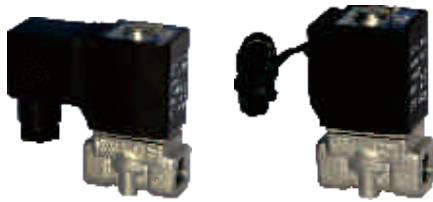


# Fluid control valve(2/2 way)

## 2L Series (Direct-acting and normally closed)



### Symbol



### Product feature

1. Direct acting and normally closed type 2/2 way solenoid valve. Its high sensibility allows it to change direction quickly;
2. It has wide pressure range, including standard high pressure (H) to choose from;
3. It is compact, small size and light weight. It is easy to install and dismantle.
4. The valve body is made of SUS304 . Its coil has a Heat resistance classification of Class H. The standard seal material is PTFE(Teflon) which is suitable for a variety of working medium such as water with high temperature and vapour.
5. The protection class of the coil is IP65 and there is a choice for grommet or terminal electrical entry .

### Specification

| Model\Item | Port size<br>[Note1] | Orifice size<br>( Φ mm) | Cv   | Valid area or<br>section (mm <sup>2</sup> ) | Weight<br>[Note2](g) | Max.operating pressure differentia |     | Proof pressure |     |
|------------|----------------------|-------------------------|------|---------------------------------------------|----------------------|------------------------------------|-----|----------------|-----|
|            |                      |                         |      |                                             |                      | MPa                                | psi | MPa            | psi |
| 2LH030     | -06 1/8"             | 2.0                     | 0.18 | 3.0                                         | 300                  | 2.0                                | 300 | 3.0            | 450 |
|            | -08 1/4"             |                         |      |                                             | 290                  |                                    |     |                |     |
| 2LO30      | -06 1/8"             | 3.0                     | 0.33 | 6.0                                         | 300                  | 1.0                                | 150 |                |     |
|            | -08 1/4"             |                         |      |                                             | 290                  |                                    |     |                |     |
| 2LH050     | -10 3/8"             | 4.0                     | 0.55 | 10.0                                        | 600                  | 2.0                                | 300 |                |     |
|            | -15 1/2"             |                         |      |                                             | 590                  |                                    |     |                |     |
| 2LO50      | -10 3/8"             | 5.0                     | 0.83 | 15.0                                        | 600                  | 1.0                                | 150 |                |     |
|            | -15 1/2"             |                         |      |                                             | 590                  |                                    |     |                |     |

[Note1] PT thread, G thread and NPT thread are available.

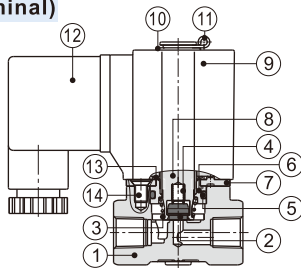
[Note2] The weight in the table is the terminal valve's weight, 2LO30 series grommet valve's weight is 10g less than terminal's. 2LO50series grommet valve's weight is 20g less than terminal's.

### Specification of coil

| Valve type | Coil type        | Power type | Frequency (Hz) | Voltage range | Electrical entry | Power Consumption (VA/W) | Insulation | Temp. rise(°C) |
|------------|------------------|------------|----------------|---------------|------------------|--------------------------|------------|----------------|
| 2L□030     | CDA116<br>CLA116 | AC         | 50             | ± 15 %        | Terminal (CDA)   | 10.0VA                   | Class H    | 35             |
|            |                  |            | 60             |               |                  | 8.0VA                    |            | 30             |
|            |                  | DC         | —              | ± 10 %        |                  | 6.5W                     |            | 30             |
|            |                  |            | —              |               |                  | 25.0VA                   |            | 60             |
| 2L□050     | CDA170<br>CLA170 | AC         | 50             | ± 15 %        | Grommet (CLA)    | 22.0VA                   |            | 55             |
|            |                  |            | 60             |               |                  | 10.5W                    |            | 40             |
|            |                  | DC         | —              | ± 10 %        |                  | —                        |            | —              |
|            |                  |            | —              |               |                  | —                        |            | —              |

### Inner structure

#### 2L030 (Terminal)



| No. | Item          | No. | Item          | No. | Item        |
|-----|---------------|-----|---------------|-----|-------------|
| 1   | Body          | 6   | Fixed cap     | 11  | E Clip      |
| 2   | Airtight ring | 7   | Fixed plate   | 12  | Connector   |
| 3   | Spring        | 8   | Movable core  | 13  | Bead flange |
| 4   | Spring        | 9   | Coil assembly | 14  | Screw       |
| 5   | O-ring        | 10  | Washer        |     |             |

### Valve's specification

| Acting                               |  | Direct acting                      |             |       |         |
|--------------------------------------|--|------------------------------------|-------------|-------|---------|
| Initial state                        |  | Normally closed                    |             |       |         |
| Adaptable fluid                      |  | Steam, High temperature Water, Oil |             |       |         |
| Viscosity limit                      |  | Under 20CST                        |             |       |         |
| Ambient and fluid temperature ( °C ) |  |                                    | Oil         | Water | Steam   |
|                                      |  | Max.                               | 150         | 150   | 183     |
|                                      |  | Min.                               | -10 [Note1] | 1     | —       |
|                                      |  |                                    |             |       | Ambient |
|                                      |  |                                    |             |       | 100     |
|                                      |  |                                    |             |       | -20     |

[Note1] 50CST or less.

### Ordering code

#### Ordering code of valves

2L H 030 08 A □ □

① ② ③ ④ ⑤ ⑥ ⑦

| ① Model                                       | ② Pressure condition                | ③ Size series   | ④ Port size          | ⑤ Voltage                                                  | ⑥ Electrical entry            | ⑦ Thread type               |
|-----------------------------------------------|-------------------------------------|-----------------|----------------------|------------------------------------------------------------|-------------------------------|-----------------------------|
| 2L: 2/2 way direct-acting and normally closed | H: High pressure<br>Blank: Standard | 030: 030 Series | 06: 1/8"<br>08: 1/4" | A: AC220V<br>B: DC24V<br>C: AC110V<br>E: AC24V<br>F: DC12V | Blank: Terminal<br>I: Grommet | Blank: PT<br>G: G<br>T: NPT |
|                                               |                                     | 050: 050 Series | 10: 3/8"<br>15: 1/2" |                                                            |                               |                             |

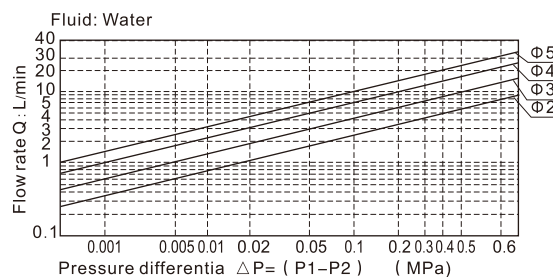
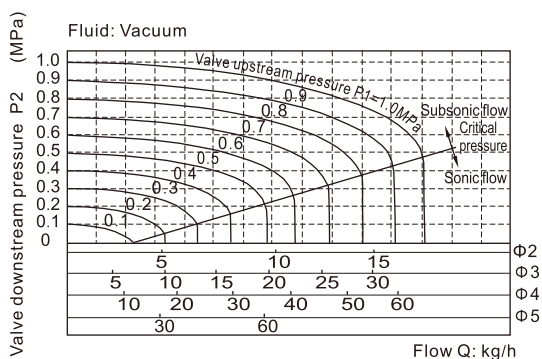
#### Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P148 for details of ordering code.

# Fluid control valve(2/2 way)

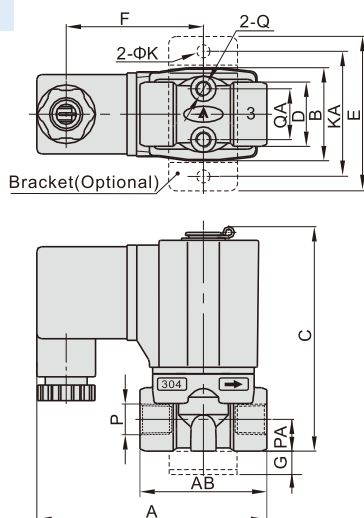
## 2L Series (Direct-acting and normally closed )

### Flow chart

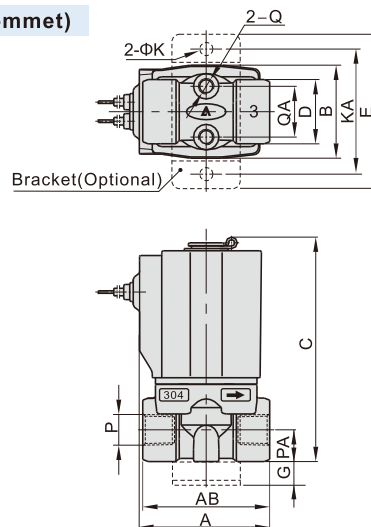


### Dimensions

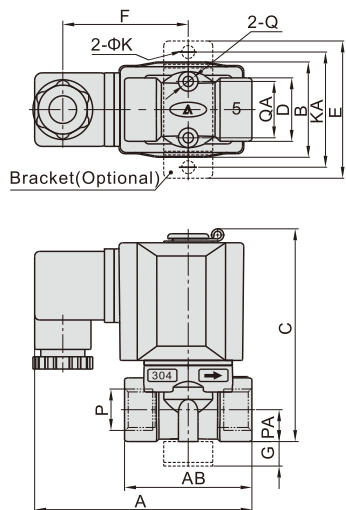
#### 2L□030(Terminal)



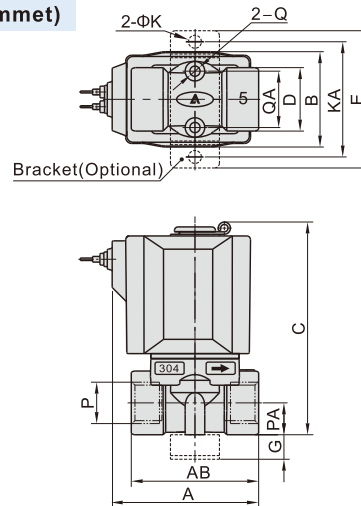
#### 2L□030(Grommet)



#### 2L□050(Terminal)



#### 2L□050(Grommet)



| Model\Item | A    | AB | B    | C  | D  | E  | F    | G  | K   | KA | P    | PA | Q  | QA |
|------------|------|----|------|----|----|----|------|----|-----|----|------|----|----|----|
| 2L□030-06  | 72.5 | 40 | 29.5 | 71 | 20 | 49 | 43.5 | 10 | 5.3 | 40 | 1/8" | 10 | M5 | 16 |
| 2L□030-08  | 72.5 | 40 | 29.5 | 71 | 20 | 49 | 43.5 | 10 | 5.3 | 40 | 1/4" | 10 | M5 | 16 |
| 2L□050-10  | 89.5 | 52 | 39   | 87 | 26 | 56 | 51   | 10 | 5.3 | 48 | 3/8" | 13 | M5 | 23 |
| 2L□050-15  | 89.5 | 52 | 39   | 87 | 26 | 56 | 51   | 10 | 5.3 | 48 | 1/2" | 13 | M5 | 23 |

| Model\Item | A  | AB | B    | C  | D  | E  | G  | K   | KA | P    | PA | Q  | QA |
|------------|----|----|------|----|----|----|----|-----|----|------|----|----|----|
| 2L□030-06  | 41 | 40 | 29.5 | 71 | 20 | 49 | 10 | 5.3 | 40 | 1/8" | 10 | M5 | 16 |
| 2L□030-08  | 41 | 40 | 29.5 | 71 | 20 | 49 | 10 | 5.3 | 40 | 1/4" | 10 | M5 | 16 |
| 2L□050-10  | 60 | 52 | 39   | 87 | 26 | 56 | 10 | 5.3 | 48 | 3/8" | 13 | M5 | 23 |
| 2L□050-15  | 60 | 52 | 39   | 87 | 26 | 56 | 10 | 5.3 | 48 | 1/2" | 13 | M5 | 23 |