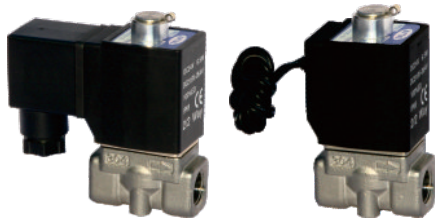


# Fluid control valve(2/2 way)

## 2KS Series (Direct-acting and normally opened)



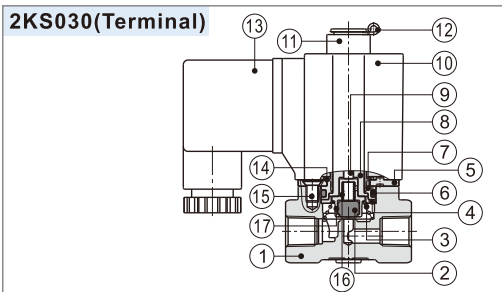
### Symbol



### Product feature

1. Direct acting and normally opened type 2/2 way solenoid valve. Its high sensibility allows it to change direction quickly;
2. It has wide pressure range, including extra high pressure (X), high pressure (H), standard and large volume(L) 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 B. The standard seal material is FPM-F. Please contact us if other material are required.
5. The protection class of the coil is IP65 and there is a choice for grommet or terminal electrical entry.

### Inner structure



| No. | Item          | No. | Item          |
|-----|---------------|-----|---------------|
| 1   | Body          | 10  | Coil assembly |
| 2   | Airtight ring | 11  | Position ring |
| 3   | Spring        | 12  | E Clip        |
| 4   | Bead flange   | 13  | Connector     |
| 5   | Fixed plate   | 14  | Washer        |
| 6   | O-ring        | 15  | Screw         |
| 7   | Fixed cap     | 16  | Spring        |
| 8   | Electromagnet | 17  | Airtight bush |
| 9   | Man drill     |     |               |

### Specification

| Model\Item | Port size<br>[Note1] | Orifice size<br>(Φmm) | Cv   | Valid area or<br>section (mm <sup>2</sup> ) | Weight<br>[Note2](g) | Max. operating pressure differential |     | Proof pressure |     |
|------------|----------------------|-----------------------|------|---|----------------------|--------------------------------------|-----|----------------|-----|
|            |                      |                       |      |   |                      | MPa                                  | psi | MPa            | psi |
| 2KSX030    | -06 1/8"             | 1.5                   | 0.10 | 1.8   | 305                  | 2.0                                  | 300 | 3.0            | 450 |
|            | -08 1/4"             |                       |      |   | 295                  |                                      |     |                |     |
| 2KSH030    | -06 1/8"             | 2.0                   | 0.18 | 3.0   | 305                  | 1.5                                  | 220 |                |     |
|            | -08 1/4"             |                       |      |   | 295                  |                                      |     |                |     |
| 2KS030     | -06 1/8"             | 3.0                   | 0.33 | 6.0   | 305                  | 0.7                                  | 100 |                |     |
|            | -08 1/4"             |                       |      |   | 295                  |                                      |     |                |     |
| 2KSL030    | -06 1/8"             | 4.0                   | 0.55 | 10.0  | 305                  | 0.4                                  | 60  |                |     |
|            | -08 1/4"             |                       |      |   | 295                  |                                      |     |                |     |
| 2KSX050    | -10 3/8"             | 3.0                   | 0.34 | 6.1   | 610                  | 2.0                                  | 300 |                |     |
|            | -15 1/2"             |                       |      |   | 600                  |                                      |     |                |     |
| 2KSH050    | -10 3/8"             | 4.0                   | 0.55 | 10.0  | 610                  | 1.5                                  | 220 |                |     |
|            | -15 1/2"             |                       |      |   | 600                  |                                      |     |                |     |
| 2KS050     | -10 3/8"             | 5.0                   | 0.83 | 15.0  | 610                  | 0.7                                  | 100 |                |     |
|            | -15 1/2"             |                       |      |   | 600                  |                                      |     |                |     |
| 2KSL050    | -10 3/8"             | 7.0                   | 1.40 | 25.0  | 610                  | 0.4                                  | 60  |                |     |
|            | -15 1/2"             |                       |      |   | 600                  |                                      |     |                |     |

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2KS030 series grommet valve's weight is 10g less than terminal's. 2KS050series 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) |         |    |
|------------|------------------|------------|----------------|---------------|-------------------|--------------------------|------------|----------------|---------|----|
| 2KS□030    | CDA116<br>CLA116 | AC         | 50             | ± 15%         | Terminal<br>(CDA) | 15.0VA                   | Class B    | 50             |         |    |
|            |                  |            | 60             |               |                   | 11.0VA                   |            | 40             |         |    |
| 2KS□050    | CDA170<br>CLA170 | AC         | 50             | ± 15%         |                   | Grommet<br>(CLA)         |            | 6.5W           | Class B | 30 |
|            |                  |            | 60             |               |                   |                          |            | 35.0VA         |         | 65 |
|            |                  | DC         | -              | ± 10%         |                   |                          | 30.0VA     |                |         | 60 |
|            |                  |            |                |               |                   |                          | 10.5W      |                |         | 40 |

### Valve's specification

| Acting                               |      | Direct acting   |             |             |         |
|--------------------------------------|------|-----------------|-------------|-------------|---------|
| Initial state                        |      | Normally opened |             |             |         |
| Adaptable fluid                      |      | Air, Water, Oil |             |             |         |
| Viscosity limit                      |      | Under 20CST     |             |             |         |
| Ambient and fluid temperature ( °C ) |      | Water           | Air         | Oil         | Ambient |
|                                      | Max. | 80              | 90          | 80          | 70      |
|                                      | Min. | 1               | -20 [Note1] | -10 [Note2] | -20     |

[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

### Ordering code

#### Ordering code of valves

2KS H 030 08 A □ G



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

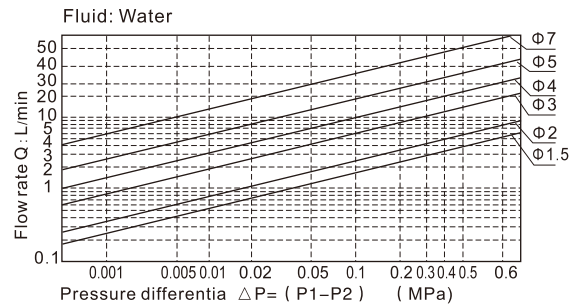
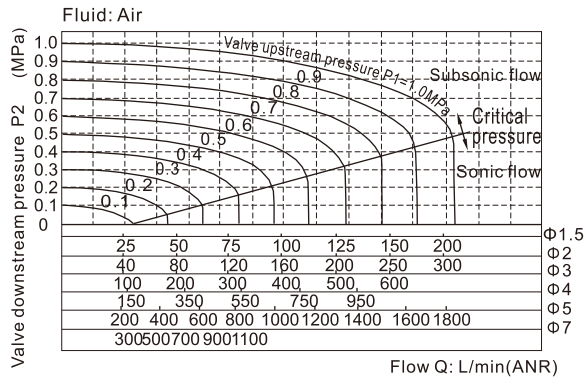
#### Ordering code of accessories

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)

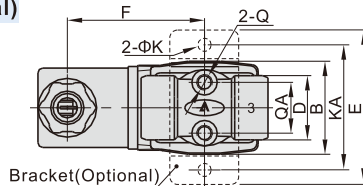
## 2KS Series (Direct-acting and normally opened)

### Flow chart

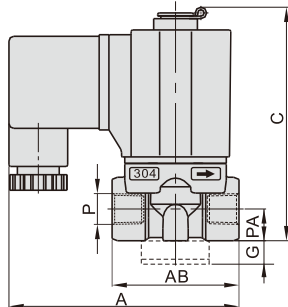


### Dimensions

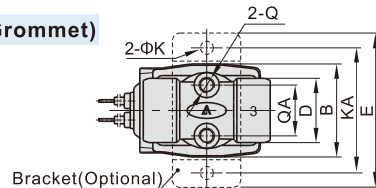
#### 2KS□030 (Terminal)



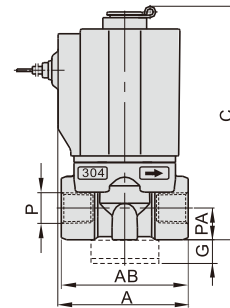
Bracket(Optional)



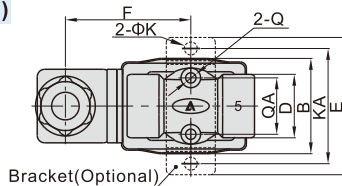
#### 2KS□030(Grommet)



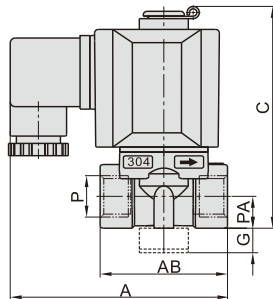
Bracket(Optional)



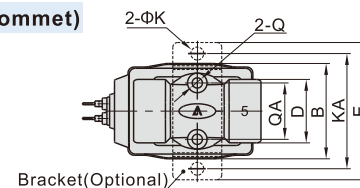
#### 2KS□050 (Terminal)



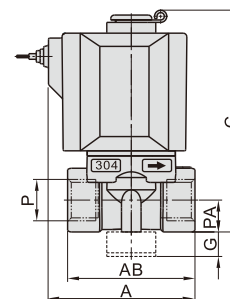
Bracket(Optional)



#### 2KS□050(Grommet)



Bracket(Optional)



| Model/Item | A    | AB | B    | C  | D  | E  | F    | G  | K   | KA | P    | PA | Q  | QA |
|------------|------|----|------|----|----|----|------|----|-----|----|------|----|----|----|
| 2KS□030-06 | 72.5 | 40 | 29.5 | 76 | 20 | 49 | 43.5 | 10 | 5.3 | 40 | 1/8" | 10 | M5 | 16 |
| 2KS□030-08 | 72.5 | 40 | 29.5 | 76 | 20 | 49 | 43.5 | 10 | 5.3 | 40 | 1/4" | 10 | M5 | 16 |
| 2KS□050-10 | 89.5 | 52 | 39   | 92 | 26 | 56 | 51   | 10 | 5.3 | 48 | 3/8" | 13 | M5 | 23 |
| 2KS□050-15 | 89.5 | 52 | 39   | 92 | 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 |
|------------|----|----|------|----|----|----|----|-----|----|------|----|----|----|
| 2KS□030-06 | 41 | 40 | 29.5 | 76 | 20 | 49 | 10 | 5.3 | 40 | 1/8" | 10 | M5 | 16 |
| 2KS□030-08 | 41 | 40 | 29.5 | 76 | 20 | 49 | 10 | 5.3 | 40 | 1/4" | 10 | M5 | 16 |
| 2KS□050-10 | 60 | 52 | 39   | 92 | 26 | 56 | 10 | 5.3 | 48 | 3/8" | 13 | M5 | 23 |
| 2KS□050-15 | 60 | 52 | 39   | 92 | 26 | 56 | 10 | 5.3 | 48 | 1/2" | 13 | M5 | 23 |