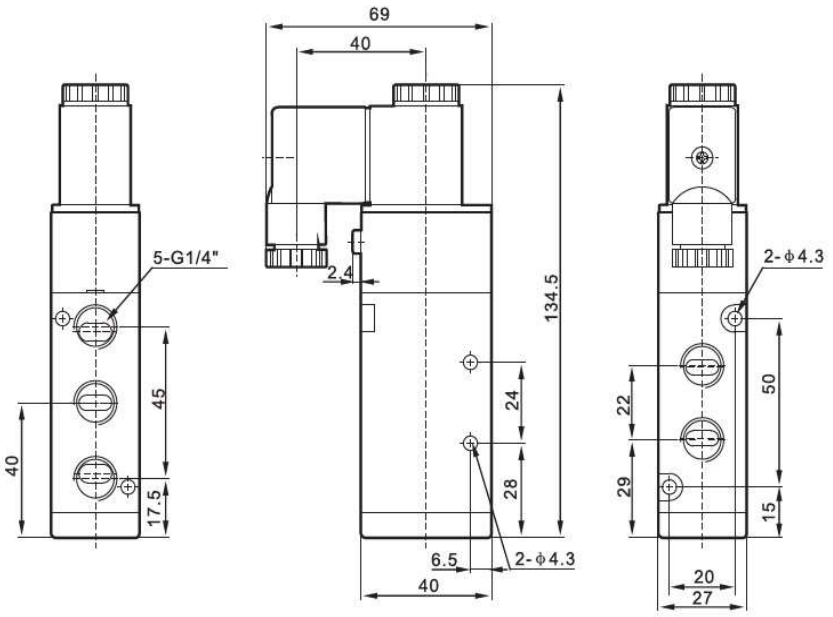
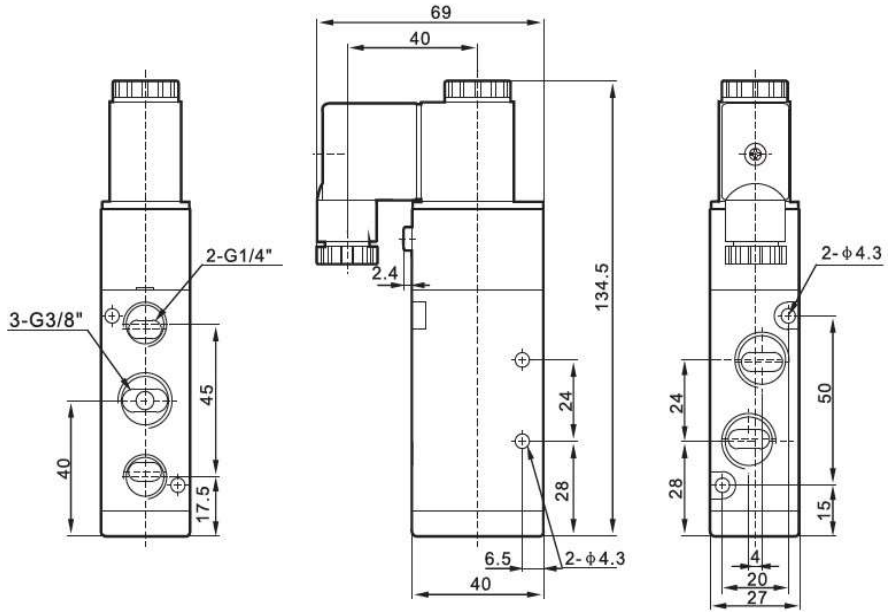
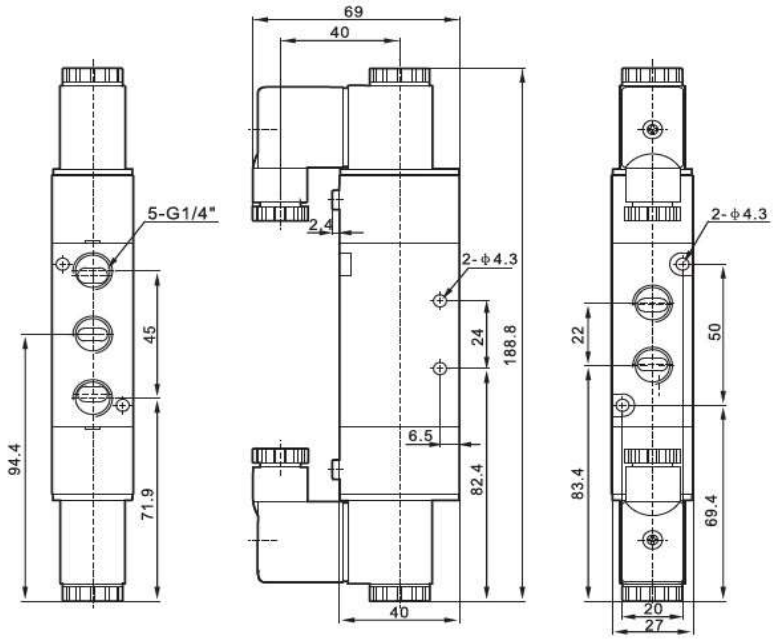


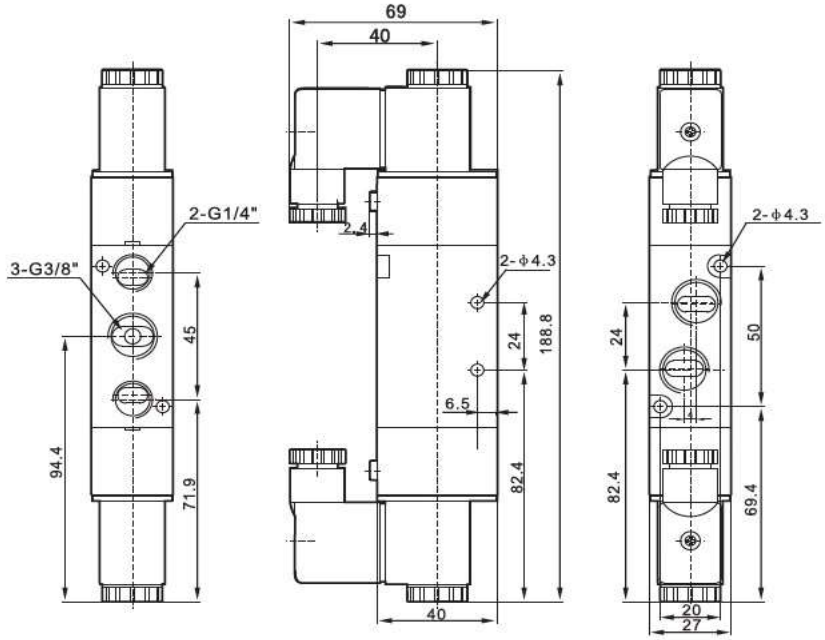

**4V310 10**



**4V320-08**



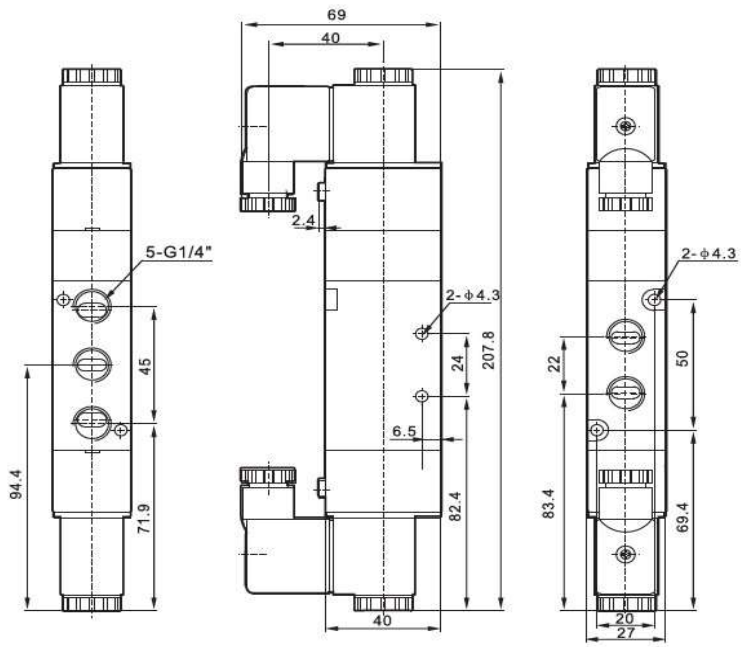

**4V320-10**








**4V330C-08**

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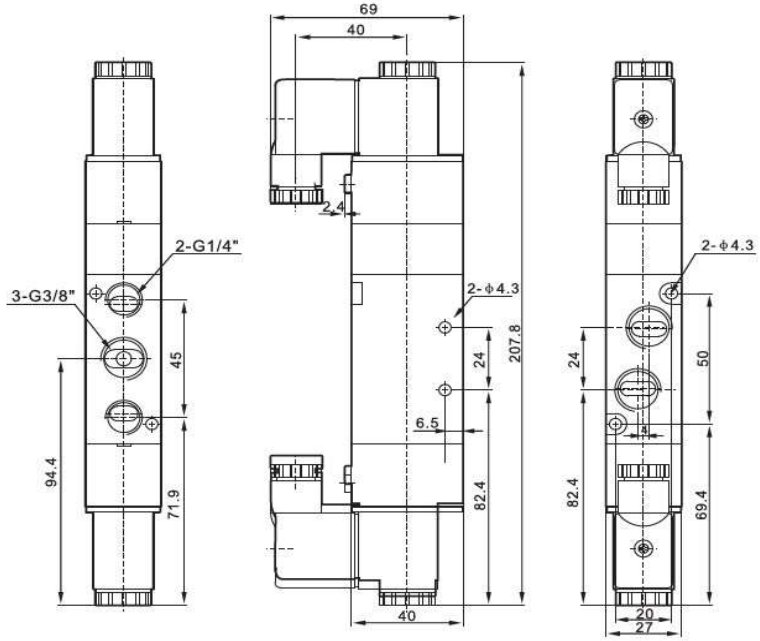
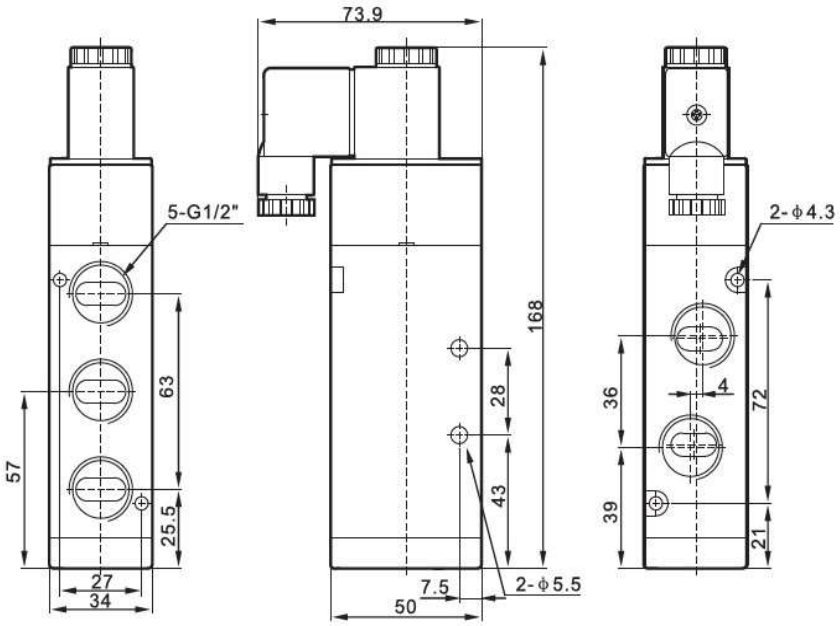
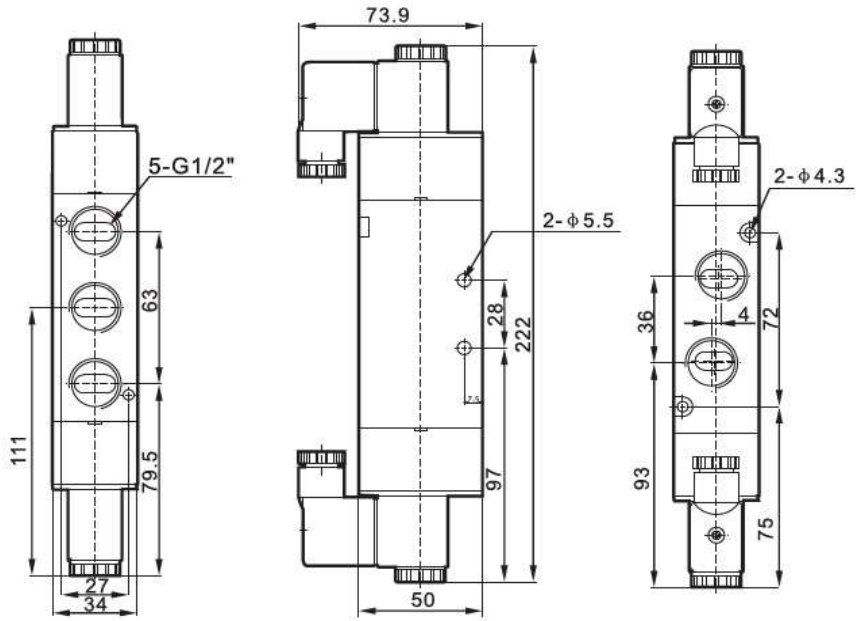


4V410-15




4V420-15
4V430C-15








# 3A Series 2positions/3ways Air Control Valve

3A110-06

3A210-08

3A310-10

## 1.Ordering Code :

| 3A | 2 | 10 | - | 08 | - | □ |
|---|---|---|---|---|---|---|

**Air Valve Type**
3A: Two positions Three ways air control valve

**Body size**
1: 100 series(M5, G1/8) 2: 200 sereis(G1/8,G1/4)
3: 300 series(G1/4,G3/8) 4: 400 sereis(G1/2)

**Coil and position**
10: Single-head for two positions
20: Double-head for two positions
30C: Double-head center close type for three positions
30E: Double-head center exhaust type for three positions
30P: Double-head center pressure type for three positions

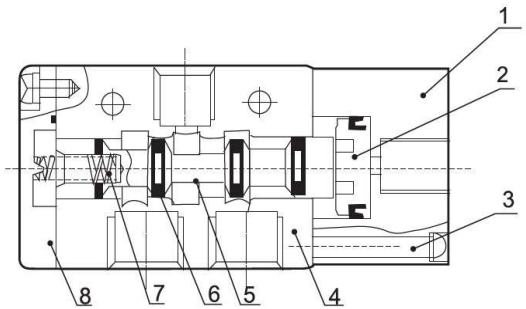
**Connecting port size**
06: G1/8 08: G1/4 M5: M5x0.8
10: G3/8 15: G1/2

**Normal close or normal open**
Blank: Normal close
NO: Normal open

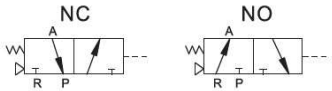
## 2.Characteristics:

1) This series air valves are with high dust prevention.
2) Different sealing materials are available like NBR, EPDM, VITON.
3) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
4) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

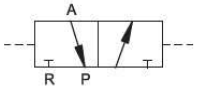
## 3.Internal Structure:

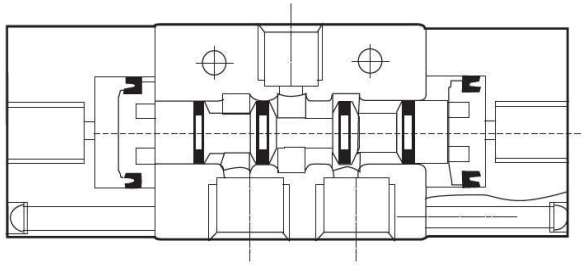



**Single-Head Type**




**Double-Head Type**



| No.: | Designation | No.: | Designation | No.: | Designation |
|---|---|---|---|---|---|
| 1. | Air control cover | 4. | Valve body | 7. | Spring |
| 2. | Piston | 5. | Spool | 8. | Rear cover |
| 3. | Screw | 6. | O ring | | |

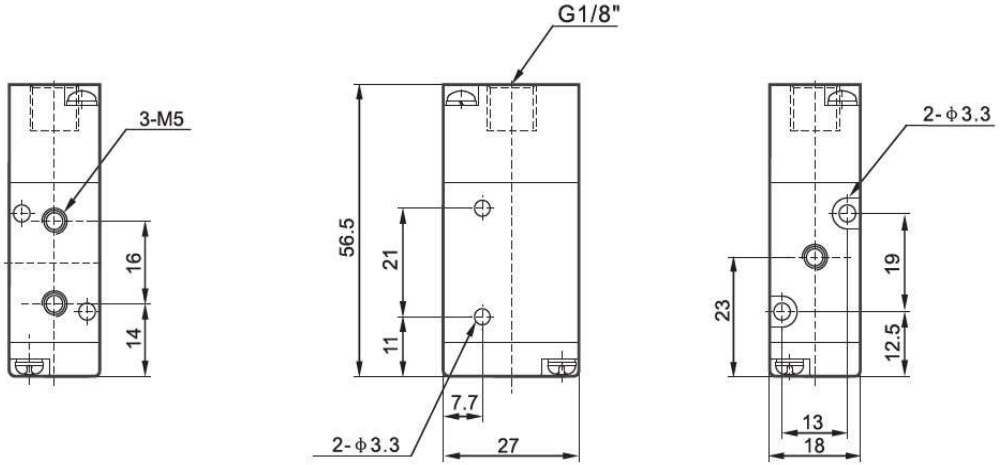
## 4.Specification:

| Model | Acting head | 3A100 Series | | 3A200 Series | | 3A300 Series | | 3A400 Series |
|---|---|---|---|---|---|---|---|---|
| | Single head | 3A110-M5 | 3A110-06 | 3A210-06 | 3A210-08 | 3A310-08 | 3A310-10 | 3A410-15 |
| | Double head | 3A120-M5 | 3A120-06 | 3A220-06 | 3A220-08 | 3A320-08 | 3A320-10 | 3A420-15 |
| Applicable medium | | ≤40μ Filtered Air | | | | | | |
| Motion pattern | | Inner guide type | | | | | | |
| Working pressure | | 0.15~0.8 MPa | | | | | | |
| Proof Pressure | | 1.2MPa | | | | | | |
| Temperature range | | NBR: 5℃~50℃ | | | | | | |
| Port size | | M5x0.8 | G1/8 | G1/8 | G1/4 | G1/4 | G3/8 | G1/2 |
| Effective section area ($mm^2$) | | 10 | 12 | 14 | 16 | 25 | 30 | 50 |
| Cv Value | | 0.56 | 0.67 | 0.78 | 0.89 | 1.4 | 1.68 | 2.79 |
| Material of body | | Aluminum alloy | | | | | | |
| Highest action frequency | | 5 cycles/second | | | | | | |
| Shortest excitation time | | 0.05 s | | | | | | |
| Sealing material | | NBR or VITON | | | | | | |

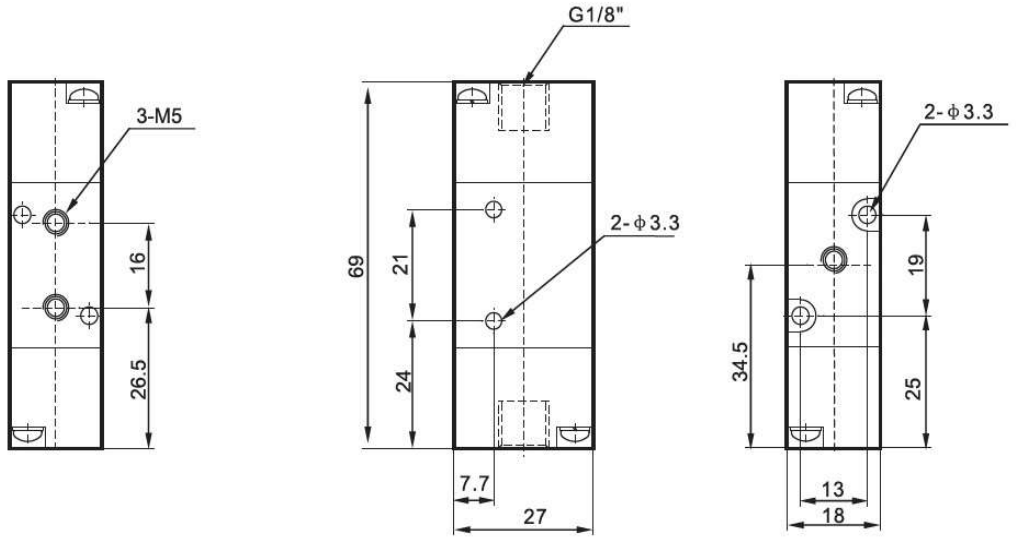
* 1 kgf/cm2 = 1 bar = 0.1 Mpa = 100KPa = 14.5psi

## 5. Overall and Dimension Sheet:

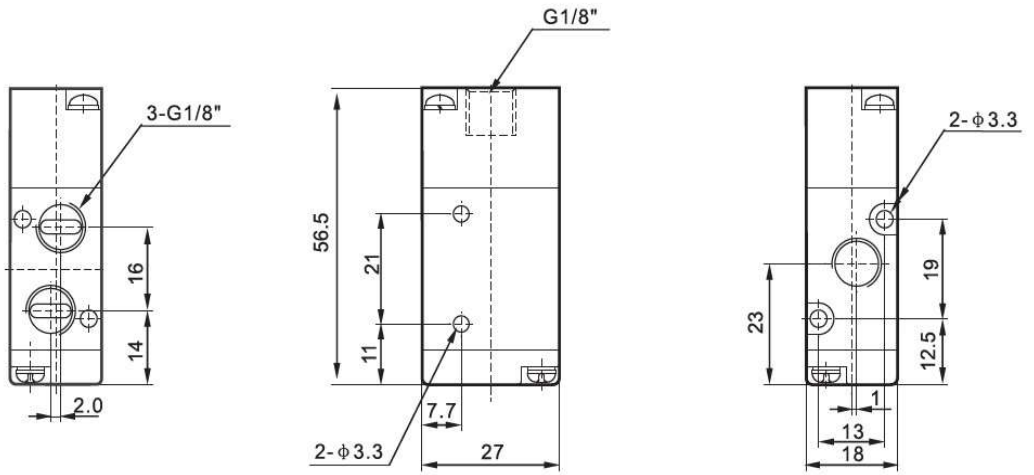
### 3A110-M5



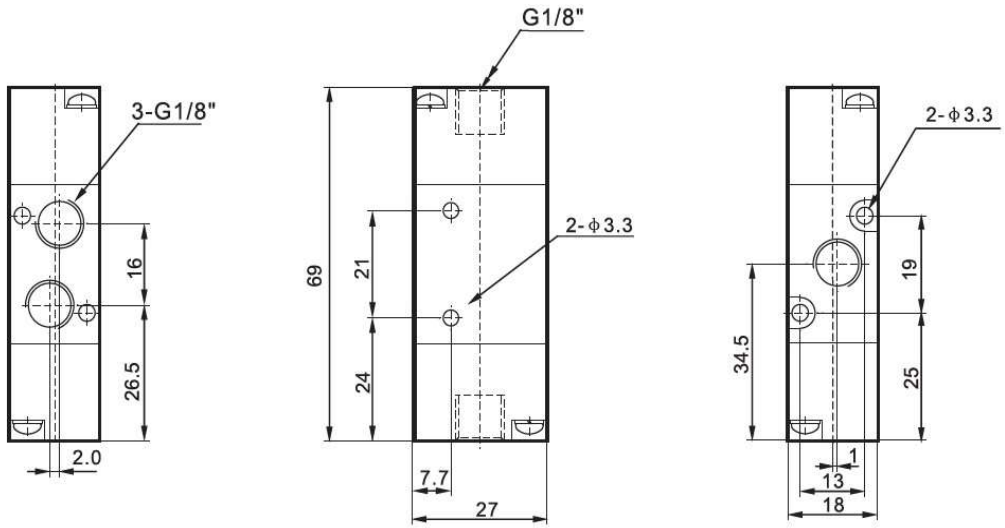

### 3A120-M5



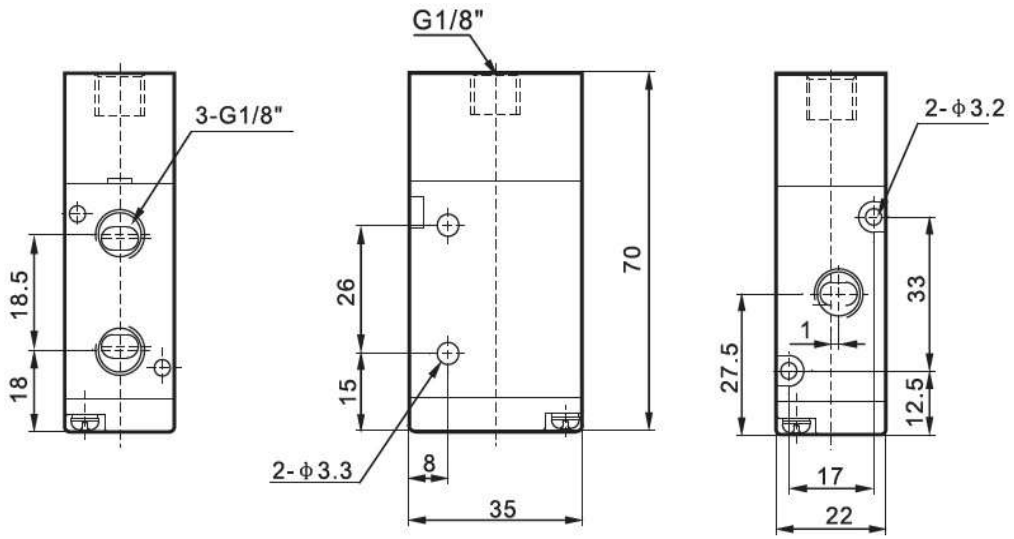

### 3A110-06



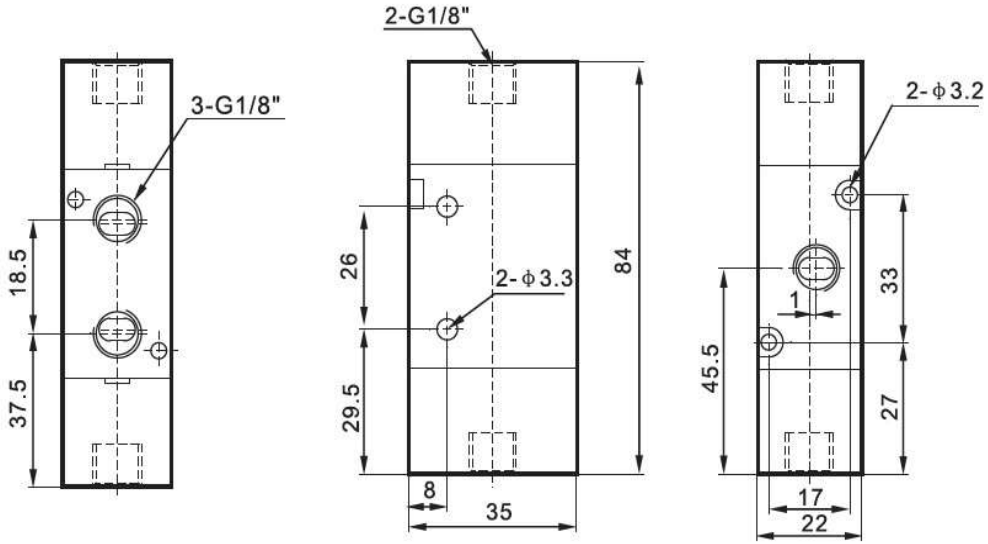

### 3A120-06



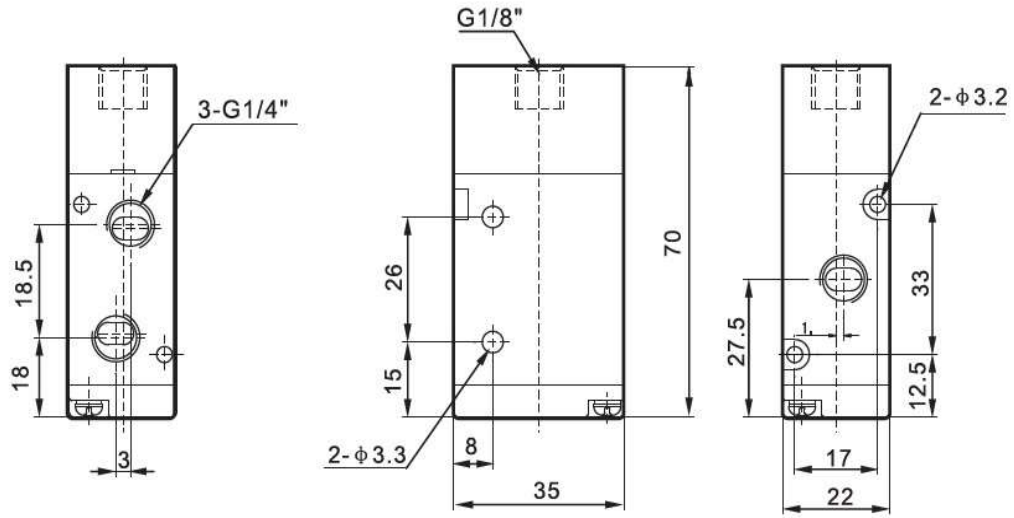
### 3A210-06



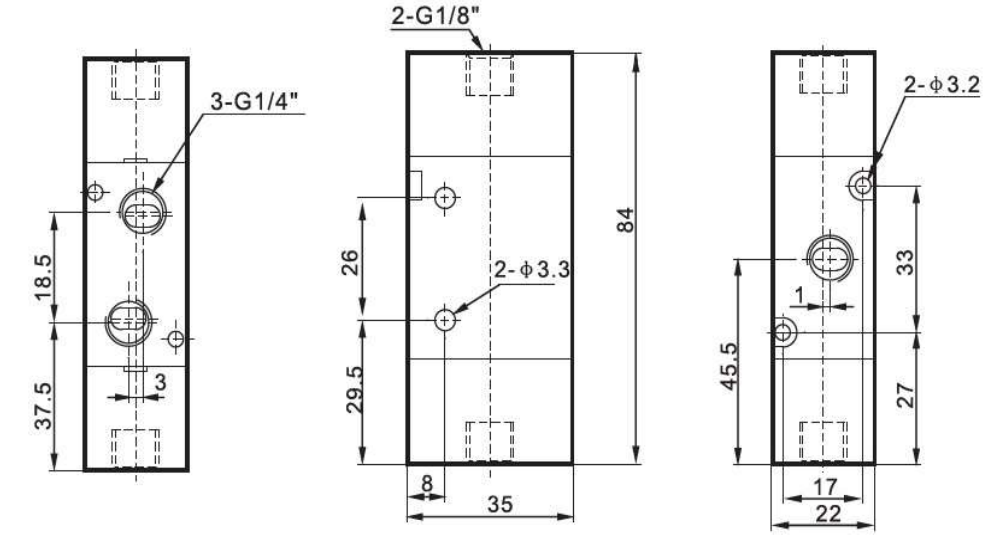

### 3A220-06



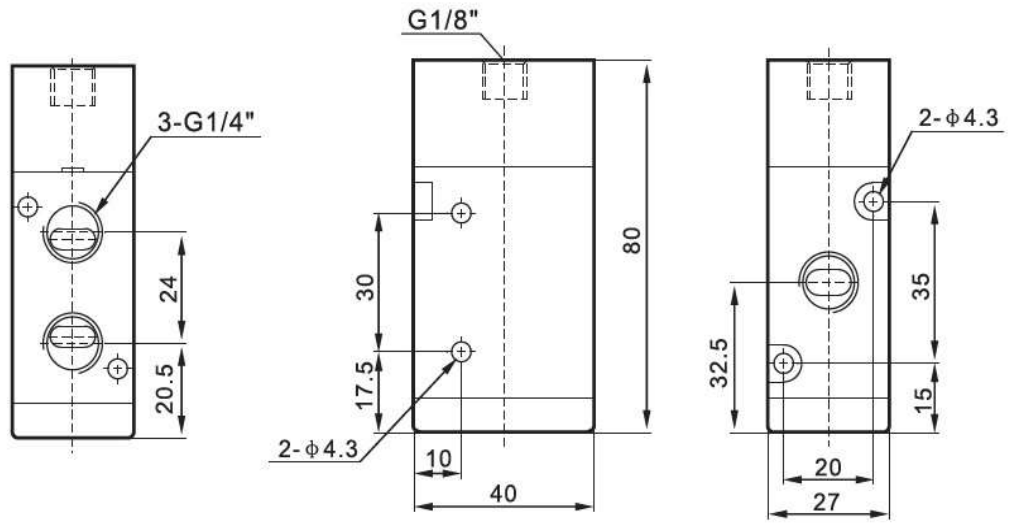

### 3A210-08



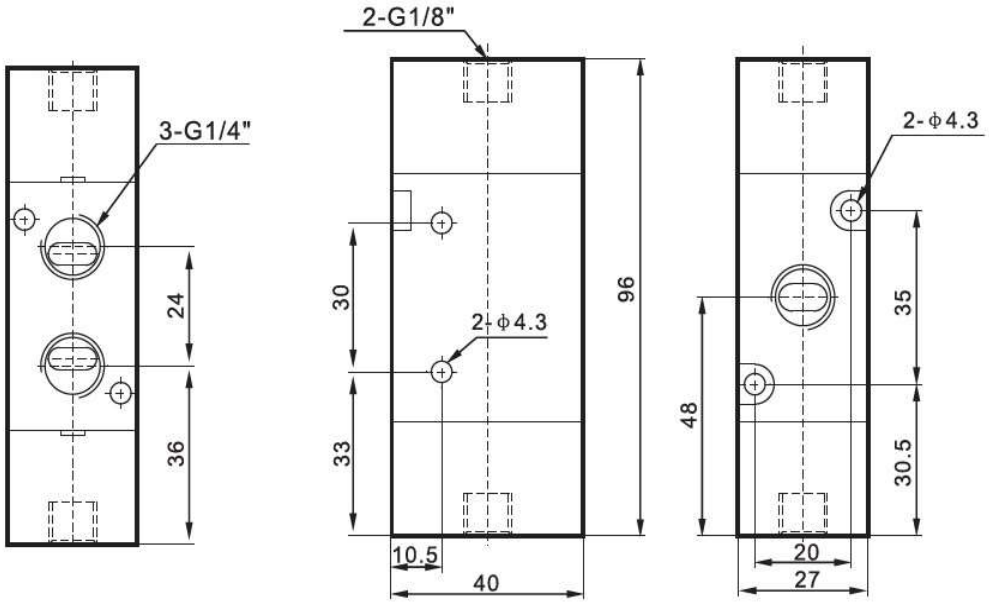

### 3A220-08



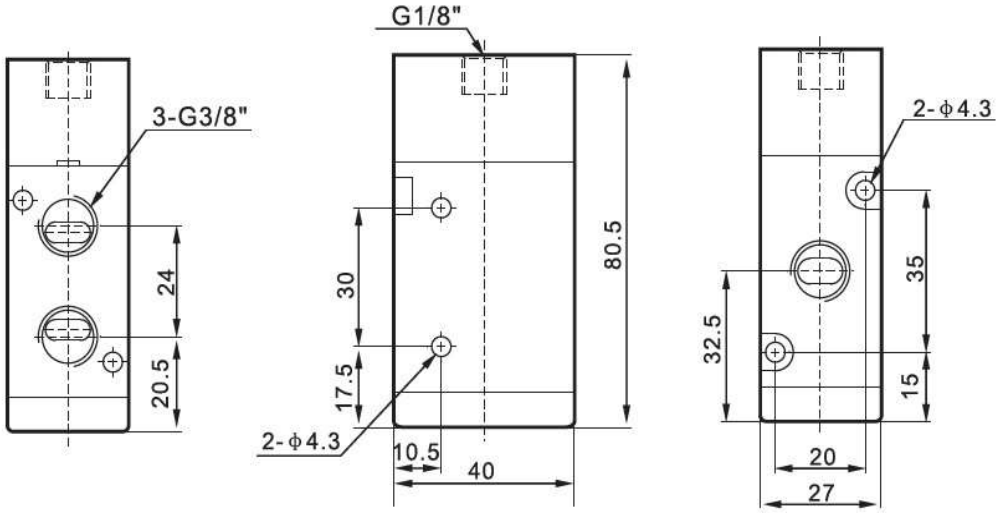
### 3A310-08




### 3A320-08




### 3A310-10

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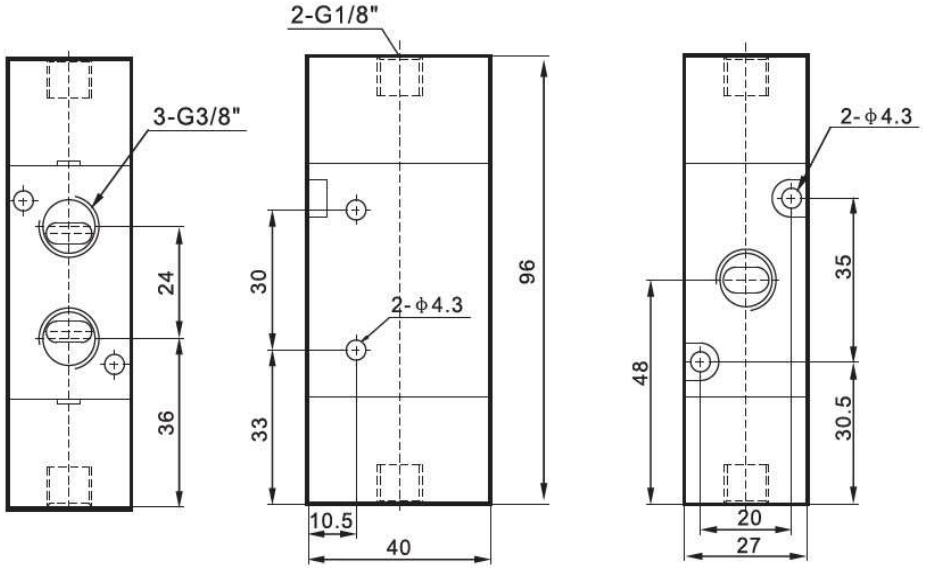
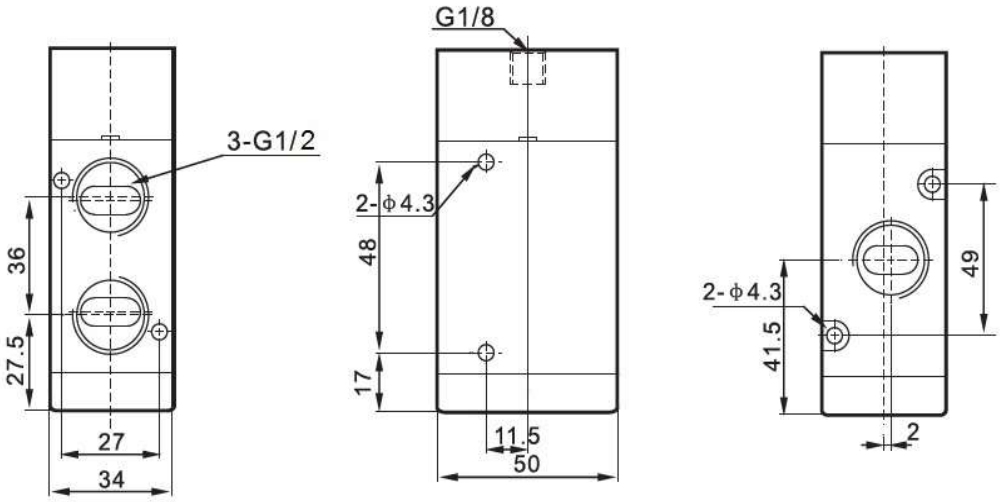
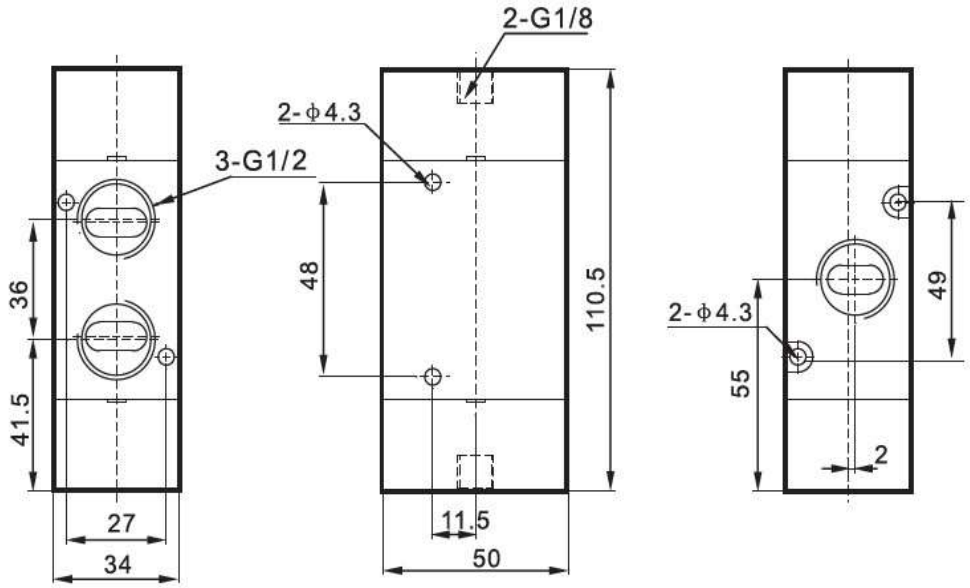


3A410-15




3A420-15








# 4A Series 2positions/5ways Air Control Valve

4A210-08

4A220-08

4A310-10

## 1.Ordering Code :

| 4A | 2 | 10 | – | 08 |
|---|---|---|---|---|

**Air Valve Type**

4A: Two positions Five ways air control valve

**Body size**

1: 100 series(M5, G1/8) 2: 200 sereis(G1/8,G1/4)
3: 300 series(G1/4,G3/8) 4: 400 sereis(G1/2)

**Coil and position**

10: Single-head for two positions
20: Double-head for two positions
30C: Double-head center close type for three positions
30E: Double-head center exhaust type for three positions
30P: Double-head center pressure type for three positions

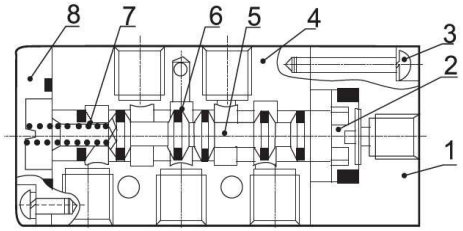
**Connecting port size**

06: G1/8 08: G1/4 M5: M5x0.8
10: G3/8 15: G1/2

## 2.Characteristics:

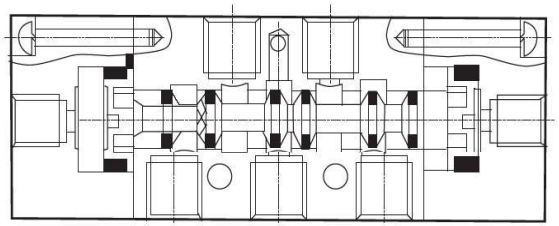
1) This series air valves are with high dust prevention.
2) Different sealing materials are available like NBR, EPDM, VITON.
3) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
4) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

## 3.Internal Structure:

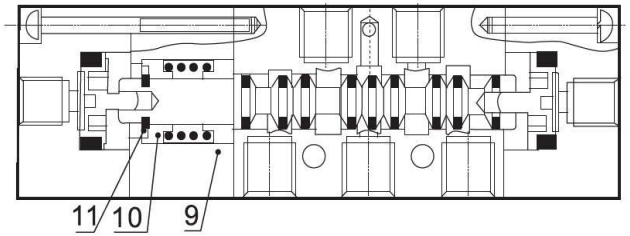



**Single-Head Type**
(4A110~4A410)

**Double-Head Type**
(4A120~4A420)



**Double-Head Type**
(4A130~4A430)




| No.: | Designation | No.: | Designation | No.: | Designation |
|---|---|---|---|---|---|
| 1. | Air control cover | 5. | Spool | 9. | Back seat |
| 2. | Piston | 6. | O ring | 10. | Spring seat |
| 3. | Screw | 7. | Spring | 11. | C-type buckle |
| 4. | Valve body | 8. | Rear cover | | |

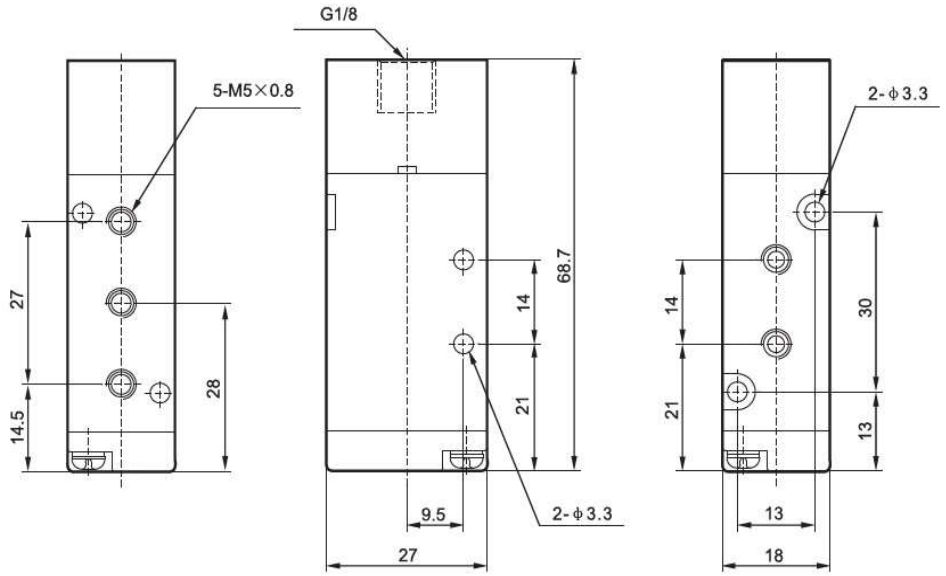
## 4.Specification:

| Model | Acting head | 4A100 Series | | 4A200 Series | | 4A300 Series | | 4A400 Series |
|---|---|---|---|---|---|---|---|---|
| | Single head | 4A110-M5 | 4A110-06 | 4A210-06 | 4A210-08 | 4A310-08 | 4A310-10 | 4A410-15 |
| | Double head | 4A120-M5 | 4A120-06 | 4A220-06 | 4A220-08 | 4A320-08 | 4A320-10 | 4A420-15 |
| | Center close | 4A130C-M5 | 4A130C-06 | 4A230C-06 | 4A230C-08 | 4A330C-08 | 4A330C-10 | 4A430C-15 |
| | Center exhaust | 4A130E-M5 | 4A130E-06 | 4A230E-06 | 4A230E-08 | 4A330E-08 | 4A330E-10 | 4A430E-15 |
| | Center pressure | 4A130P-M5 | 4A130P-06 | 4A230P-06 | 4A230P-08 | 4A330P-08 | 4A330P-10 | 4A430P-15 |
| Applicable medium | | ≤40μ Filtered Air | | | | | | |
| Motion pattern | | Inner guide type | | | | | | |
| Working pressure | | 0.15~0.8 MPa | | | | | | |
| Proof Pressure | | 1.2MPa | | | | | | |
| Temperature range | | NBR: 5℃~50℃ | | | | | | |
| Port size | | M5x0.8 | G1/8 | G1/8 | G1/4 | G1/4 | G3/8 | G1/2 |
| Effective section area (mm$^2$) | | 10 | 12 | 14 | 16 | 25 | 30 | 50 |
| Cv Value | | 0.56 | 0.67 | 0.78 | 0.89 | 1.4 | 1.68 | 2.79 |
| Material of body | | Aluminum alloy | | | | | | |
| Highest action frequency | | 5 cycles/second | | | | | | |
| Shortest excitation time | | 0.05 s | | | | | | |
| Sealing material | | NBR or VITON | | | | | | |

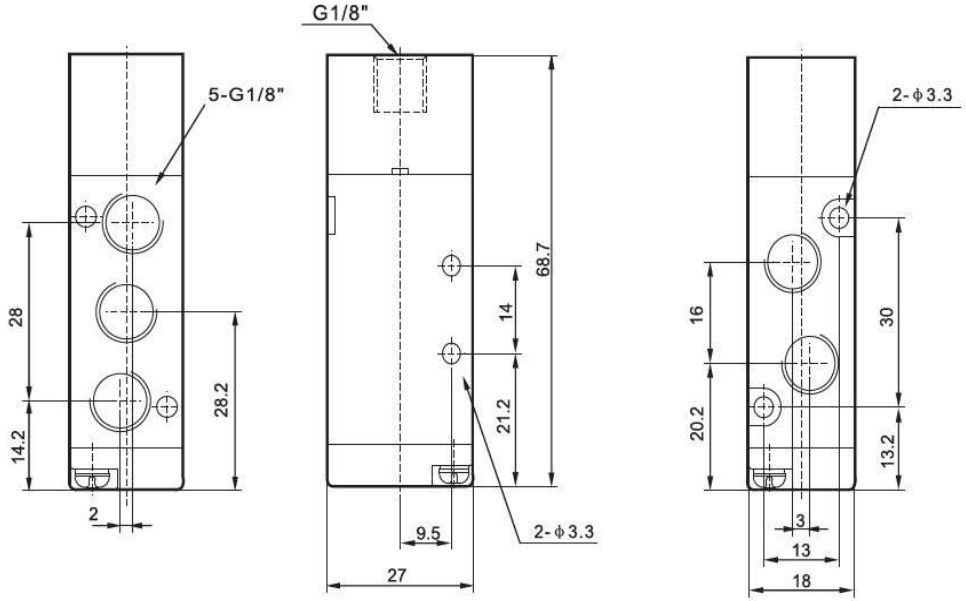
* 1 kgf/cm2 = 1 bar = 0.1 Mpa = 100KPa = 14.5psi

## 5. Overall and Dimension Sheet:

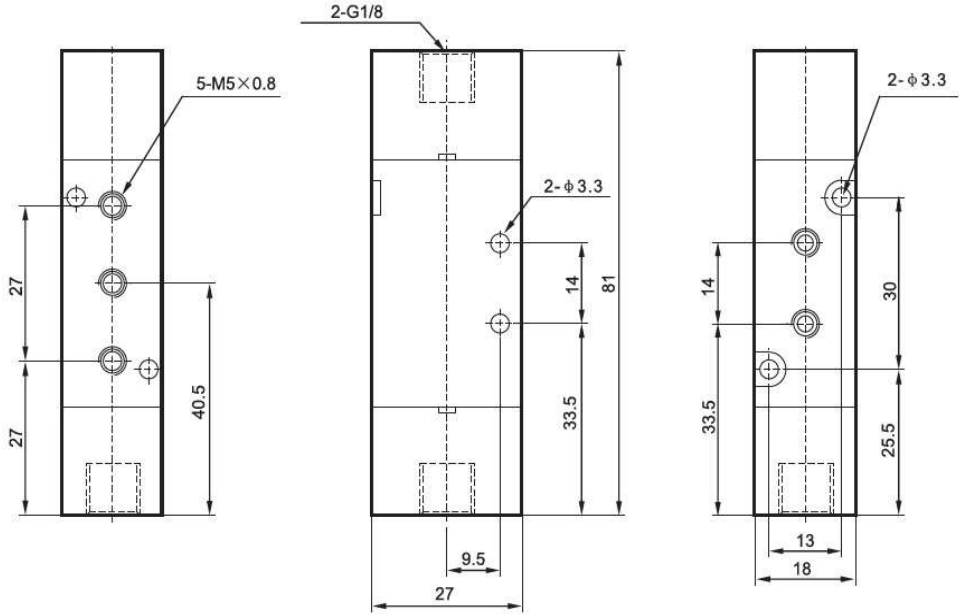
### 4A110-M5



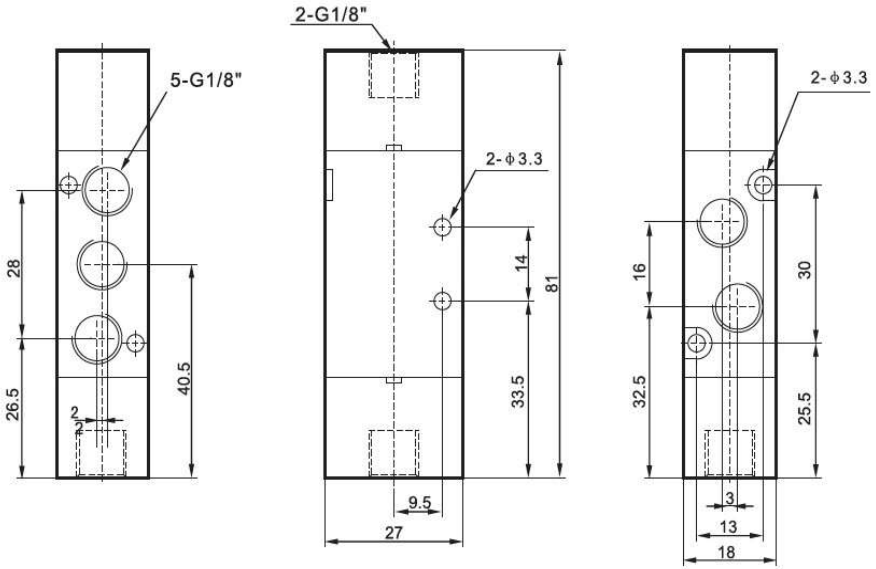

### 4A110-06



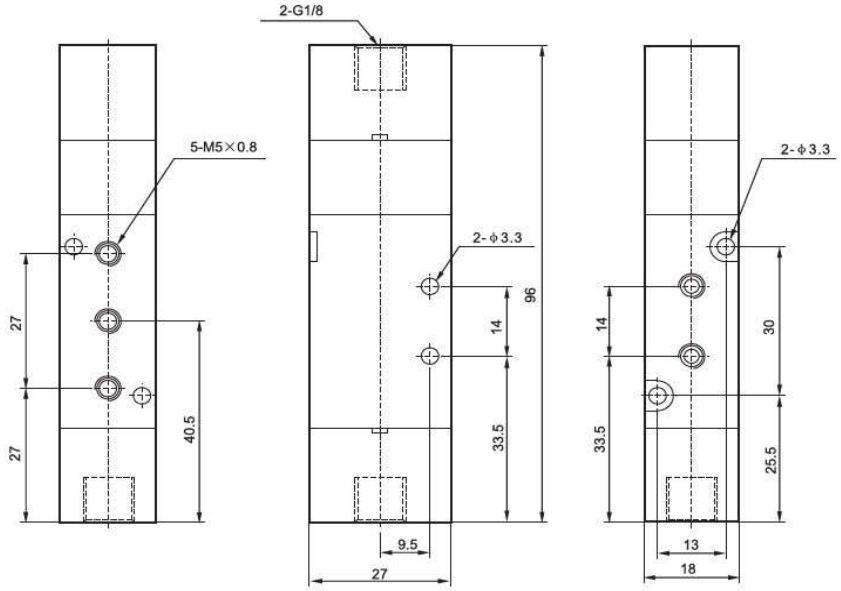

### 4A120-M5



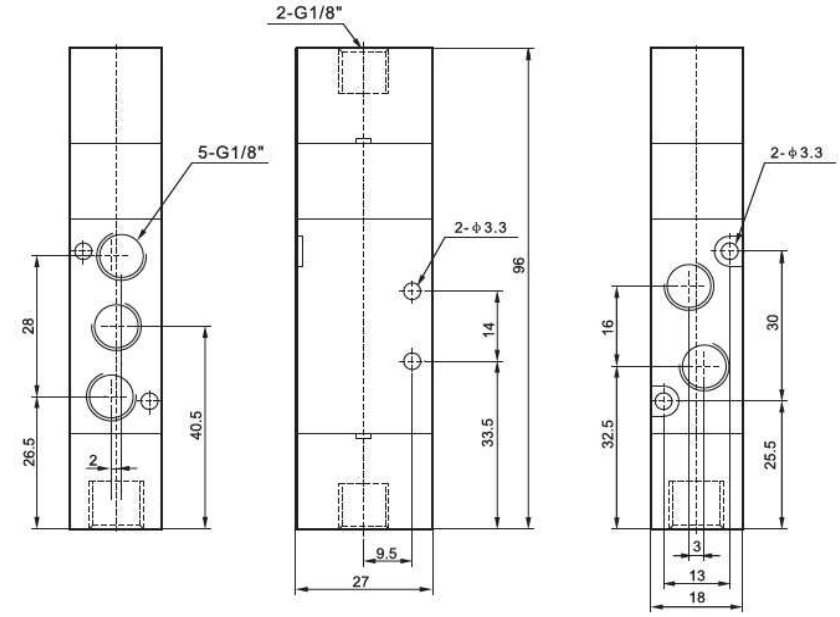

### 4A120-06



**4A130C-M5**



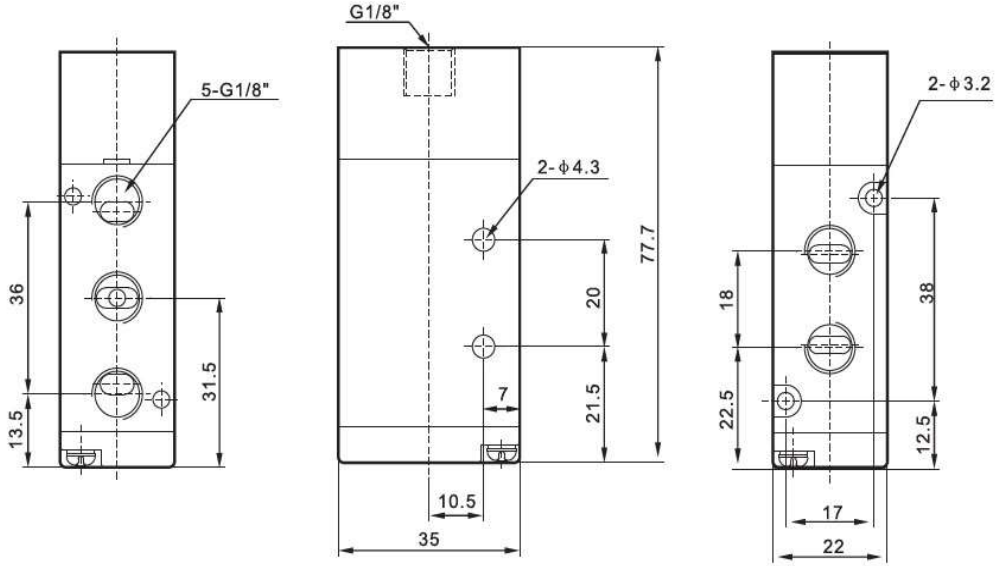

**4A130C-06**



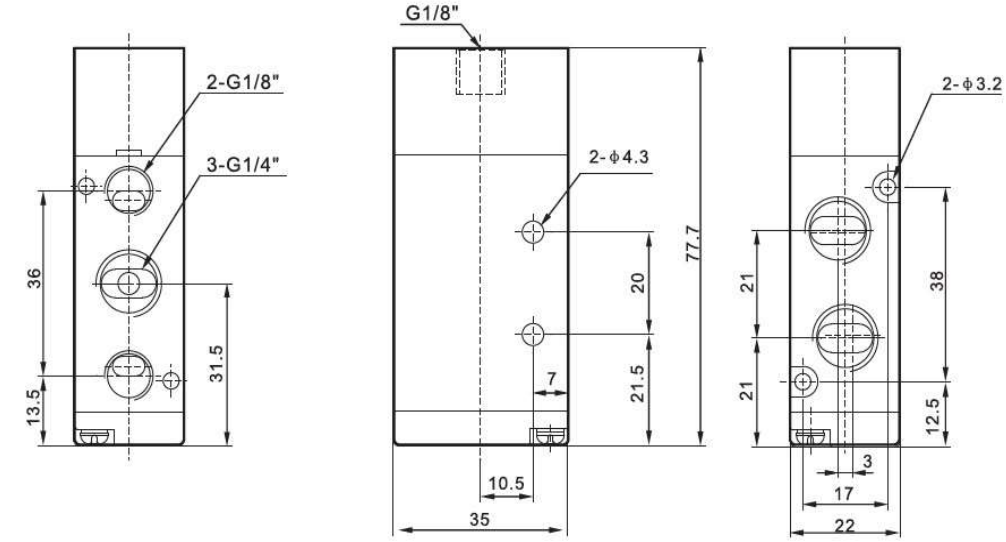





**4A210-06**




**4A210-08**



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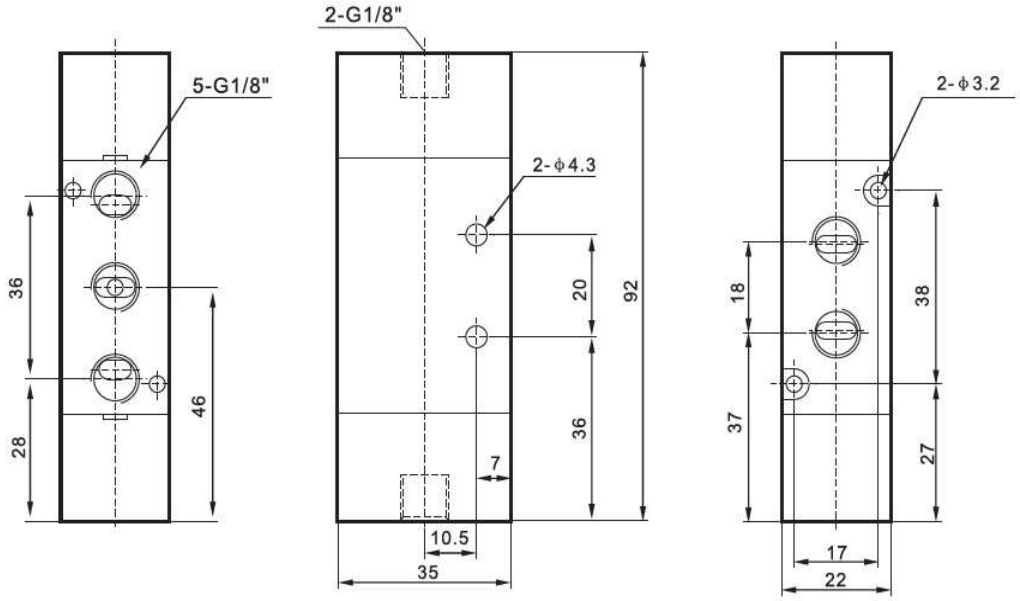
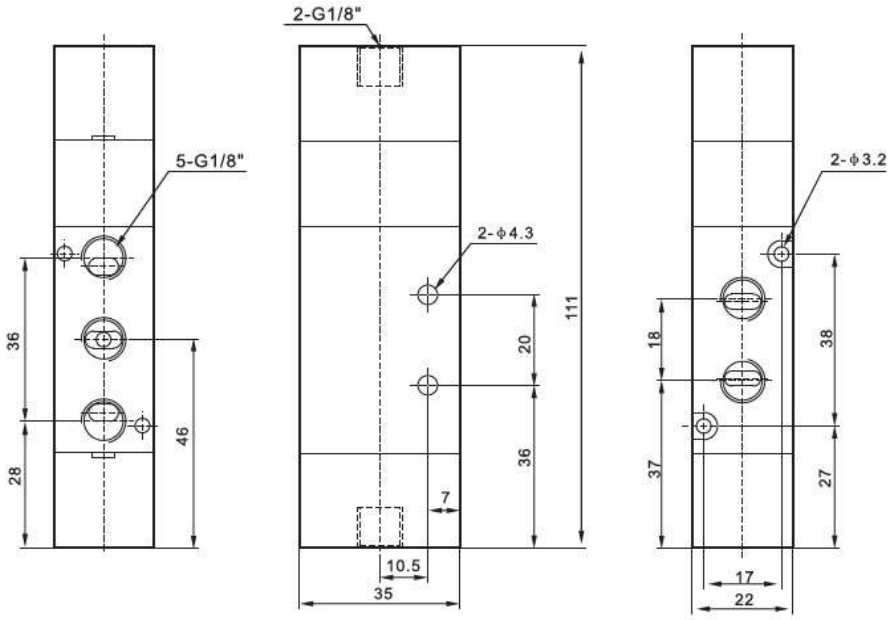



## 4A230C-06

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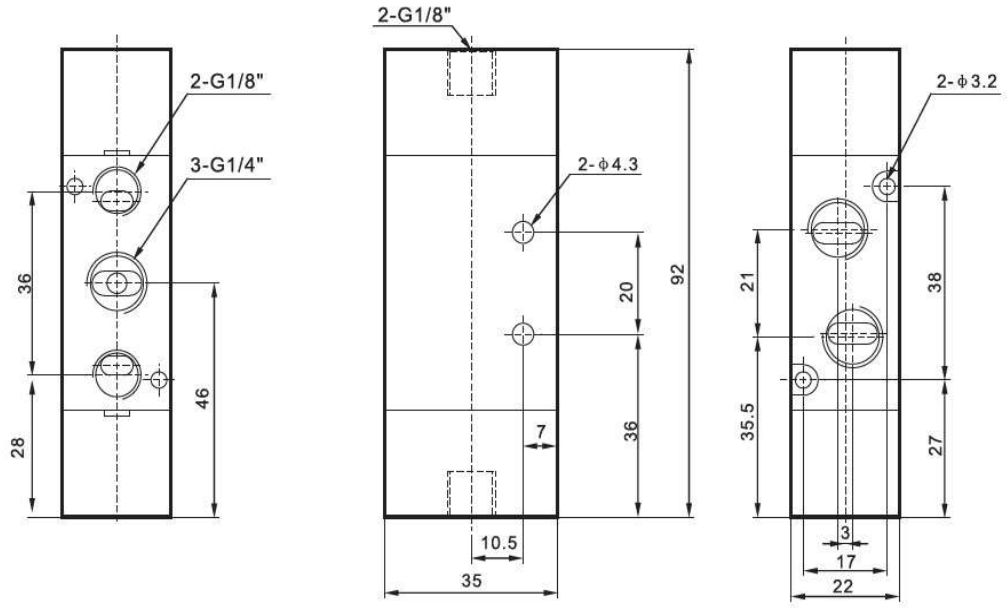


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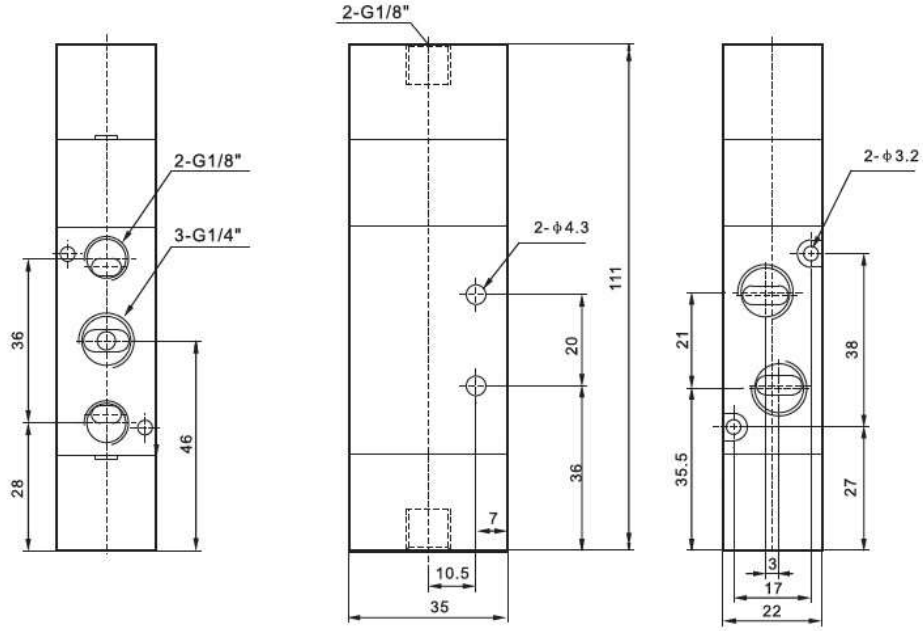

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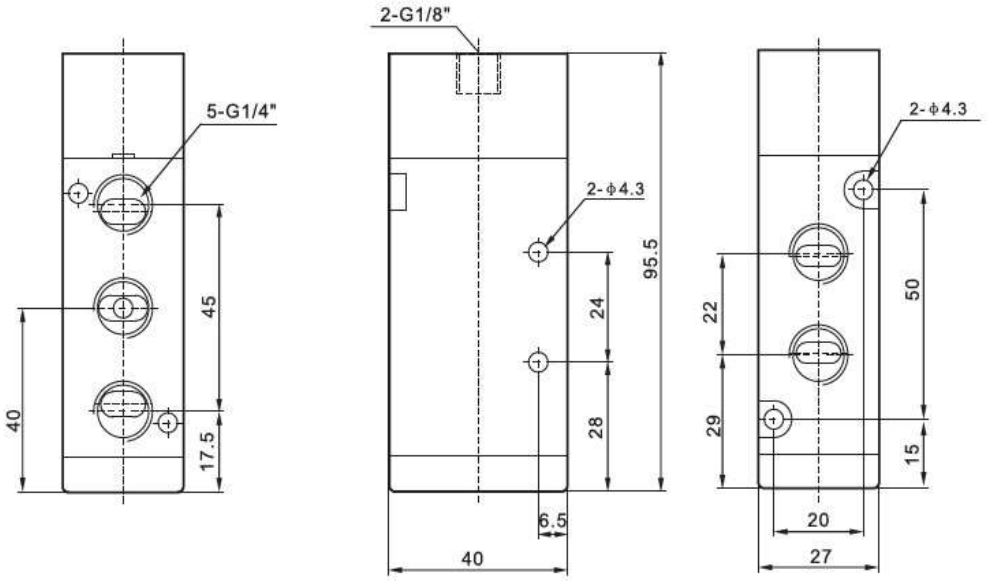


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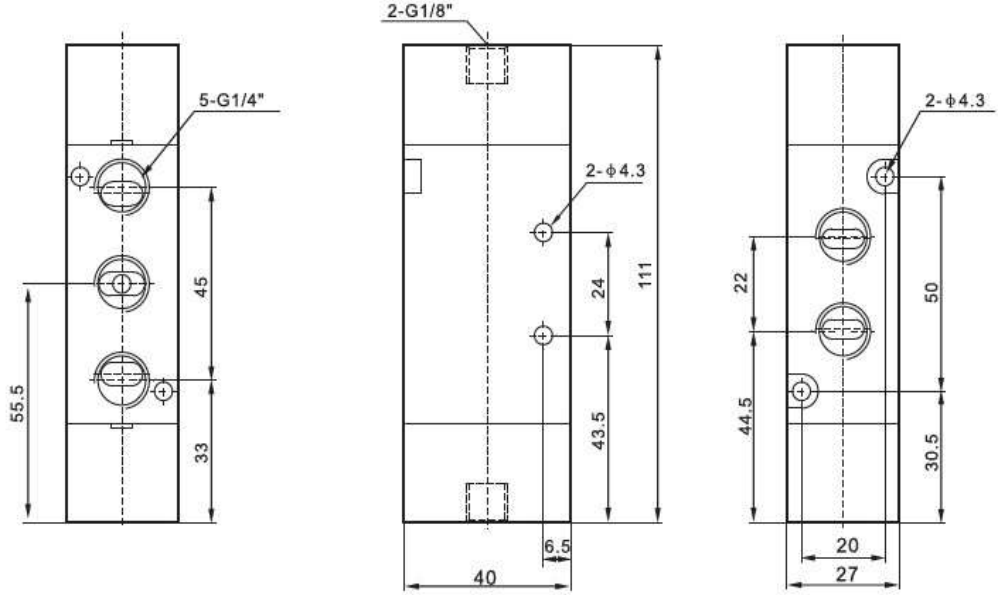


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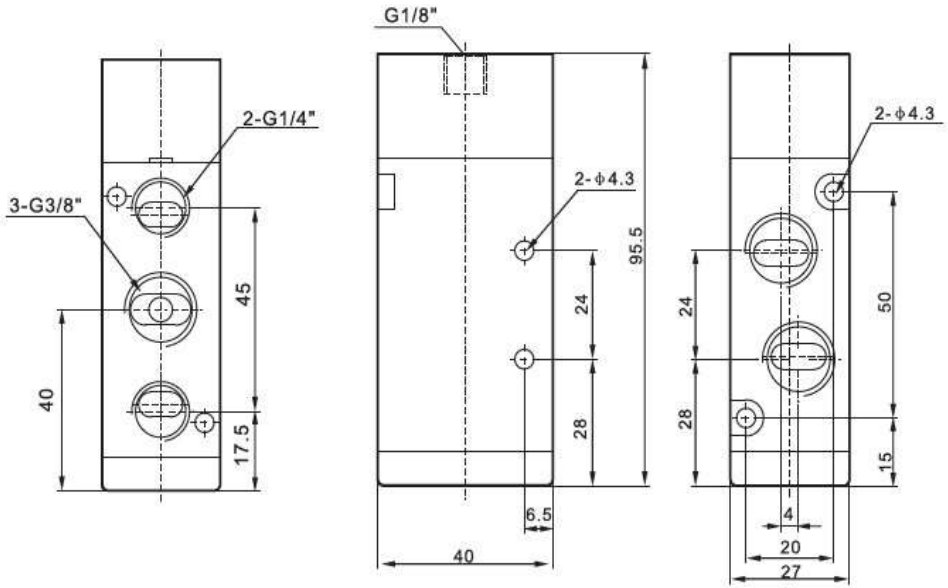


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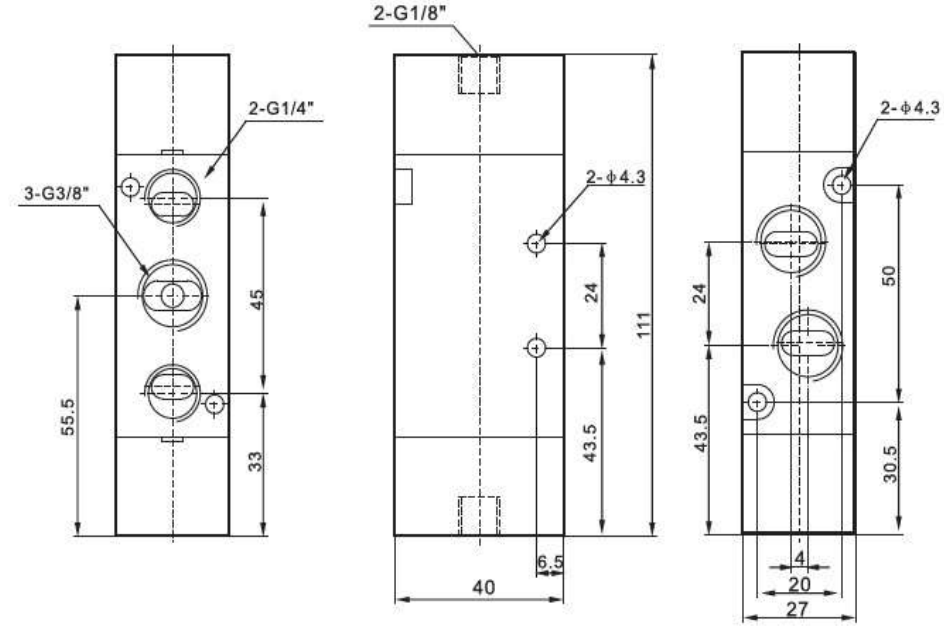

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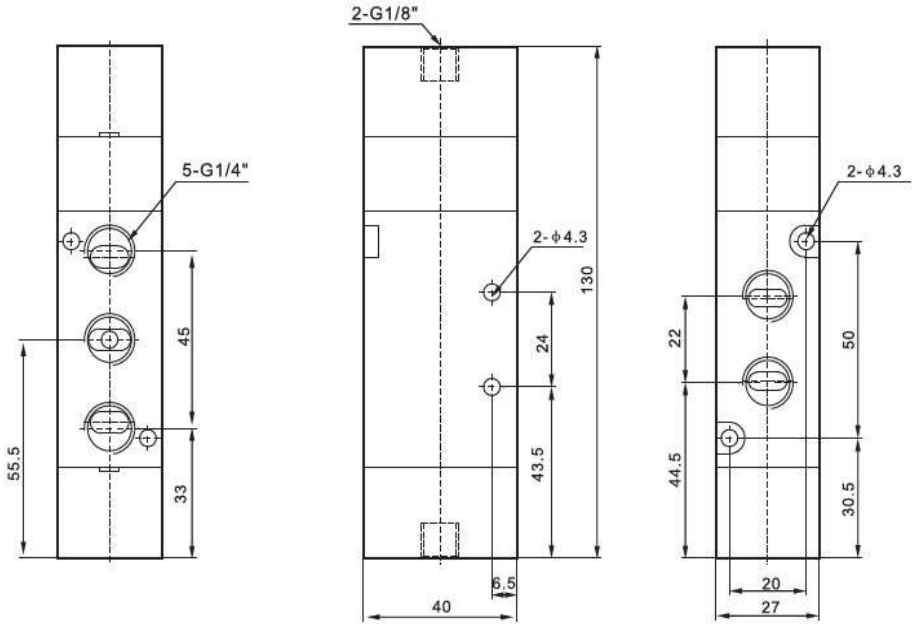


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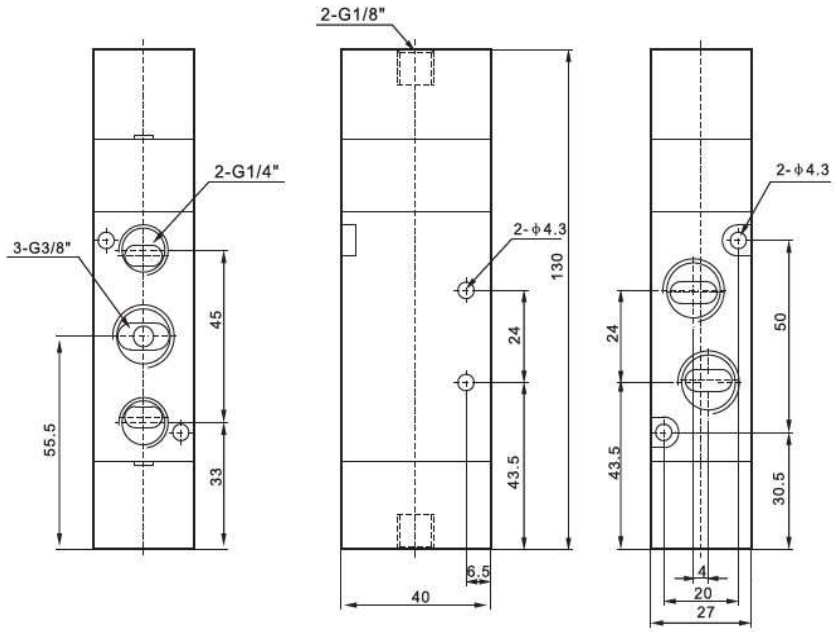


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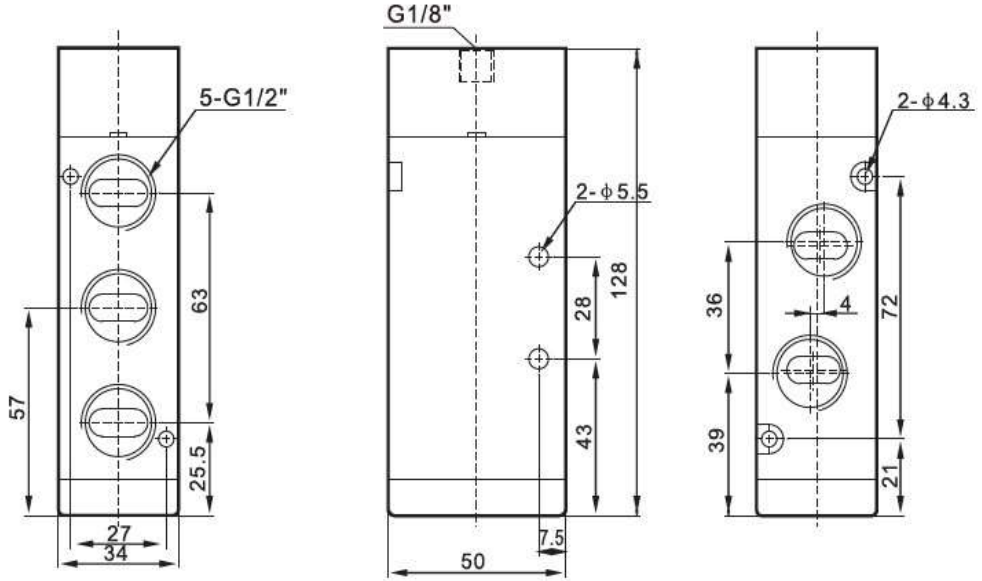
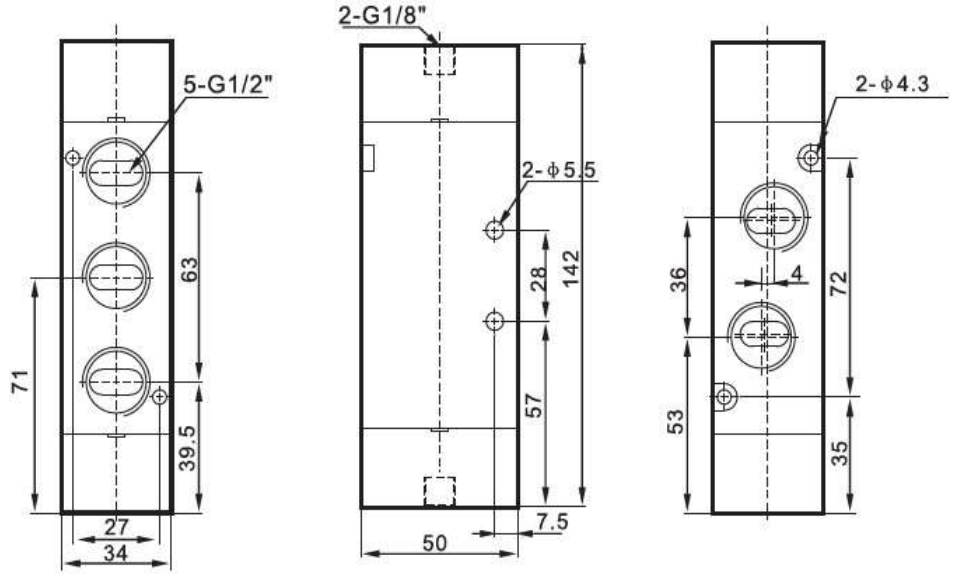



## 4A420-15
## 4A430C-15



# 5V Series 2positions3ways or 2positions5ways Solenoid Valve

5V110-06

5V120-06

5V210-08

5V220-08

## 1.Ordering Code :

| 5V | 2 | 10 | – | 08 | – | DC24V | – | □ |
|---|---|---|---|---|---|---|---|---|

**Solenoid Valve Type**

5V: Two positions five ways or Two positions three ways solenoid valve

**Body size**

1: 100 series(M5, G1/8)

2: 200 sereis(G1/8,G1/4)

**Coil and position**

10: Single-head (single coil) for two positions

20: Double-head (double coils) for two positions

30C: Double-head (double coils) center close type for three positions

30E: Double-head (double coils) center exhaust type for three positions

30P: Double-head (double coils) center pressure type for three positions

**Connecting port size**

M5: M5x0.8

06: G1/8

08: G1/4

**Voltage**

DC12V

DC24V

AC110V 50/60Hz

AC220V 50/60Hz

AC380V 50/60Hz

**Normal close or Normal open**

Blank: Normal close

NO: Normal open

## 2.Characteristics:

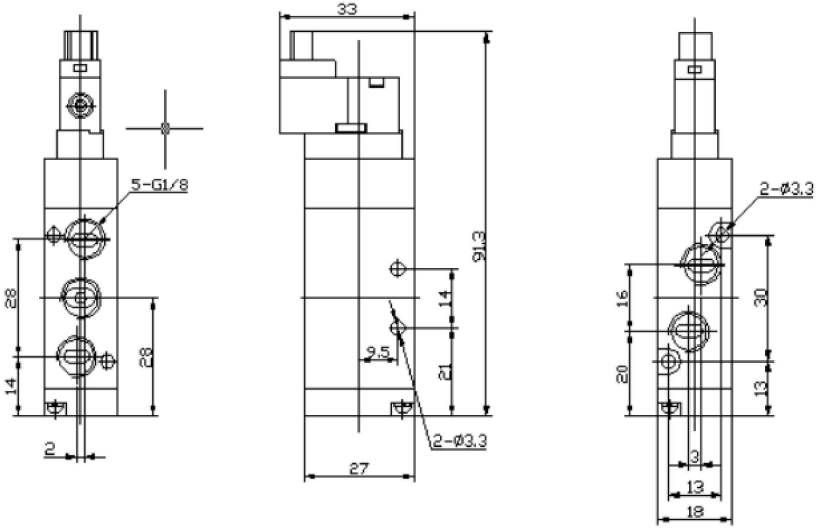
1) This 5V series solenoid valves are with micro pilot head with longlife.
2) Sealing parts: Mitsubishi brand
3) Lubricating grease: Dowcorning 6169
4) Stem: With guide device
5) Low power consumption.
6) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
7) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

## 4.Specification:

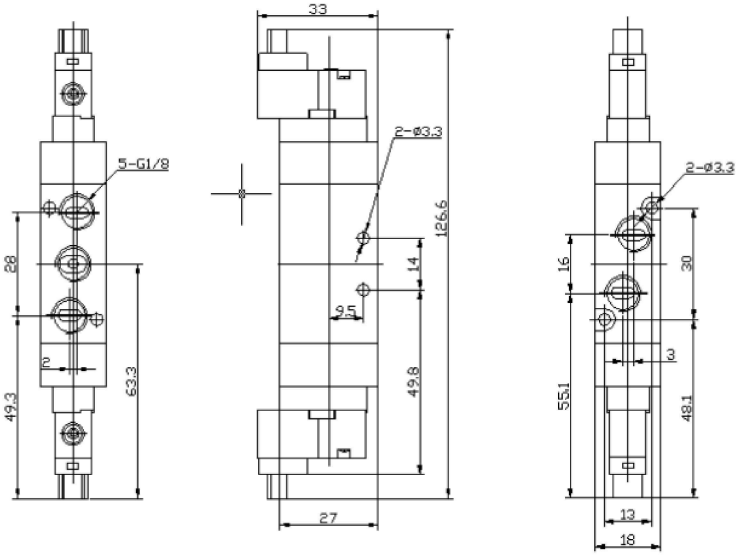
| Model | 5V110-06-NO | 5V110-06 | 5V120-06 | 5V130-06 | 5V210-06-NO | 5V210-08 | 5V220-08 | 5V230-08 |
|---|---|---|---|---|---|---|---|---|
| Applicable medium | 5μm Filtered Air | | | | | | | |
| Motion pattern | Pilot acting | | | | | | | |
| Valve type | 2position/3way | 2position/5way | | 3/5ways | 2position/3way | 2position/5way | | 3/5ways |
| Normal open or close | Normal open | | | | Normal open | | | |
| Working pressure | 0.15~0.7 MPa | | | | | | | |
| Proof Pressure | 0.8 MPa | | | | | | | |
| Temperature range | NBR: -10℃~60℃ | | | | | | | |
| Port size | G1/8 | | | | | G1/4 | | |
| Cv Value | 0.67 | | | 0.5 | 0.89 | | | 0.67 |
| Available Voltage | DC12V,DC24V,AC110V,AC220V,AC380V | | | | | | | |
| Power consumption | AC: 1.2W DC: 1.2W | | | | | | | |
| Voltage range | ±15% | | | | | | | |
| Working life time | ≥30,000,000 | | | | | | | |
| Material of body | Aluminum alloy | | | | | | | |
| Min.excitation time | 0.015 s | | | | | | | |
| Max.working frequency | 10 cycles/second | | | | | | | |

## 5. Overall and Dimension Sheet:

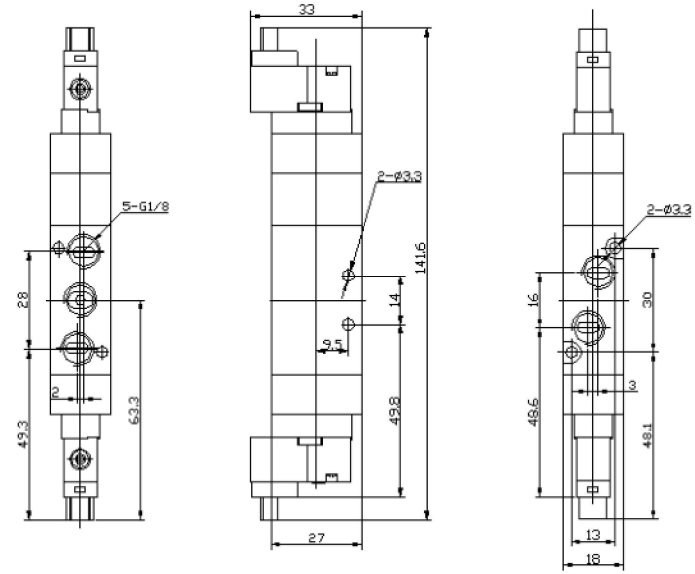
### 5V110-06



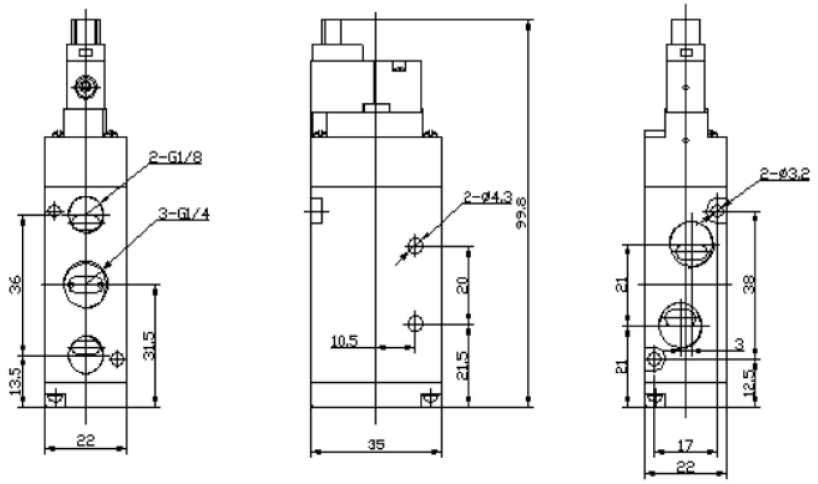

### 5V120-06



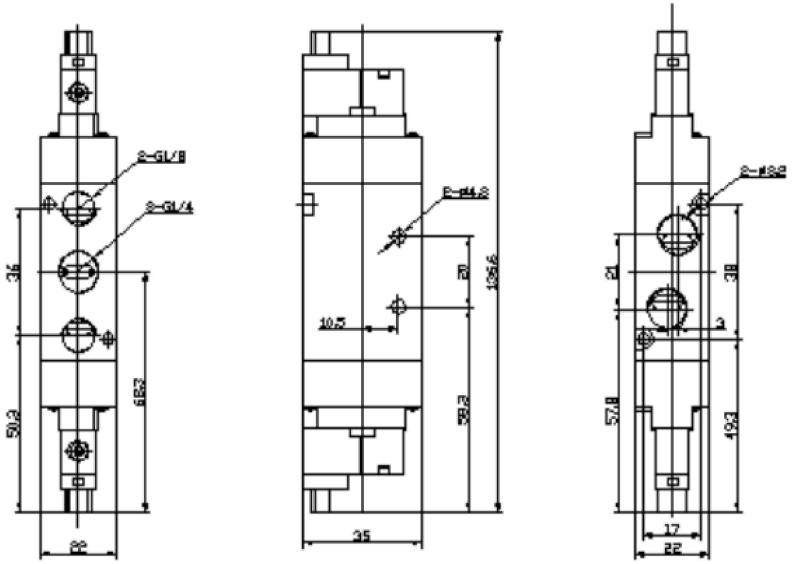

### 5V130-06



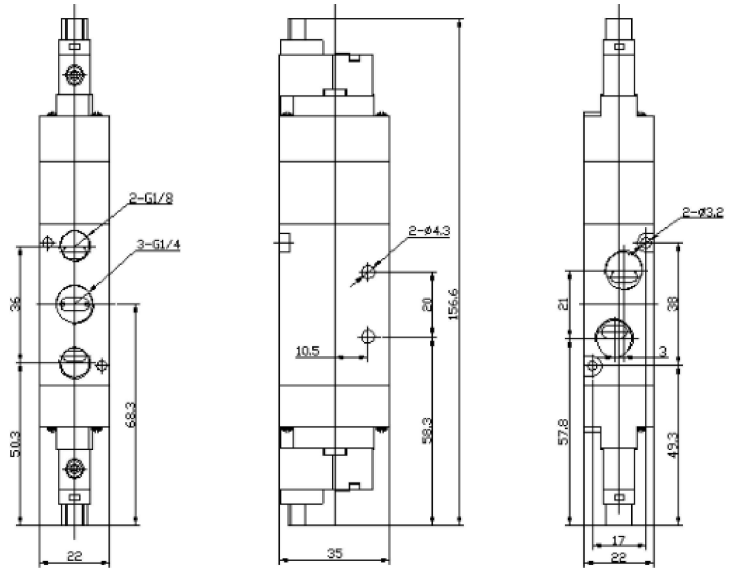

### 5V210-08



5V220-08




5V230-08








# 5V3120,5V3220,5V5120,5V5220 Series Solenoid Valve

| 5V3120-M5 | 5V3220-M5 | 5V5120-06 | 5V5220-06 |
|---|---|---|---|

## 1.Ordering Code :

| 5V | 3 | 120 | – | M5 | – | DC24V |
|---|---|---|---|---|---|---|

**Solenoid Valve Type**

5V: Two positions five ways solenoid valve

**Body size**

3: 300 series(M5)

5: 500 sereis(G1/8)

**Coil and position**

120: Single-head (single coil) for two positions

220: Double-head (double coils) for two positions

**Connecting port size**

M5: M5x0.8

06: G1/8

08: G1/4

**Voltage**

DC12V

DC24V

AC110V 50/60Hz

AC220V 50/60Hz

## 2.Characteristics:

1) This 5V series solenoid valves are with micro pilot head with longlife.
2) Sealing parts:  Mitsubishi brand
3) Lubricating grease:  Dowcorning 6169
4) Stem: With guide device
5) Low power consumption.
6) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
7) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

## 4.Specification:

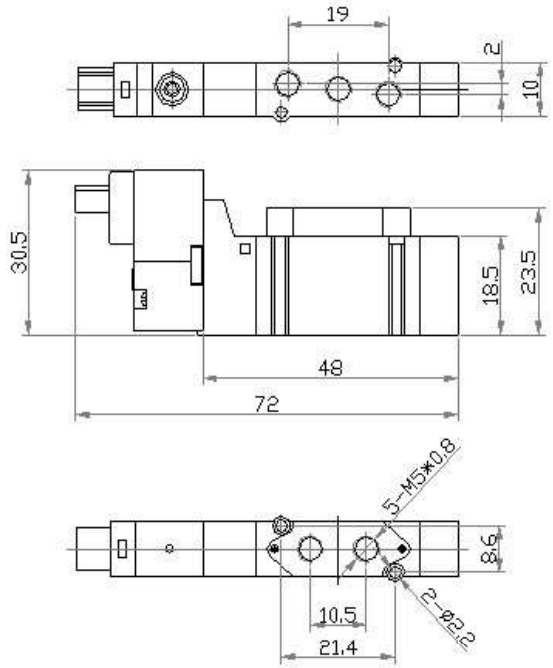
| Model | 5V3120-M5 | 5V3220-M5 | 5V5120-06 | 5V5220-06 |
|---|---|---|---|---|
| Applicable medium | 5μm Filtered Air | | | |
| Motion pattern | Pilot acting | | | |
| Valve type | 2position/5way | | | |
| Working pressure | 0.15~0.7 MPa | | | |
| Proof Pressure | 0.8 MPa | | | |
| Temperature range | NBR: -10℃~60℃ | | | |
| Port size | M5x0.8 | | G1/8 | |
| Cv Value | 0.26 | 0.26 | 0.66 | 0.66 |
| Available Voltage | DC12V,DC24V,AC110V,AC220V | | | |
| Power consumption | AC: 1.2W  DC: 1.2W | | | |
| Voltage range | ±15% | | | |
| Working life time | ≥30,000,000 | | | |
| Material of body | Aluminum alloy | | | |
| Min.excitation time | 0.015 s | | | |
| Max.working frequency | 10 cycles/second | | | |



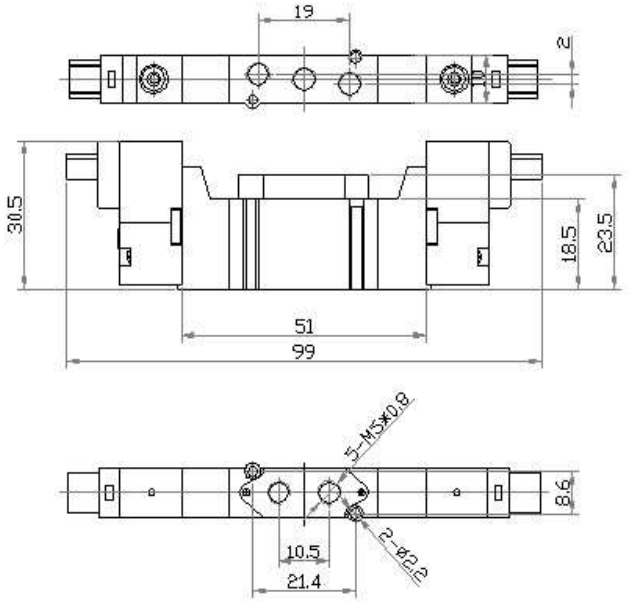


## 5. Overall and Dimension Sheet:

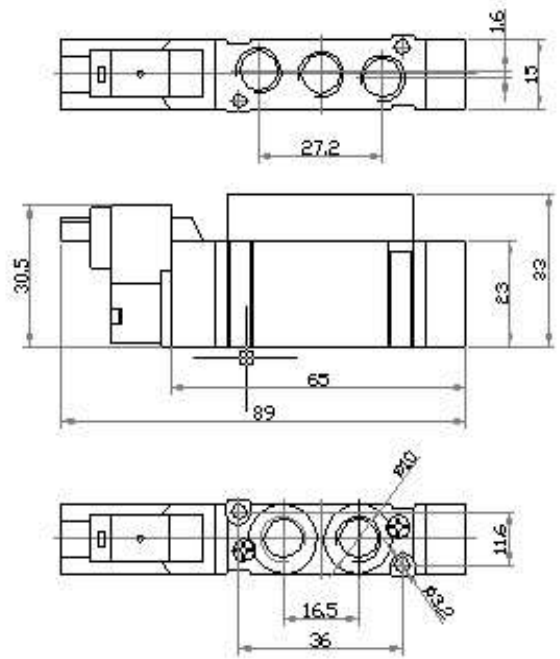
**5V3120-M5**



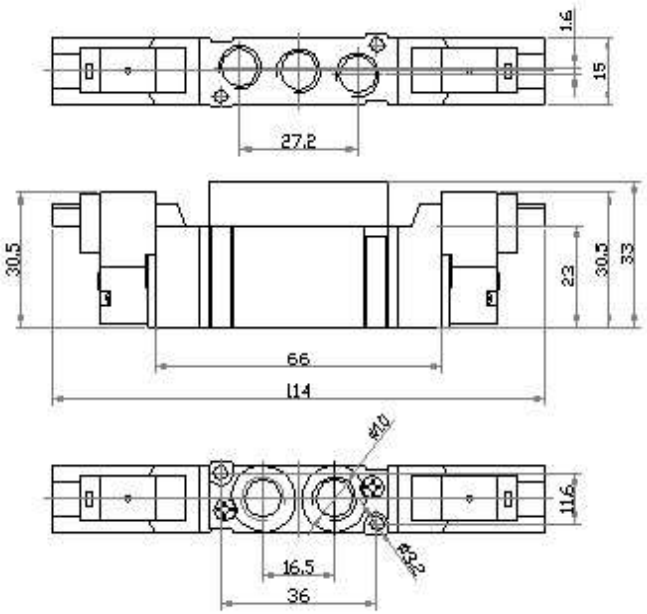

**5V3220-M5**



5V5120-06



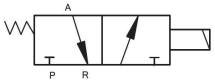

5V5220-06








# 3V1 Series 2positions/3ways Solenoid Valve




## 1.Ordering Code :

3V1 – 06 – □ – DC24V

**Solenoid Valve Type**

3V1: Two positions Three ways solenoid valve

**Connecting port size**

M5: M5x0.8 06: G1/8 08: G1/4

**Connecting type**

Blank: Thread connection type

B: Plate connection type

**Voltage**

| | |
|---|---|
| DC5V | AC24V 50/60Hz |
| DC12V | AC110V 50/60Hz |
| DC24V | AC220V 50/60Hz |

## 2.Characteristics:

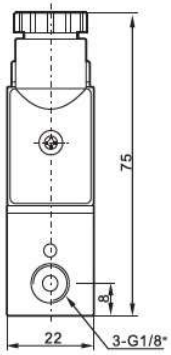
1) The protection grade for this series solenoid valve is IP65.
2) Different voltages are available for coils.
3) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
4) Lead wire type is available, please remind when you order.
5) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

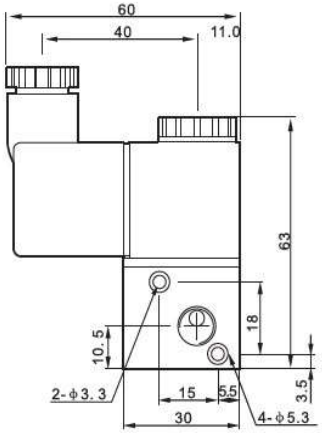
## 3.Specification:

| Model | 3V1-M5 | 3V1-06 | 3V1-08 |
|---|---|---|---|
| Applicable medium | ⩽40μ Filtered Air | | |
| Motion pattern | Direct drive type | | |
| Working pressure | 0~0.8 MPa | | |
| Proof Pressure | 1.2MPa | | |
| Temperature range | NBR: -10℃~60℃ | | |
| Orifice(mm) | 1.2 | | |
| Port size | M5x0.8 | G1/8 | G1/4 |
| IP grade | IP65 | | |
| Insulation grade | F | | |
| Available Voltage | DC5, DC12V,DC24V,AC24V,AC36V,AC110V,AC220V,AC380V | | |
| Power consumption | AC220V:2W, AC110V:2.5W,AC24V:3.5W,DC24V:3W,DC12V:2.5W | | |
| Voltage range | ±10% | | |
| Material of body | Aluminum alloy | | |
| Highest action frequency | 10 cycles/second | | |
| Shortest excitation time | 0.05 s | | |
| Sealing material | NBR or VITON | | |

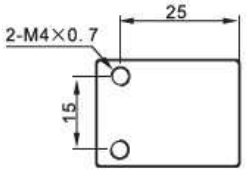
* 1 kgf/cm2 = 1 bar = 0.1 Mpa = 100KPa = 14.5psi

## 4. Overall and Dimension Sheet:



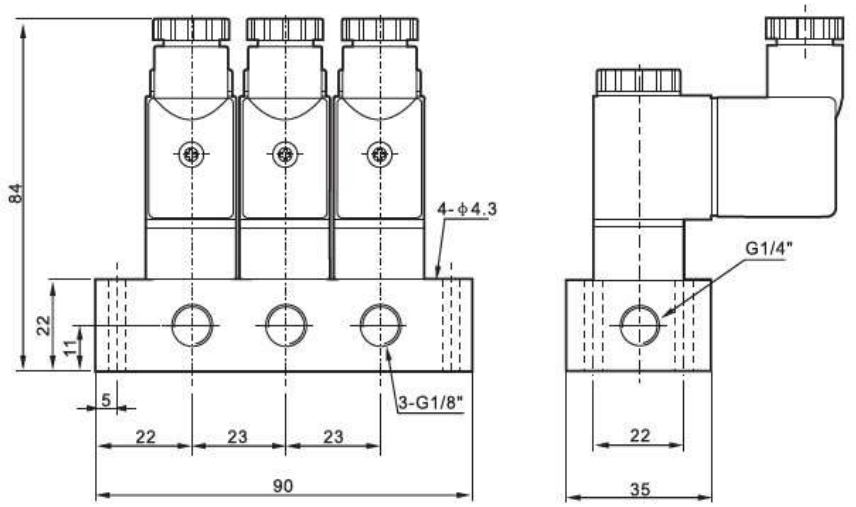

3V1-06



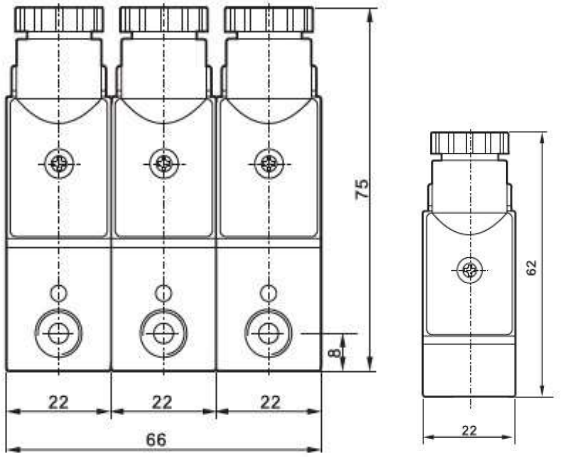




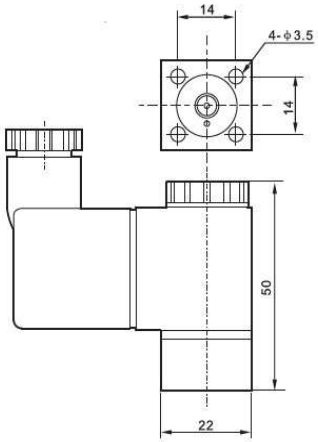

3V1-06B-3F



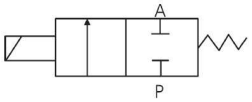

3V1-06-3F




3V1-06B



# 2V025 Series 2positions/2ways Solenoid Valve




## 1.Ordering Code :

| 2V | 025 | – | 08 | – | DC24V |
|---|---|---|---|---|---|

**Solenoid Valve Type**
2V: Two positions Two ways solenoid valve

**Body size**
025: Normal size

**Connecting port size**
06: G1/8
08: G1/4

**Voltage**

| | |
|---|---|
| DC5V | AC24V 50/60Hz |
| DC12V | AC110V 50/60Hz |
| DC24V | AC220V 50/60Hz |







## 2.Characteristics:

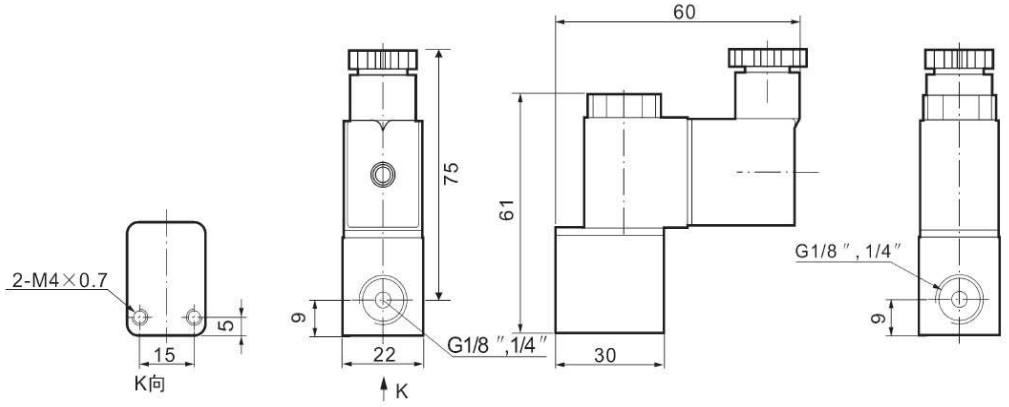
1) The protection grade for this series solenoid valve is IP65.
2) Different voltages are available for coils.
3) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
4) Lead wire type is available, please remind when you order.
5) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

## 3. Specification:

| Model | 2V025-06 | 2V025-08 |
|---|---|---|
| Applicable medium | ⩽40μ Filtered Air, Water, Oil | |
| Motion pattern | Direct drive type | |
| Working pressure | 0.15~0.8 MPa | |
| Proof Pressure | 1.2MPa | |
| Temperature range | NBR: 5℃~50℃ | |
| Port size | G1/4 | |
| IP grade | IP65 | |
| Insulation grade | F | |
| Available Voltage | DC5, DC12V,DC24V,AC24V,AC36V,AC110V,AC220V,AC380V | |
| Power consumption | AC: 6.5W, DC: 6.5W | |
| Voltage range | ±10% | |
| Material of body | Aluminum alloy or Brass with nickel plated | |
| Highest action frequency | 10 cycles/second | |
| Shortest excitation time | 0.05 s | |
| Sealing material | NBR or VITON | |

* 1 kgf/cm2 = 1 bar = 0.1 Mpa = 100KPa = 14.5psi

## 4. Overall and Dimension Sheet:



# 5VMP series Diaphragm Solenoid Valve

5VMP-06

5VMP-08

## 1. Ordering Code :

| 5V | MP | – | 06 | – | DC24V |
|---|---|---|---|---|---|

**Solenoid Valve Type**
5V: 2positions 4ways solenoid valve

**Valve type**
MP: Diaphragm valve

**Connecting port size**
06: G1/8
08: G1/4
15: G1/2

**Voltage**
DC12V
DC24V

## 2.Characteristics:

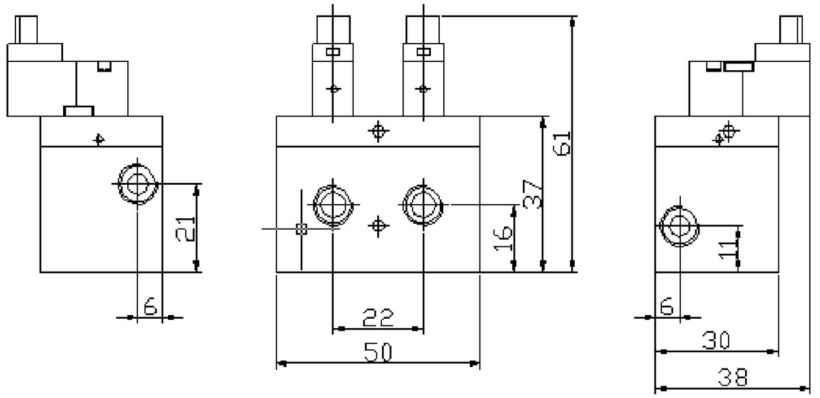
1) This 5V series diaphragm valves are with micro pilot head with longlife.
2) Sealing parts: Mitsubishi brand
3) Lubricating grease: Dowcorning 6169
4) Stem: With guide device
5) Low power consumption.
6) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
7) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

## 4.Specification:

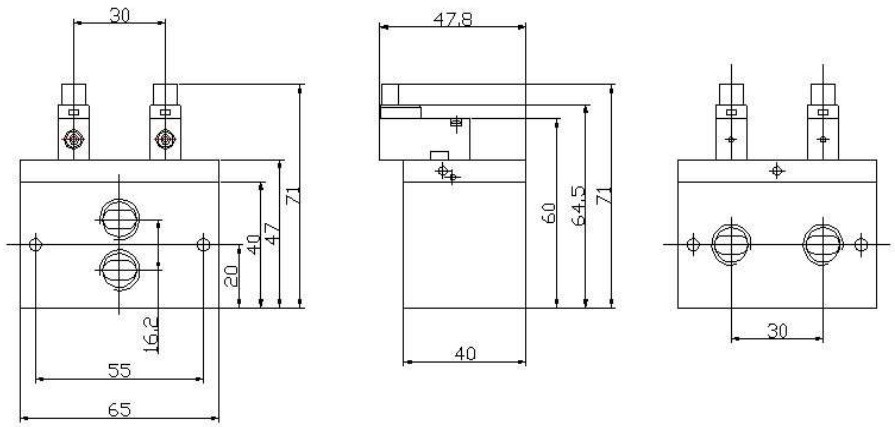
| Model | 5VMP-06 | 5VMP-08 | 5VMP-15 |
|---|---|---|---|
| Applicable medium | 5μm Filtered Air | | |
| Motion pattern | Pilot acting | | |
| Valve type | 2positions/4ways | | |
| Working pressure | 0.1~0.4 MPa | | |
| Proof Pressure | 0.5 MPa | | |
| Temperature range | NBR: -15℃~80℃ (not frozen) | | |
| Port size | G1/8 | G1/4 | G1/2 |
| Available Voltage | DC12V,DC24V | | |
| Power consumption | DC: 1.2W | | |
| Voltage range | ±15% | | |
| Material of body | Aluminum alloy | | |
| Min.excitation time | 0.015 s | | |

## 5. Overall and Dimension Sheet:

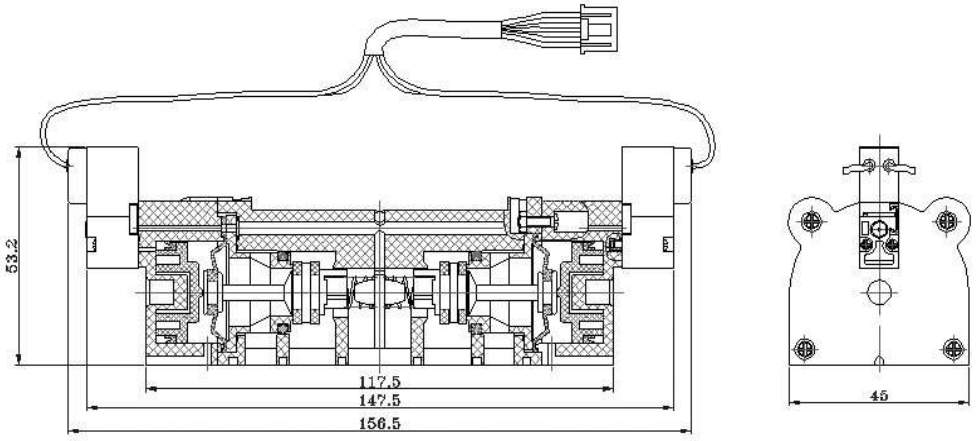
**5VMP-06**



**5VMP-08**




**5VMP-15D**






FESCOLO

## 4M Series 2positions/5ways Plate Type Solenoid Valve

### 1.Ordering Code :

| 4M | 2 | – | 10 | – | 08 | – | AC220V |
|---|---|---|---|---|---|---|---|

**Solenoid Valve Type**

4M: Two positions Five ways plate type solenoid valve

**Body size**

2: 200 sereis(G1/8,G1/4)

3: 300 series(G1/4,G3/8)

**Connecting port size**

10: Single-head (single coil) for two positions

20: Double-head (double coils) for two positions

**Connecting port size**

| | | |
|---|---|---|
| 06: G1/8 | 08: G1/4 | M5: M5x0.8 |
| 10: G3/8 | 15: G1/2 | |

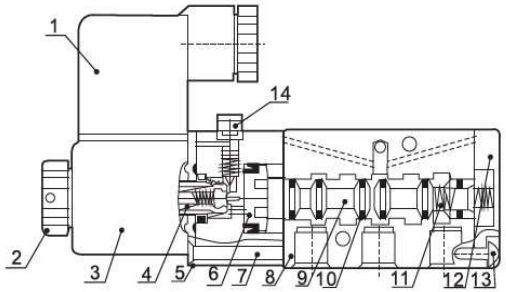
**Voltage**

| | | | |
|---|---|---|---|
| DC5V | DC12V | DC24V | AC24V 50/60Hz |
| AC110V 50/60Hz | AC220V 50/60Hz | AC380V 50/60Hz | |

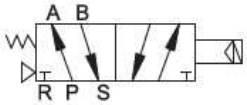
## 2.Characteristics:

1) The protection grade for this series solenoid valve is IP65.
2) Different voltages are available for coils.
3) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
4) Lead wire type is available, please remind when you order.
5) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

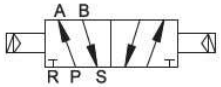
## 3.Internal Structure:

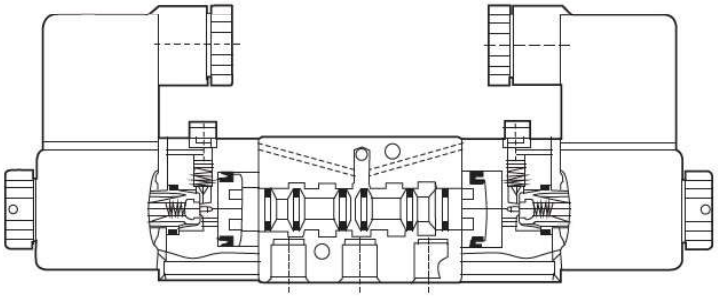



**Single-Head Type**
(4M210~4M310)




**Double-Head Type**
(4M220~4M320)



| No.: | Designation | No.: | Designation | No.: | Designation |
|---|---|---|---|---|---|
| 1. | Connector | 6. | Piston | 11. | Spring |
| 2. | Nut | 7. | Screw | 12. | Rear cover |
| 3. | Coil | 8. | Valve body | 13. | Screw |
| 4. | Pilot units | 9. | Spool | 14. | Manual pin |
| 5. | Plate | 10. | O ring | | |

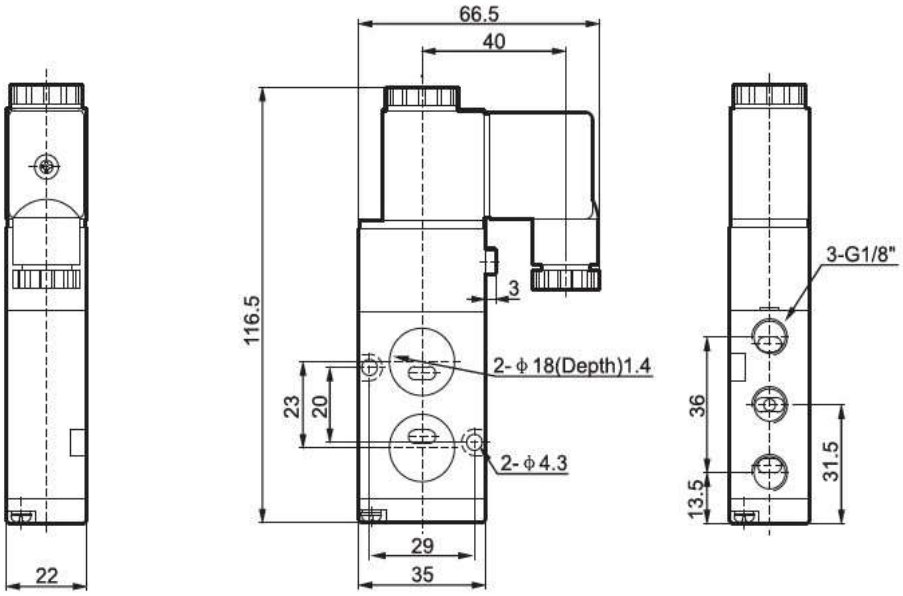
## 4.Specification:

| Model | 4M210-06 | 4M220-06 | 4M210-08 | 4M220-08 | 4M310-08 | 4M320-08 | 4M310-10 | 4M320-10 |
|---|---|---|---|---|---|---|---|---|
| Applicable medium | ≤40μ Filtered Air | | | | | | | |
| Motion pattern | Inner guide type | | | | | | | |
| Working pressure | 0.15~0.8 MPa | | | | | | | |
| Proof Pressure | 1.2MPa | | | | | | | |
| Temperature range | NBR: -10℃~60℃ | | | | | | | |
| Port size | G1/8 | | G1/4 | | G1/4 | | G3/8 | |
| Effective section area ($mm^2$) | 14 | | 16 | | 25 | | 30 | |
| Cv Value | 0.78 | | 0.89 | | 1.39 | | 1.67 | |
| Available Voltage | DC5, DC12V,DC24V,AC24V, AC110V,AC220V,AC380V | | | | | | | |
| Power consumption | AC220V:2W, AC110V:2.5W,AC24V:3.5W,DC24V:3W,DC12V:2.5W | | | | | | | |
| Voltage range | - 15%~+10% | | | | | | | |
| Material of body | Aluminum alloy | | | | | | | |
| Highest action frequency | 5 cycles/second | | | | | | | |
| Shortest excitation time | 0.05 s | | | | | | | |
| Sealing material | NBR or VITON | | | | | | | |

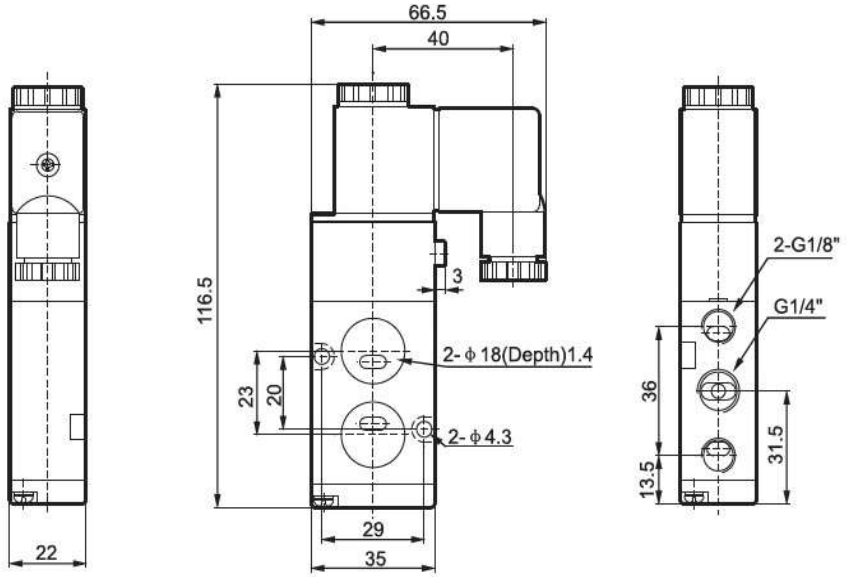
* 1 kgf/cm2 = 1 bar = 0.1 Mpa = 100KPa = 14.5psi

## 5. Overall and Dimension Sheet:

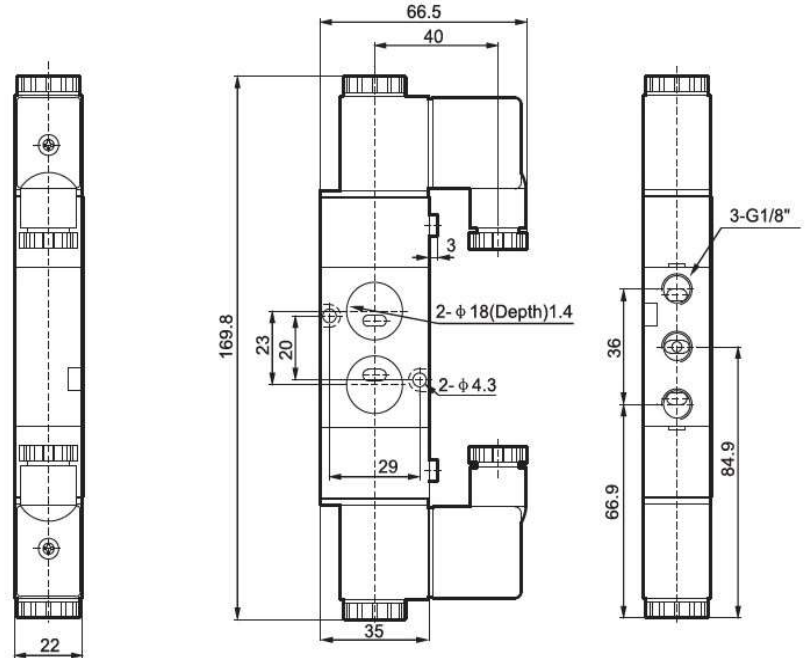
### 4M210-06



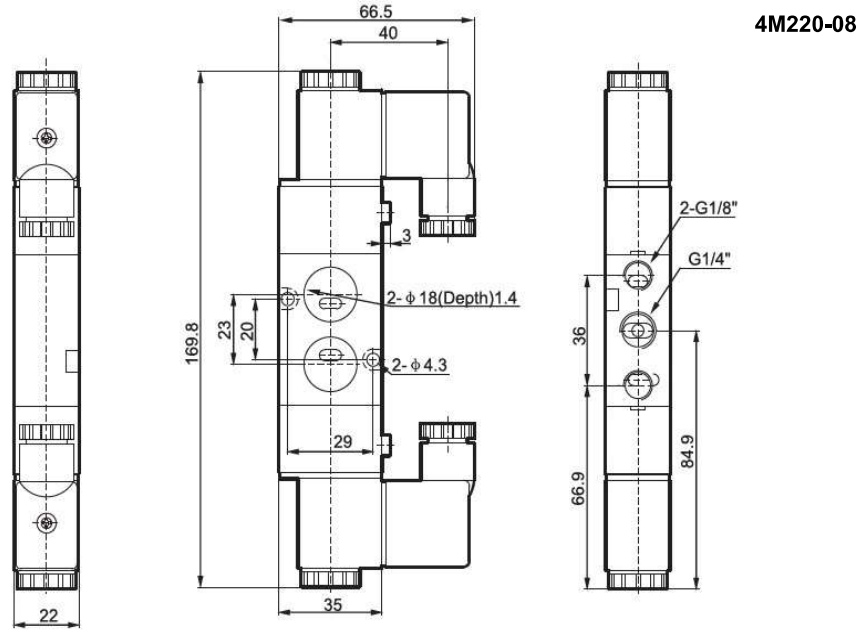

### 4M210-08



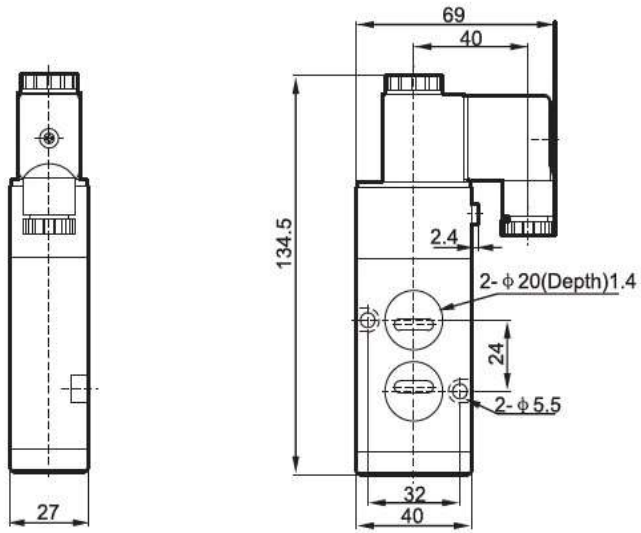

### 4M220-06



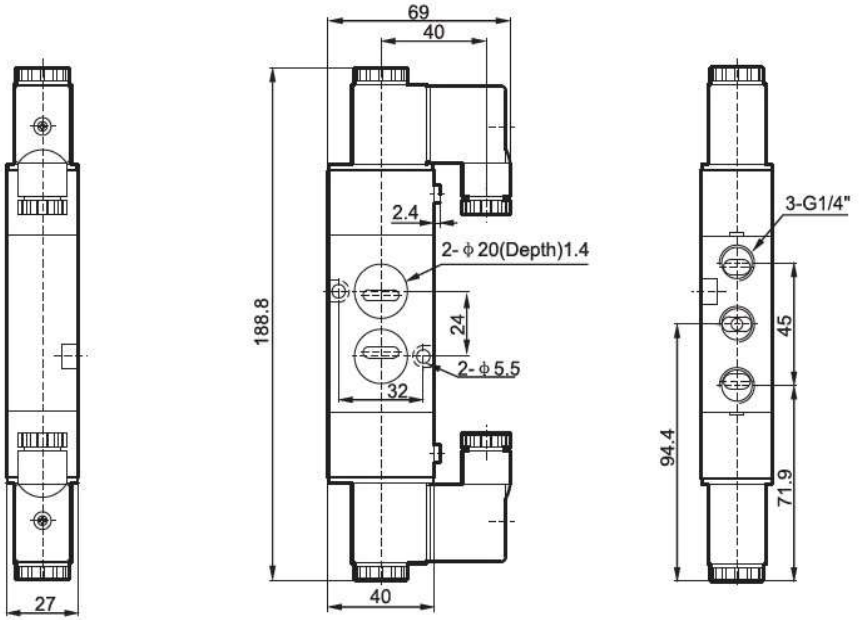

### 4M220-08



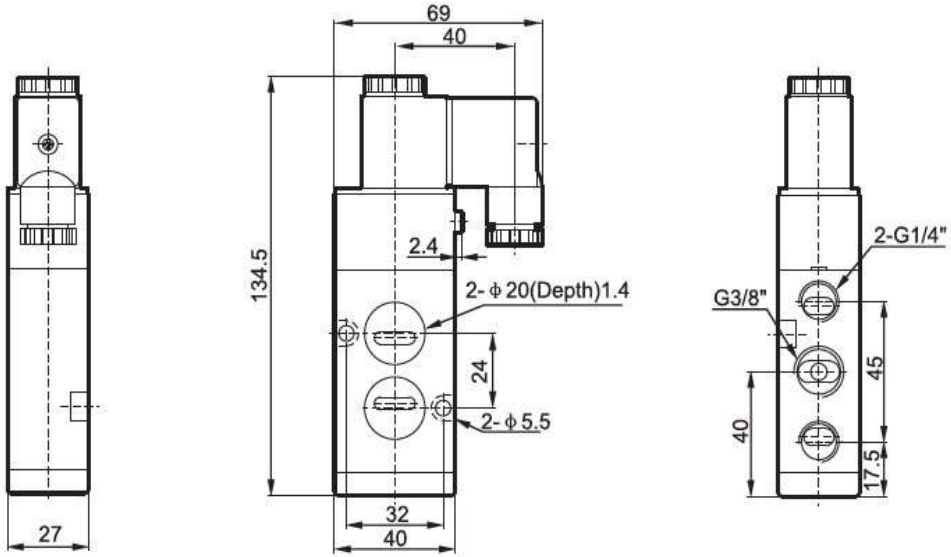
## 4M310-08



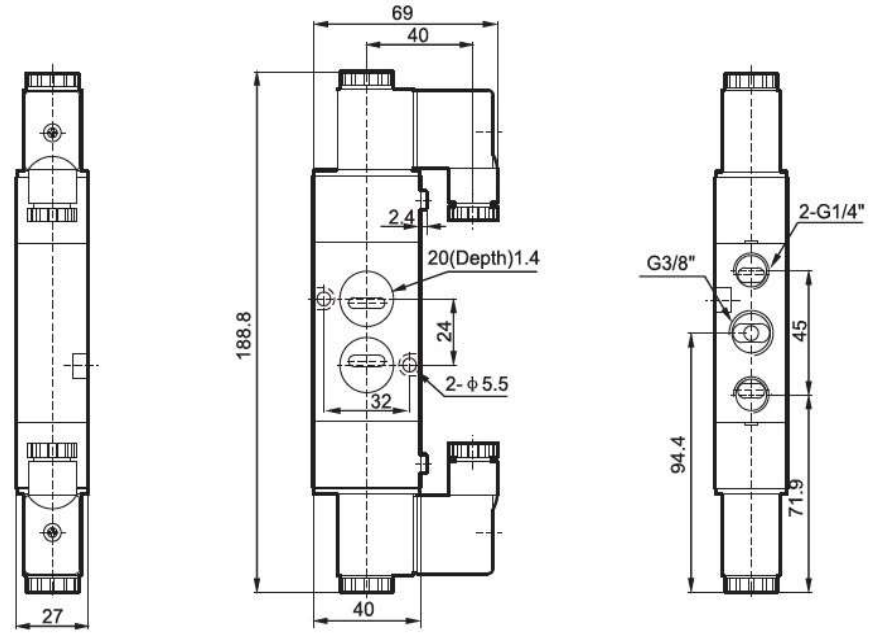

## 4M320-08




## 4M310-10




## 4M320-10



# Manifold for 4V,3V,4A,3A series valves

4V200M-4F

4V200M-6F

## 1.Ordering Code :

**4V** – **200M** – **4F**

Manifold for solenoid valve
- 4V: for 4V series solenoid valve
- 4A: for 4A series air control valve
- 3V: for 3V series solenoid valve
- 3A: for 3A series air control valve

Size of solenoid valve
- 100M: For 100series solenoid valve
- 200M: For 200series solenoid valve
- 300M: For 300series solenoid valve
- 400M: For 400series solenoid valve

Quantity of rows

| | | |
|---|---|---|
| 2F: 2rows | 5F: 2rows | 8F: 2rows |
| 3F: 2rows | 6F: 2rows | 9F: 2rows |
| 4F: 2rows | 7F: 2rows | 10F: 2rows |
| … | | |

## 2.Characteristics:

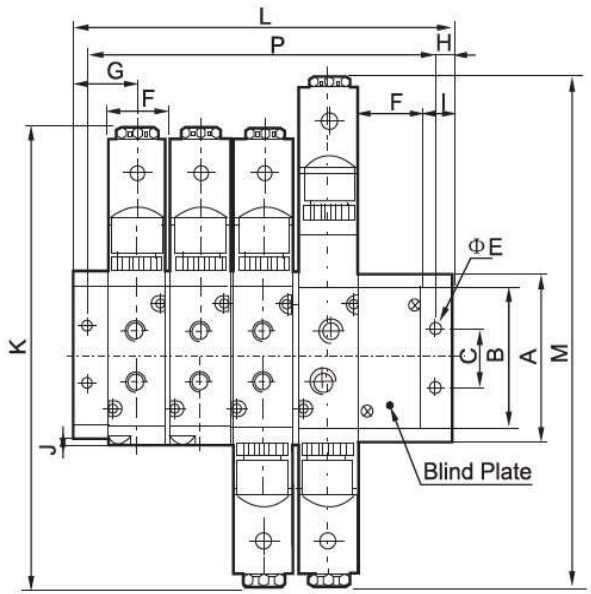
1) A manifold helps to come together with multiple solenoid valves or air valves efficiently.
2) The number of rows can be ordered by customer's need.
3) Pressure unit: 1kgf/cm$^2$=1bar=0.1MPa=100KPa=14.5psi
4) Different thread types can be offered according to customers' requirements, e.g.: PT, NPT etc.

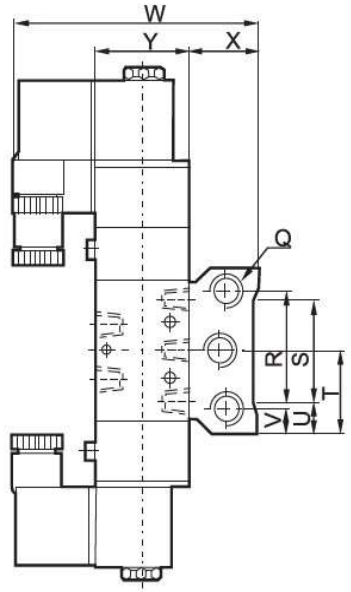




## 3. Overall and Dimension Sheet:

### 4V Series




| Model | A | B | C | E | F | G | H | I | J | K | L | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | 1F | 2F | 3F | 4F | 5F | 6F | 7F | 8F | 9F | 10F | 11F | 12F | 13F | 14F | 15F | 16F |
| 100M-□F | 58 | 43.2 | 20 | 4.5 | 18.3 | 19 | 5 | 10 | 0.8 | 81 | 38 | 57 | 76 | 95 | 114 | 133 | 152 | 171 | 190 | 209 | 228 | 247 | 266 | 285 | 304 | 323 |
| 200M-□F | 61 | 50.7 | 21 | 4.5 | 22.4 | 23 | 6 | 12 | 1.2 | 92 | 46 | 69 | 92 | 115 | 138 | 161 | 184 | 207 | 230 | 253 | 276 | 299 | 322 | 345 | 368 | 391 |
| 300M-□F | 75 | 64.8 | 26 | 4.5 | 27.3 | 27 | 6 | 13.5 | 2.5 | 111 | 54 | 82 | 110 | 138 | 166 | 194 | 22 | 250 | 278 | 306 | 334 | 362 | - | - | - | - |
| 400M-□F | 104 | 94.5 | 32 | 5.5 | 34.3 | 31.5 | 7 | 14.5 | 5 | 142 | 71 | 98 | 133 | 168 | 203 | 238 | 273 | - | - | - | - | - | - | - | - | - |

| Model | M | P | | | | | | | | | | | | | | | Q | R | S | T | U | V | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1F | 2F | 3F | 4F | 5F | 6F | 7F | 8F | 9F | 10F | 11F | 12F | 13F | 14F | 15F | 16F | | | | | | | | |
| 100M-□F | 96 | 28 | 47 | 66 | 85 | 104 | 123 | 142 | 161 | 180 | 199 | 218 | 237 | 256 | 275 | 294 | 313 | G1/4" | 40 | 30 | 29 | 14 | 9 | 25 | 27 |
| 200M-□F | 111 | 34 | 57 | 80 | 103 | 126 | 149 | 172 | 195 | 218 | 241 | 264 | 287 | 310 | 333 | 256 | 379 | G1/4" | 43 | 32 | 30.5 | 14.5 | 9 | 26 | 35 |
| 300M-□F | 130 | 42 | 70 | 98 | 126 | 154 | 182 | 210 | 238 | 266 | 294 | 322 | 350 | - | - | - | - | G3/8" | 53 | 48 | 37.5 | 13.5 | 11 | 30 | 40 |
| 400M-□F | 163 | 49 | 84 | 119 | 154 | 189 | 224 | 259 | - | - | - | - | - | - | - | - | - | G1/2" | 68 | 67 | 52 | 18.5 | 18 | 38 | 50 |

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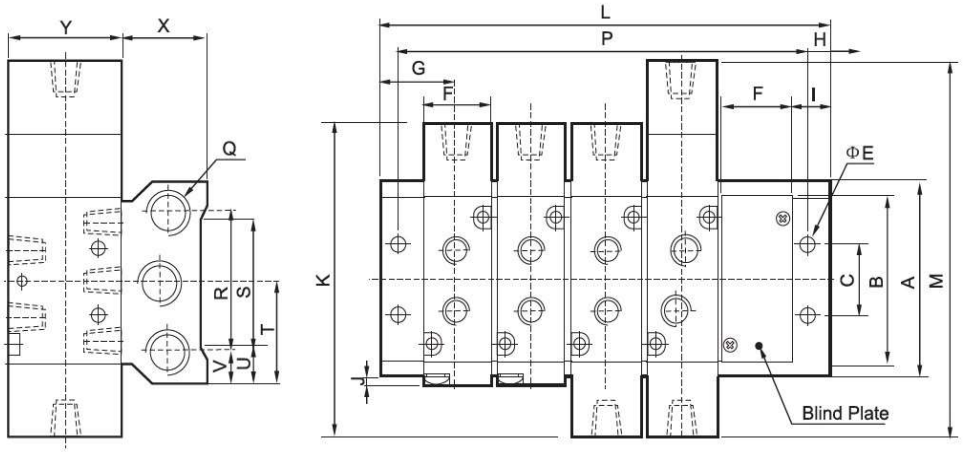
## 4A Series




| Model | A | B | C | E | F | G | H | I | J | K | L | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | 1F | 2F | 3F | 4F | 5F | 6F | 7F | 8F | 9F | 10F | 11F | 12F | 13F | 14F | 15F | 16F |
| 100M-□F | 58 | 43.2 | 20 | 4.5 | 18.3 | 19 | 5 | 10 | 0.8 | 139.4 | 38 | 57 | 76 | 95 | 114 | 133 | 152 | 171 | 190 | 209 | 228 | 247 | 266 | 285 | 304 | 323 |
| 200M-□F | 61 | 50.7 | 21 | 4.5 | 22.4 | 23 | 6 | 12 | 1.2 | 170 | 46 | 69 | 92 | 115 | 138 | 161 | 184 | 207 | 230 | 253 | 276 | 299 | 322 | 345 | 368 | 391 |
| 300M-□F | 75 | 64.8 | 26 | 4.5 | 27.3 | 27 | 6 | 13.5 | 2.5 | 188.8 | 54 | 82 | 110 | 138 | 166 | 194 | 22 | 250 | 278 | 306 | 334 | 362 | - | - | - | - |
| 400M-□F | 104 | 94.5 | 32 | 5.5 | 34.3 | 31.5 | 7 | 14.5 | 5 | 221.8 | 63 | 98 | 133 | 168 | 203 | 238 | 273 | - | - | - | - | - | - | - | - | - |

| Model | M | P | | | | | | | | | | | | | | | | Q | R | S | T | U | V | W | X | Y |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | 1F | 2F | 3F | 4F | 5F | 6F | 7F | 8F | 9F | 10F | 11F | 12F | 13F | 14F | 15F | 16F | | | | | | | | | |
| 100M-□F | 154.5 | 28 | 47 | 66 | 85 | 104 | 123 | 142 | 161 | 180 | 199 | 218 | 237 | 256 | 275 | 294 | 313 | G1/4" | 40 | 30 | 29 | 14 | 9 | 79 | 25 | 27 |
| 200M-□F | 189 | 34 | 57 | 80 | 103 | 126 | 149 | 172 | 195 | 218 | 241 | 264 | 287 | 310 | 333 | 256 | 379 | G1/4" | 43 | 32 | 30.5 | 14.5 | 9 | 93 | 26 | 35 |
| 300M-□F | 208 | 42 | 70 | 98 | 126 | 154 | 182 | 210 | 238 | 266 | 294 | 322 | 350 | - | - | - | - | G3/8" | 53 | 48 | 37.5 | 13.5 | 11 | 99.5 | 30 | 40 |
| 400M-□F | 243 | 49 | 84 | 119 | 154 | 189 | 224 | 259 | - | - | - | - | - | - | - | - | - | G1/2" | 68 | 67 | 52 | 18.5 | 18 | 112.5 | 38 | 50 |