

Fluid control valve(2/2 way)



2KWA Series (Direct-acting and normally opened)



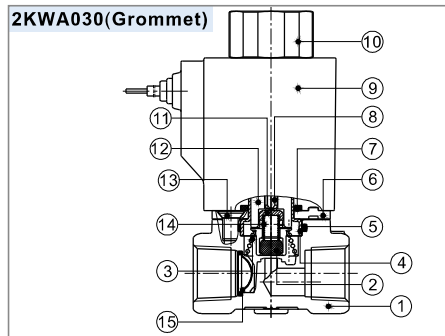
Symbol



Product feature

1. Direct acting and normally opened 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 and large volume(L) to choose from;
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 | No. | Item |
|-----|---------------|-----|---------------|-----|---------------|
| 1 | Body | 6 | Fixed plate | 11 | Airtight bush |
| 2 | Airtight ring | 7 | O-ring | 12 | Electromagnet |
| 3 | Spring | 8 | Mandril | 13 | Screw |
| 4 | Coil axis | 9 | Coil assembly | 14 | Spring |
| 5 | O-ring | 10 | Coil nut | 15 | Filter |

Specification

| Model/Item | Port size [Note1] | Cv | Orifice size (Φmm) | Valid area or section (mm ²) | Weight [Note2](g) | Max.operating pressure differentia | | Proof pressure | |
|------------|-------------------|------|--------------------|--|-------------------|------------------------------------|-----|----------------|-----|
| | | | | | | MPa | psi | Mpa | psi |
| 2KWAX030 | -06 1/8" | 0.10 | 1.5 | 1.8 | 245 | 2.0 | 300 | 3.0 | 450 |
| | -08 1/4" | | | | | | | | |
| 2KWAH030 | -06 1/8" | 0.18 | 2.0 | 3.0 | 245 | 1.5 | 220 | | |
| | -08 1/4" | | | | | | | | |
| 2KWA030 | -06 1/8" | 0.33 | 3.0 | 6.0 | 245 | 0.7 | 100 | | |
| | -08 1/4" | | | | | | | | |
| 2KWAL030 | -06 1/8" | 0.55 | 4.0 | 10.0 | 245 | 0.4 | 60 | | |
| | -08 1/4" | | | | | | | | |
| 2KWAX050 | -10 3/8" | 0.34 | 3.0 | 6.1 | 530 | 2.0 | 300 | | |
| | -15 1/2" | | | | 510 | | | | |
| | -10 3/8" | | | | 530 | | | | |
| 2KWAH050 | -10 3/8" | 0.55 | 4.0 | 10.0 | 510 | 1.5 | 220 | | |
| | -15 1/2" | | | | 510 | | | | |
| 2KWA050 | -10 3/8" | 0.83 | 5.0 | 15.0 | 530 | 0.7 | 100 | | |
| | -15 1/2" | | | | 510 | | | | |
| 2KWAL050 | -10 3/8" | 1.40 | 7.0 | 25.0 | 530 | 0.4 | 60 | | |
| | -15 1/2" | | | | 510 | | | | |

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2KWA030 series grommet valve's weight is 10g less than terminal's. 2KWA050series 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) |
|------------|--------------------|------------|----------------|---------------|------------------|--------------------------|------------|----------------|
| 2KWA□030 | CDA110K CLA110K | AC | 50 | ±15% | Terminal (CDA) | 15.0VA | Class F | 50 |
| | | | 60 | | | 11.0VA | | 45 |
| | | DC | - | ±10% | | 6.5W | | 50 |
| 2KWA□050 | CDA160K CLA160K | AC | 50 | ±15% | Grommet (CLA) | 35.0VA | | 65 |
| | | | 60 | | | 30.0VA | | 60 |
| | | DC | - | ±10% | | 12.0W | | 50 |

Valve's specification

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

[Note1] Dew point: -20(°C) or less ;

[Note2] 50CST or less.

Ordering code

Ordering code of valves

2KWA 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 |
|---|--|------------------------------------|--|--|-------------------------------------|---------------|
| 2KWA: 2/2 way direct-acting and normally opened | X: Extra high pressure H: High pressure Blank: Standard L: 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] | G: G |

[Note] The wire length is 0.5m.

Ordering code of accessories

Ordering code of accessories is the same as 2WA series valve's, Please refer to P169 for details of ordering code.

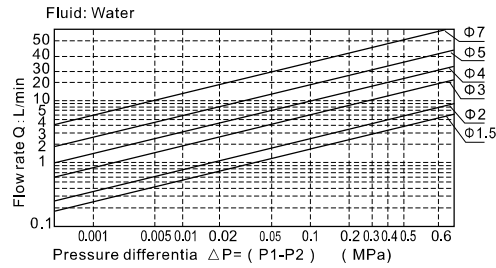
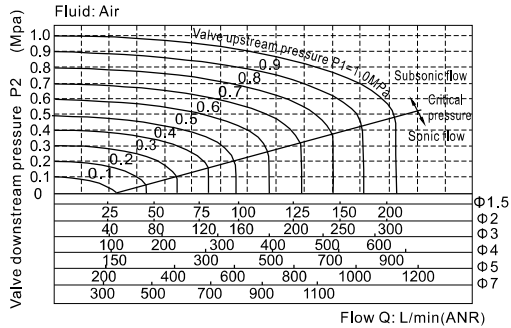


Fluid control valve(2/2 way)



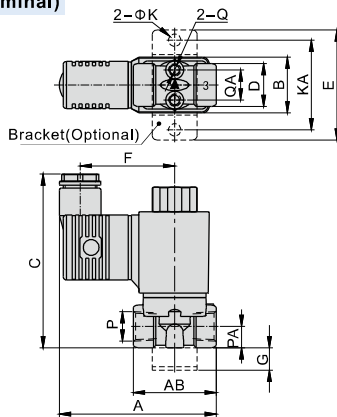
2KWA Series (Direct-acting and normally opened)

Flow chart

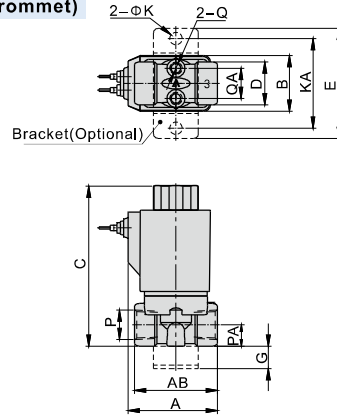


Dimensions

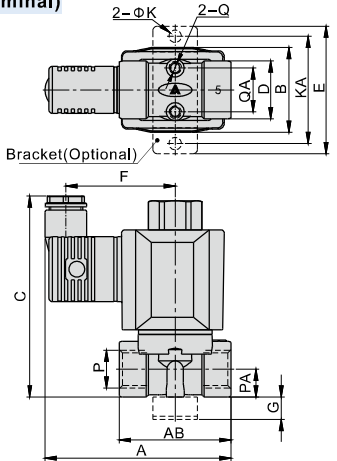
2KWA□030 (Terminal)



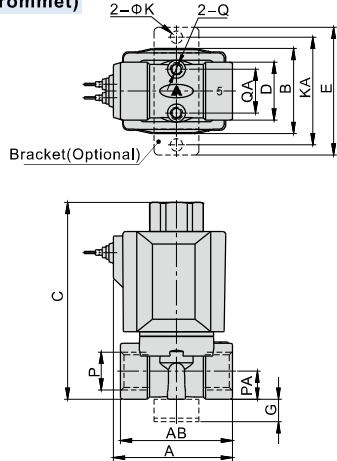
2KWA□030 (Grommet)



2KWA□050 (Terminal)



2KWA□050 (Grommet)



| Model\Item | A | AB | B | C | D | E | F | G | K | KA | P | PA | Q | QA |
|-------------|----|----|----|------|----|----|----|----|-----|----|------|------|----|------|
| 2KWA□030-06 | 70 | 37 | 25 | 77.5 | 19 | 49 | 42 | 10 | 5.5 | 40 | 1/8" | 9.5 | M5 | 13.5 |
| 2KWA□030-08 | 70 | 37 | 25 | 77.5 | 19 | 49 | 42 | 10 | 5.5 | 40 | 1/4" | 9.5 | M5 | 13.5 |
| 2KWA□050-10 | 83 | 50 | 38 | 90 | 26 | 57 | 49 | 10 | 5.5 | 48 | 3/8" | 12.5 | M5 | 19.5 |
| 2KWA□050-15 | 83 | 50 | 38 | 90 | 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 |
|-------------|----|----|----|----|----|----|----|-----|----|------|------|----|------|
| 2KWA□030-06 | 40 | 37 | 25 | 74 | 19 | 49 | 10 | 5.5 | 40 | 1/8" | 9.5 | M5 | 13.5 |
| 2KWA□030-08 | 40 | 37 | 25 | 74 | 19 | 49 | 10 | 5.5 | 40 | 1/4" | 9.5 | M5 | 13.5 |
| 2KWA□050-10 | 53 | 50 | 38 | 90 | 26 | 57 | 10 | 5.5 | 48 | 3/8" | 12.5 | M5 | 19.5 |
| 2KWA□050-15 | 53 | 50 | 38 | 90 | 26 | 57 | 10 | 5.5 | 48 | 1/2" | 12.5 | M5 | 19.5 |



Fluid control valve(2/2 way)



2KWA Series (Internally piloted and normally opened)



Specification

| Model/Item | Port size [Note1] | Orifice size (Φmm) | Cv | Valid area or section (mm ²) | Weight [Note2](g) | Operating pressure differential | | Proof pressure | |
|------------|----------------------|-----------------------|------|---|----------------------|---------------------------------|---------------------|----------------|-----|
| | | | | | | MPa | psi | MPa | psi |
| 2KWA150-15 | 1/2" | 15.0 | 5.50 | 100.0 | 575 | Max: 0.7 Min: 0.05 | Max: 100 Min: 10 | 1.5 | 220 |
| 2KWA200-20 | 3/4" | 20.0 | 9.50 | 170.0 | 735 | | | | |
| 2KWA250-25 | 1" | 25.0 | 12.5 | 220.0 | 1035 | | | | |

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, grommet valve's weight is 10g 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) |
|------------|-----------|------------|----------------|---------------|------------------|--------------------------|------------|----------------|
| 2KWA150 | CDA110K | AC | 50 | ±15% | Terminal (CDA) | 15.0VA | Class F | 50 |
| 2KWA200 | | | 60 | | | 11.0VA | | 45 |
| 2KWA250 | CLA110K | DC | - | ±10% | Grommet (CLA) | 6.5W | | 50 |

Symbol



Product feature

1. Indirect acting (Internal pilot) and normally opened type 2/2 way fluid valve. It can change direction quickly and has large flow.
2. It is compact, small and light weight. Easy to install and dismantle;
3. The valve body is made of brass. The 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.
4. The protection class of the coil is IP65 and there is a choice for grommet or terminal electrical entry.

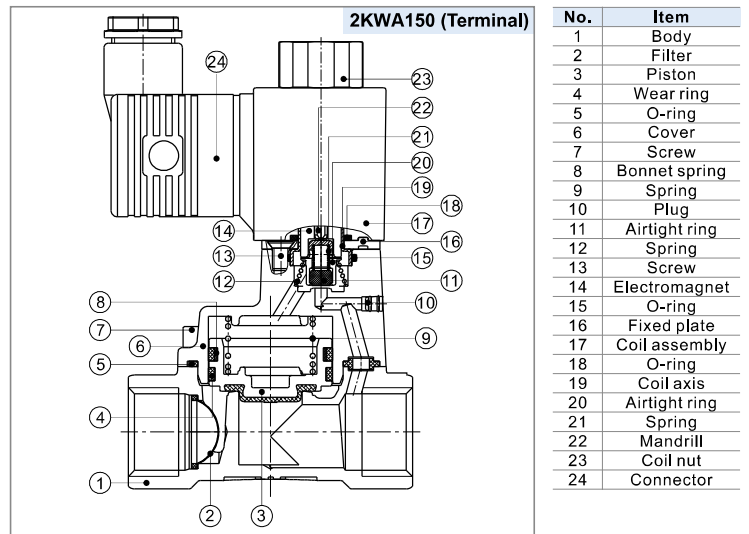
Valve's specification

| Acting | Internally piloted | | | | |
|------------------------------------|--------------------|-----------------|-------------|-------------|---------|
| | 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.

Inner structure



Ordering code

Ordering code of valves: 2KWA 150 15 A □ □

① ② ③ ④ ⑤ ⑥

| ① Model | ② Orifice size | ③ Port size | ④ Voltage | ⑤ Electrical entry | ⑥ Thread type |
|--|----------------|-------------|-----------------------------------|---|---------------|
| 2KWA: 2/2 way internally piloted and normally opened | 150: Φ15mm | 15: 1/2" | A: AC220V | Blank: Terminal I: Grommet [Note] | G: G |
| | 200: Φ20mm | 20: 3/4" | B: DC24V | | |
| | 250: Φ25mm | 25: 1" | C: AC110V E: AC24V F: DC12V | | |

[Note] The wire length is 0.5m.

Ordering code of accessories

Ordering code of accessories is the same as 2KWA series valve's. Please refer to P171 for details of ordering code.

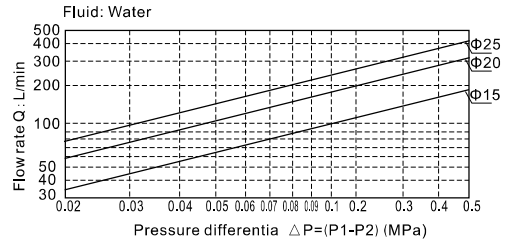
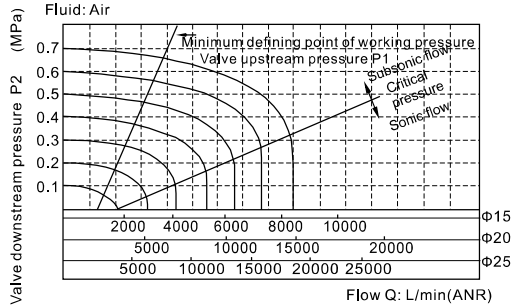


Fluid control valve(2/2 way)



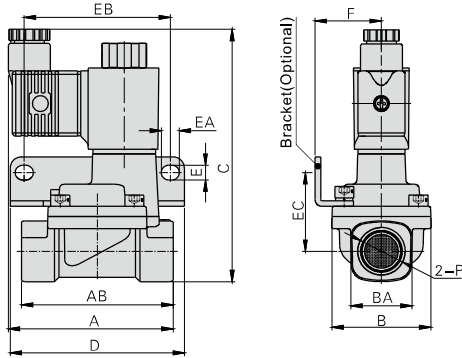
2KWA Series (Internally piloted and normally opened)

Flow chart



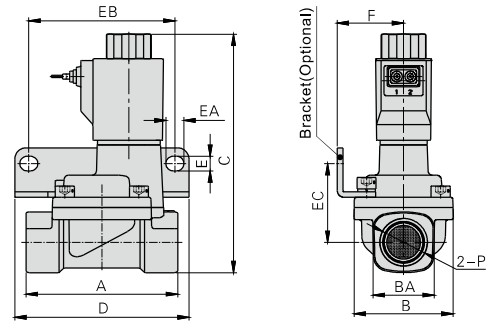
Dimensions

Terminal



| Model\Item | A | AB | B | BA | C | D | E | EA | EB | EC | F | P |
|------------|------|------|----|------|-----|------|-----|----|----|----|------|------|
| 2KWA150-15 | 73.5 | 67.5 | 44 | 27.5 | 112 | 77.5 | 6.5 | 8 | 65 | 35 | 29.5 | 1/2" |
| 2KWA200-20 | 75.5 | 79.5 | 51 | 33.5 | 119 | 87.5 | 6.5 | 8 | 75 | 38 | 33 | 3/4" |
| 2KWA250-25 | 77.5 | 90 | 57 | 40.5 | 126 | 93 | 6.5 | 8 | 80 | 42 | 35 | 1" |

Grommet



| Model\Item | A | B | BA | C | D | E | EA | EB | EC | F | P |
|------------|------|----|------|-----|------|-----|----|----|----|------|------|
| 2KWA150-15 | 67.5 | 44 | 27.5 | 109 | 77.5 | 6.5 | 8 | 65 | 35 | 29.5 | 1/2" |
| 2KWA200-20 | 79.5 | 51 | 33.5 | 116 | 87.5 | 6.5 | 8 | 75 | 38 | 33 | 3/4" |
| 2KWA250-25 | 90 | 57 | 40.5 | 123 | 93 | 6.5 | 8 | 80 | 42 | 35 | 1" |