

# Solenoid valve(3/2 way)

## 3V1 Series



### Symbol



### Product feature

1. Direct acting type and normally closed mode, flexible in direction change.
2. No need to add oil for lubrication.
3. Several valves can be installed integrately to save installation space.
4. Affiliated manual devices are equipped to facilitate installation and debugging.
5. Several standard voltage grades are optional.

### Specification

| Model              | 3V1-M5                                      | 3V1-06 |
|--------------------|---------------------------------------------|--------|
| Fluid              | Air(to be filtered by 40 μm filter element) |        |
| Acting             | Direct acting                               |        |
| Port size [Note1]  | M5                                          | 1/8"   |
| Valve type         | 3 port 2 position                           |        |
| Lubrication        | Not required                                |        |
| Operating pressure | 0~0.8MPa(0~114psi)                          |        |
| Proof pressure     | 1.2MPa(175psi)                              |        |
| Temperature        | -20~70°C                                    |        |
| Orifice size       | Φ1.2mm                                      |        |
| Material of body   | Aluminum alloy                              |        |

[Note1] G thread is available.

### Coil specification

| Item                       | Specification       |        |       |       |       |
|----------------------------|---------------------|--------|-------|-------|-------|
| Standard voltage           | AC220V              | AC110V | AC24V | DC24V | DC12V |
| Scope of voltage           | AC: ± 15% DC: ± 10% |        |       |       |       |
| Power consumption          | 4.5VA               | 4.5VA  | 5.0VA | 3.0W  | 3.0W  |
| Protection                 | IP65(DIN40050)      |        |       |       |       |
| Temperature classification | B Class             |        |       |       |       |
| Electrical entry           | Terminal, Grommet   |        |       |       |       |
| Activating time            | 0.05 sec and below  |        |       |       |       |
| Max. frequency [Note 1]    | 10 cycle/sec        |        |       |       |       |

[Note 1] The maximum actuation frequency is in the no-load state.

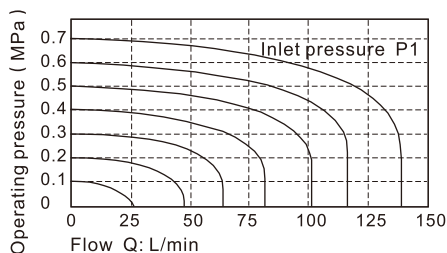
### Ordering code

**3V 1 06 A □ G**

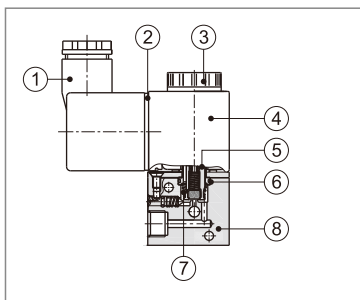
① ② ③ ④ ⑤ ⑥

| ①Model                          | ②Code       | ③Port size | ④Standard voltage                                          | ⑤Electrical entry             | ⑥Thread type |
|---------------------------------|-------------|------------|------------------------------------------------------------|-------------------------------|--------------|
| 3V: Solenoid valve<br>(3/2 way) | 1: 1 Series | M5: M5     | A: AC220V<br>B: DC24V<br>C: AC110V<br>E: AC24V<br>F: DC12V | Blank: Terminal<br>I: Grommet | No this code |
|                                 |             | 06: 1/8"   |                                                            |                               | G: G Thread  |

### Flow chart



### Inner structure



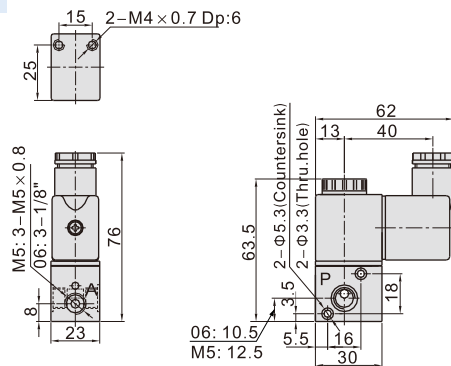
| No. | Item      | No. | Item          |
|-----|-----------|-----|---------------|
| 1   | Connector | 5   | Armature      |
| 2   | Gasket    | 6   | O-ring        |
| 3   | Coil nut  | 7   | Return spring |
| 4   | Coil      | 8   | Body          |

# Solenoid valve(3/2 way)

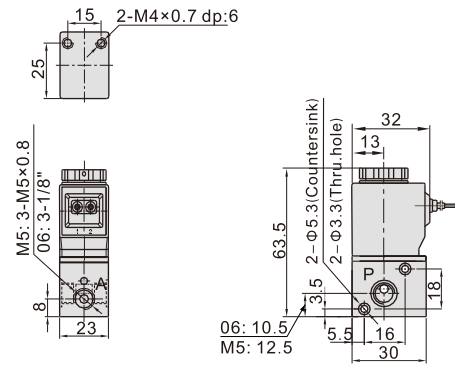
## 3V1 Series

### Dimensions

#### Terminal

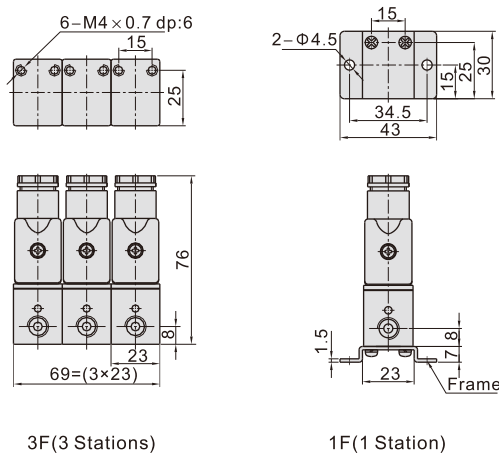


#### Grommet

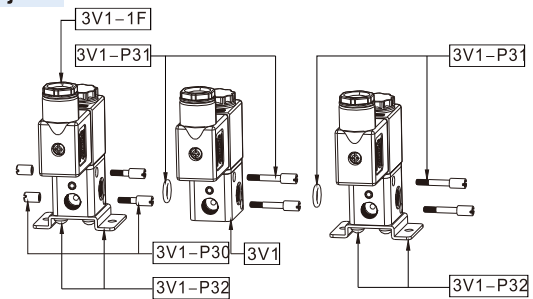


### Series connection

#### Dimensions



#### How to joint



#### Product structure

| Connection Amount\Q.TY | 3V1   | 3V1-P30 | 3V1-P31 | 3V1-P32 |
|------------------------|-------|---------|---------|---------|
| 3V1-□-□-1F             | 1     | 0       | 0       | 1       |
| 3V1-□-□-2F             | 2     | 1       | 1       | 1       |
| .....                  | ..... | .....   | .....   | .....   |
| 3V1-□-□- nF            | n     | 1       | n-1     | 2       |

Note: "n" is the number of junction valve, and n≥3.

### Ordering code for series

3V 1 06 A □ 3F G

① ② ③ ④ ⑤ ⑥ ⑦

| ①Model                          | ②Code       | ③Port size | ④Standard voltage                                          | ⑤Electrical entry             | ⑥Number of stations                                                            | ⑦Thread type  |
|---------------------------------|-------------|------------|------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------|---------------|
| 3V: Solenoid valve<br>(3/2 way) | 1: 1 Series | M5: M5     | A: AC220V<br>B: DC24V<br>C: AC110V<br>E: AC24V<br>F: DC12V | Blank: Terminal<br>I: Grommet | 1F: 1 Station<br>2F: 2 Stations<br>3F: 3 Stations<br>.....<br>20F: 20 Stations | Not this code |
|                                 |             | 06: 1/8"   |                                                            |                               |                                                                                | G: G Thread   |

The above codes have included the series accessories, so it is unnecessary to order the accessories specially. But if you like, you could order as follows.

| Code of accessories | Accessory name          | Part code   | Part name              | Quantity |
|---------------------|-------------------------|-------------|------------------------|----------|
| 3V1-P30             | Coupling screw assembly | F-3V1002B   | Coupling screw(S)      | 2        |
|                     |                         | F-3V1003B   | Coupling screw(M)      | 2        |
| 3V1-P31             | Coupling screw assembly | GOR20008N75 | O-Ring                 | 1        |
|                     |                         | F-3V1004B   | Coupling screw(L)      | 2        |
| 3V1-P32             | Bracket assembly        | F-3V1001B   | Fixed mounting         | 1        |
|                     |                         | GSDA04008ZA | Cross round head screw | 2        |