

Fluid control valve(2/2way)

2WA Series (Direct-acting and normally closed)



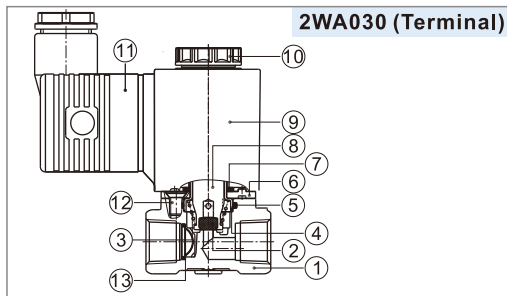
Symbol



Product feature

1. Direct acting and normally closed type 2/2 way fluid 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 , large volume(L) and extra large volume (T);
3. It is compact, small size and light weight. Easy to install and dismantle.
4. The valve body is made of brass .Its coil has a Heat resistance classification of Class F. The standard seal material is FPM-F. Please contact us if other seal 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 | 8 | Movable core |
| 2 | Airtight ring | 9 | Coil assembly |
| 3 | Spring | 10 | Coil nut |
| 4 | Steel bushing | 11 | Connector |
| 5 | O-ring | 12 | Screw |
| 6 | Fixed plate | 13 | Filter [Note] |
| 7 | O-ring | | |

[Note] Extra large volume type has no filter element.

Ordering code

Ordering code of valves

2WA L 030 08 A □ □



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

[Note] The wire length is 0.5m.

Ordering code of accessories

F-2WA030 LB



| ① Accessories code | ② Valve type | ③ Accessories type |
|-------------------------|--|--------------------|
| F: Mounting accessories | 2WA030: 030 Series valve 2WA050: 050 Series valve | LB: LB Type |

Specification

| Model\Item | Port size [Note1] | Orifice size (Φmm) | Cv | Valid area or section (mm ²) | Weight [Note2](g) | Max.operating pressure differentia | | Proof pressure | | |
|------------|----------------------|-----------------------|------|---|----------------------|------------------------------------|-----|----------------|-----|-----|
| | | | | | | MPa | psi | MPa | psi | |
| 2WAX030 | -06 | 1/8" | 1.5 | 0.10 | 1.8 | 245 | 3.0 | 450 | 5.0 | 750 |
| | -08 | 1/4" | | | | 235 | | | | |
| 2WAH030 | -06 | 1/8" | 2.0 | 0.18 | 3.0 | 245 | 2.0 | 300 | | |
| | -08 | 1/4" | | | | 235 | | | | |
| 2WA030 | -06 | 1/8" | 3.0 | 0.33 | 6.0 | 245 | 1.0 | 150 | | |
| | -08 | 1/4" | | | | 235 | | | | |
| 2WAL030 | -06 | 1/8" | 4.0 | 0.55 | 10.0 | 245 | 0.5 | 75 | | |
| | -08 | 1/4" | | | | 235 | | | | |
| 2WAT030 | -06 | 1/8" | 6.0 | 1.10 | 12.0 | 245 | 0.1 | 15 | | |
| | -08 | 1/4" | | | | 235 | | | | |
| 2WAX050 | -10 | 3/8" | 3.0 | 0.34 | 6.1 | 530 | 3.0 | 450 | | |
| | -15 | 1/2" | | | | 510 | | | | |
| 2WAH050 | -10 | 3/8" | 4.0 | 0.55 | 10.0 | 530 | 2.0 | 300 | | |
| | -15 | 1/2" | | | | 510 | | | | |
| 2WA050 | -10 | 3/8" | 5.0 | 0.83 | 15.0 | 530 | 1.0 | 150 | | |
| | -15 | 1/2" | | | | 510 | | | | |
| 2WAL050 | -10 | 3/8" | 7.0 | 1.40 | 25.0 | 530 | 0.5 | 75 | | |
| | -15 | 1/2" | | | | 510 | | | | |
| 2WAT050 | -10 | 3/8" | 10.0 | 2.20 | 40.0 | 530 | 0.1 | 15 | | |
| | -15 | 1/2" | | | | 510 | | | | |

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

[Note2] The weight in the table is the terminal valve's weight, 2WA030 series grommet valve's weight is 10g less than terminal's. 2WA050series 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) |
|------------|------------------|------------|----------------|---------------|-------------------------------------|--------------------------|------------|----------------|
| 2WA□030 | CDA110 CLA110 | AC | 50 | ± 15% | Terminal (CDA) Grommet (CLA) | 10.0VA | Class F | 35 |
| | | | 60 | | | 8.0VA | | 30 |
| | | DC | - | ± 10% | | 6.5W | | 30 |
| 2WA□050 | CDA160 CLA160 | AC | 50 | ± 15% | | 25.0VA | | 60 |
| | | | 60 | | | 22.0VA | | 55 |
| | | DC | - | ± 10% | | 12.0W | | 40 |

Valve's specification

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

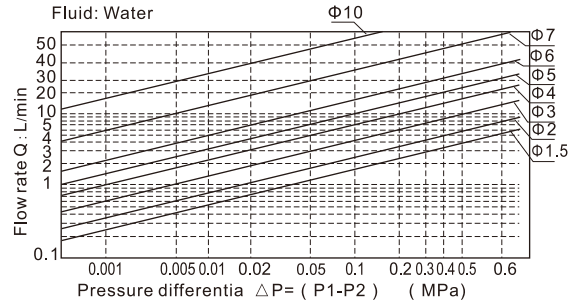
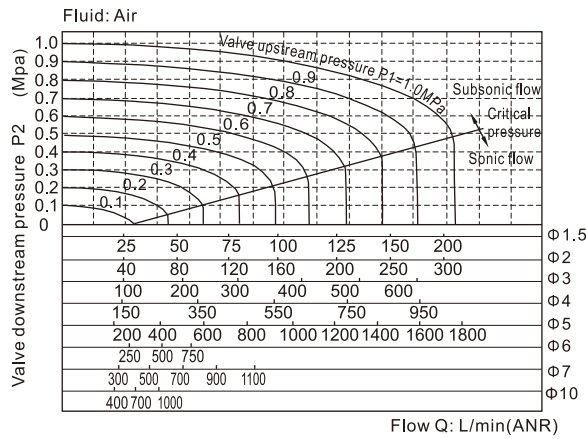
[Note1] Dew point: -20(°C) or less ;

[Note2] 50CST or less.

Fluid control valve(2/2way)

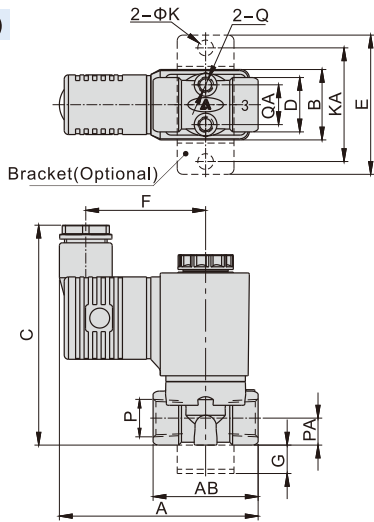
2WA Series (Direct-acting and normally closed)

Flow chart

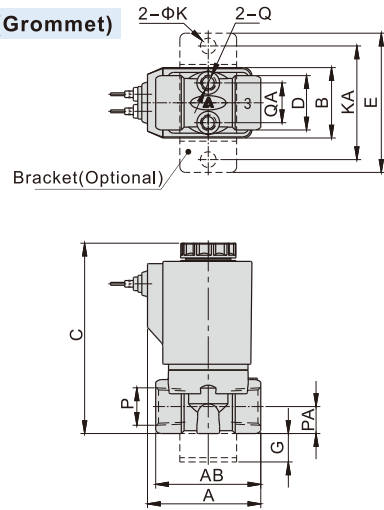


Dimensions

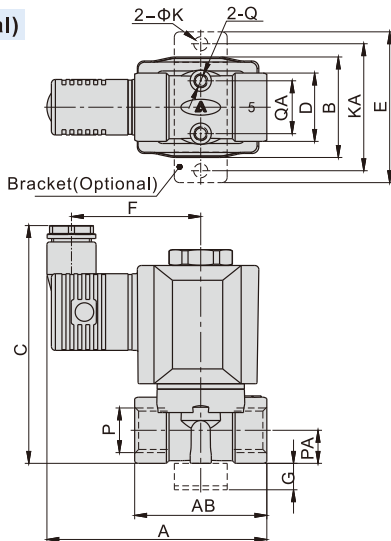
2WA□030 (Terminal)



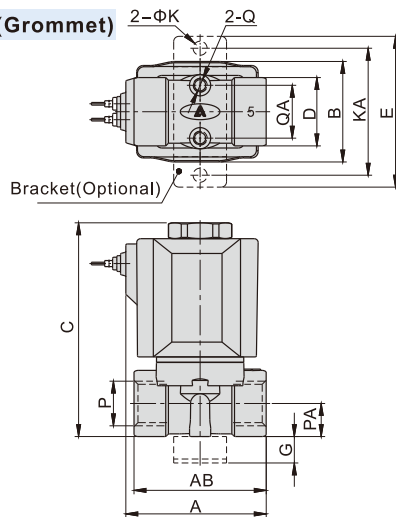
2WA□030 (Grommet)



2WA□050 (Terminal)



2WA□050 (Grommet)



| Model\Item | A | AB | B | C | D | E | F | G | K | KA | P | PA | Q | QA |
|-------------|------|------|----|------|----|----|----|----|-----|----|------|------|----|------|
| 2WA□030-06 | 70 | 37 | 25 | 77.5 | 19 | 49 | 42 | 10 | 5.5 | 40 | 1/8" | 9.5 | M5 | 13.5 |
| 2WAT□030-06 | 71.5 | 39.5 | 25 | 77.5 | 19 | 49 | 42 | 10 | 5.5 | 40 | 1/8" | 9.5 | M5 | 13.5 |
| 2WA□030-08 | 70 | 37 | 25 | 77.5 | 19 | 49 | 42 | 10 | 5.5 | 40 | 1/4" | 9.5 | M5 | 13.5 |
| 2WAT□030-08 | 71.5 | 39.5 | 25 | 77.5 | 19 | 49 | 42 | 10 | 5.5 | 40 | 1/4" | 9.5 | M5 | 13.5 |
| 2WA□050-10 | 83 | 50 | 38 | 90 | 26 | 57 | 49 | 10 | 5.5 | 48 | 3/8" | 12.5 | M5 | 19.5 |
| 2WAT□050-10 | 84 | 51 | 38 | 93 | 26 | 57 | 49 | 10 | 5.5 | 48 | 3/8" | 12.5 | M5 | 19.5 |
| 2WA□050-15 | 83 | 50 | 38 | 90 | 26 | 57 | 49 | 10 | 5.5 | 48 | 1/2" | 12.5 | M5 | 19.5 |
| 2WAT□050-15 | 84 | 51 | 38 | 93 | 26 | 57 | 49 | 10 | 5.5 | 48 | 1/2" | 12.5 | M5 | 19.5 |

| Model\Item | A | AB | B | C | D | E | G | K | KA | P | PA | Q | QA |
|-------------|------|------|----|----|----|----|----|-----|----|------|------|----|------|
| 2WA□030-06 | 40 | 37 | 25 | 67 | 19 | 49 | 10 | 5.5 | 40 | 1/8" | 9.5 | M5 | 13.5 |
| 2WAT□030-06 | 41.5 | 39.5 | 25 | 67 | 19 | 49 | 10 | 5.5 | 40 | 1/8" | 9.5 | M5 | 13.5 |
| 2WA□030-08 | 40 | 37 | 25 | 67 | 19 | 49 | 10 | 5.5 | 40 | 1/4" | 9.5 | M5 | 13.5 |
| 2WAT□030-08 | 41.5 | 39.5 | 25 | 67 | 19 | 49 | 10 | 5.5 | 40 | 1/4" | 9.5 | M5 | 13.5 |
| 2WA□050-10 | 53 | 50 | 38 | 81 | 26 | 57 | 10 | 5.5 | 48 | 3/8" | 12.5 | M5 | 19.5 |
| 2WAT□050-10 | 54 | 51 | 38 | 84 | 26 | 57 | 10 | 5.5 | 48 | 3/8" | 12.5 | M5 | 19.5 |
| 2WA□050-15 | 53 | 50 | 38 | 81 | 26 | 57 | 10 | 5.5 | 48 | 1/2" | 12.5 | M5 | 19.5 |
| 2WAT□050-15 | 54 | 51 | 38 | 84 | 26 | 57 | 10 | 5.5 | 48 | 1/2" | 12.5 | M5 | 19.5 |

