

# Fluid control valve(2/2way)

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



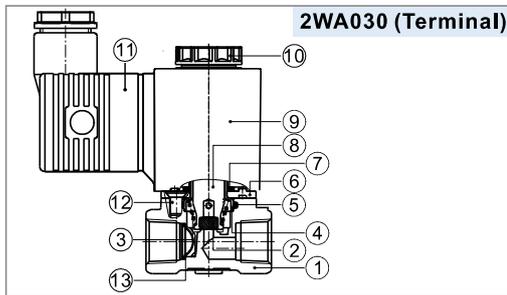
### Symbol



### 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 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
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	06: 1/8" 08: 1/4"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet[Note]	Blank: PT G: G T: NPT
	050: 050 Series	10: 3/8" 15: 1/2"				

[Note] The wire length is 0.5m.

#### Ordering code of accessories

F-2WA030 LB  
 ① ② ③

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 <sup>2</sup> )	Weight [Note2](g)	Max. operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2WAX030	-06	1/8"	1.5	0.10	1.8	3.0	450	5.0	750
	-08	1/4"							
2WAH030	-06	1/8"	2.0	0.18	3.0	2.0	300	5.0	750
	-08	1/4"							
2WA030	-06	1/8"	3.0	0.33	6.0	1.0	150	5.0	750
	-08	1/4"							
2WAL030	-06	1/8"	4.0	0.55	10.0	0.5	75	5.0	750
	-08	1/4"							
2WAT030	-06	1/8"	6.0	1.10	12.0	0.1	15	5.0	750
	-08	1/4"							
2WAX050	-10	3/8"	3.0	0.34	6.1	3.0	450	5.0	750
	-15	1/2"							
2WAH050	-10	3/8"	4.0	0.55	10.0	2.0	300	5.0	750
	-15	1/2"							
2WA050	-10	3/8"	5.0	0.83	15.0	1.0	150	5.0	750
	-15	1/2"							
2WAL050	-10	3/8"	7.0	1.40	25.0	0.5	75	5.0	750
	-15	1/2"							
2WAT050	-10	3/8"	10.0	2.20	40.0	0.1	15	5.0	750
	-15	1/2"							

[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)	10.0VA	Class F	50
			60			8.0VA		45
		DC	-	± 10%		6.5W		50
2WA□050	CDA160 CLA160	AC	50	± 15%	Grommet (CLA)	25.0VA	Class F	65
			60			22.0VA		60
		DC	-	± 10%		12.0W		50

### Valve's specification

Acting		Direct acting			
Initial state		Normally closed			
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

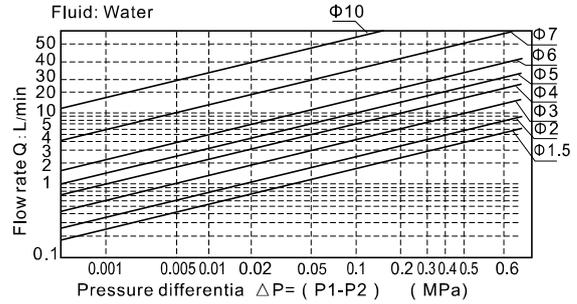
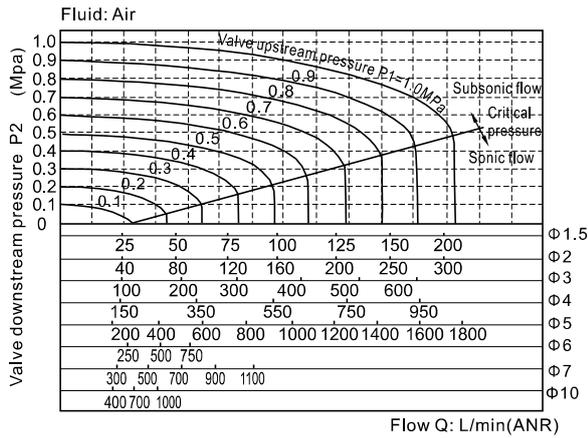
[Note1] Dew point: -20(°C) or less ;

[Note2] 50CST or less.

# Fluid control valve(2/2way)

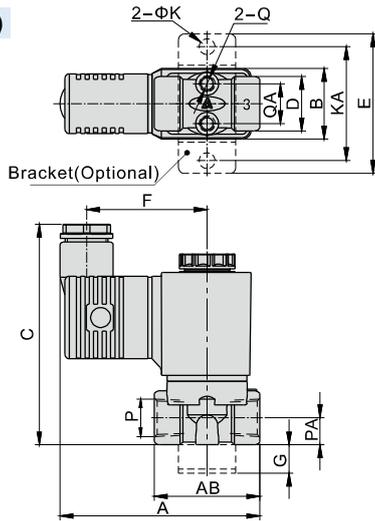
## 2WA Series (Direct-acting and normally closed)

### Flow chart

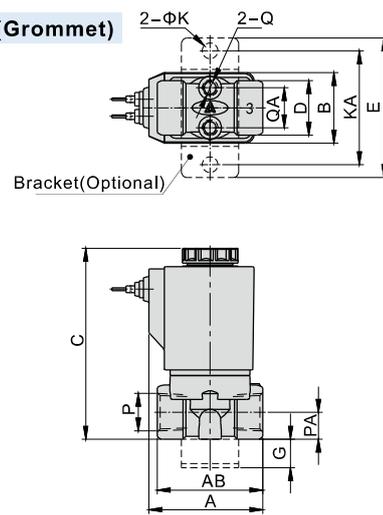


### Dimensions

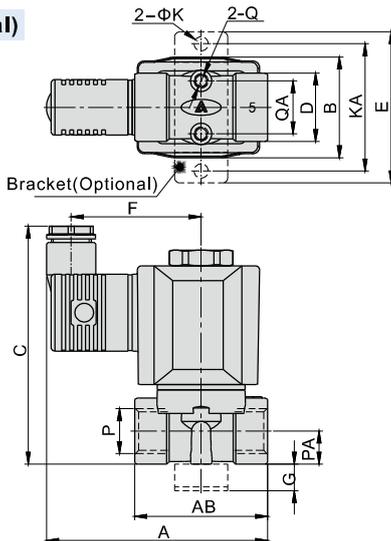
#### 2WA□030 (Terminal)



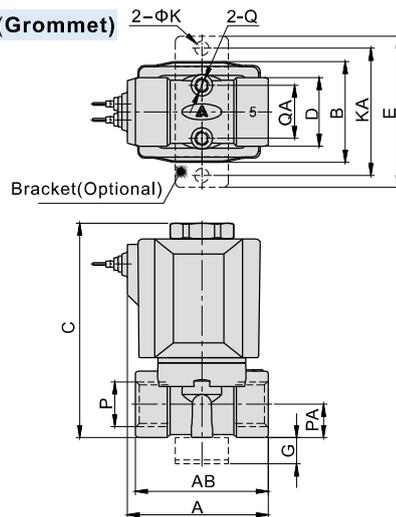
#### 2WA□030 (Grommet)



#### 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

# Fluid control valve(2/2 way)

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



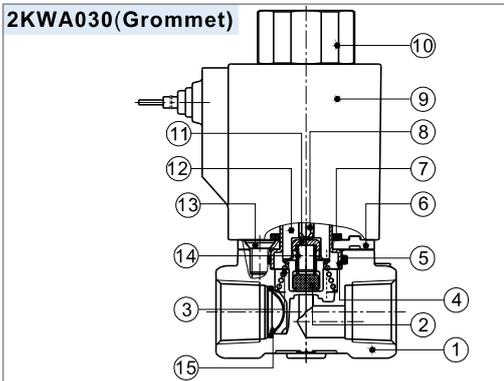
### Symbol



### 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 <sup>2</sup> )	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"				235				
2KWAH030	-06 1/8"	0.18	2.0	3.0	245	1.5	220		
	-08 1/4"				235				
2KWA030	-06 1/8"	0.33	3.0	6.0	245	0.7	100		
	-08 1/4"				235				
2KWAL030	-06 1/8"	0.55	4.0	10.0	245	0.4	60		
	-08 1/4"				235				
2KWAX050	-10 3/8"	0.34	3.0	6.1	530	2.0	300		
	-15 1/2"				510				
2KWAH050	-10 3/8"	0.55	4.0	10.0	530	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] PT thread, G thread and NPT thread are 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	CDA110 CLA110	AC	50	±15%	Terminal (CDA)	15.0VA	Class F	50
			60			11.0VA		45
		DC	-	±10%		6.5W		50
2KWA□050	CDA160 CLA160	AC	50	±15%	Grommet (CLA)	35.0VA		65
			60			30.0VA		60
		DC	-	±10%		12.0W		50

### 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

2KWA H 030 08 A □ □



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]	Blank: PT G: G T: NPT

[Note] The wire length is 0.5m.

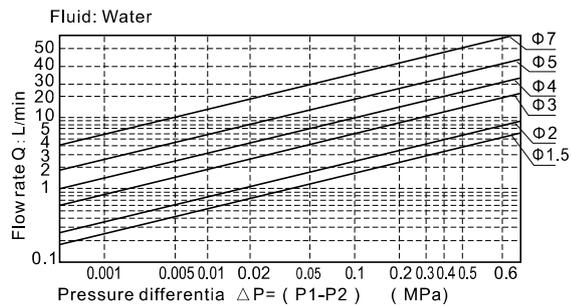
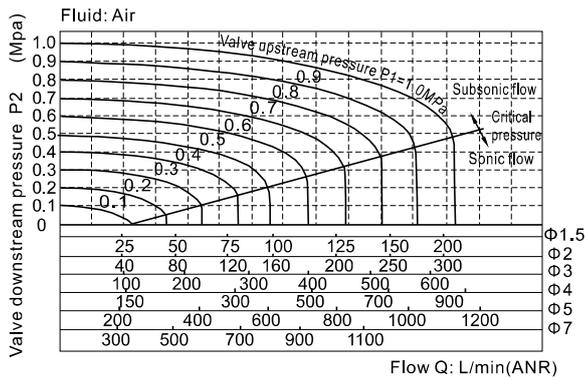
#### Ordering code of accessories

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)

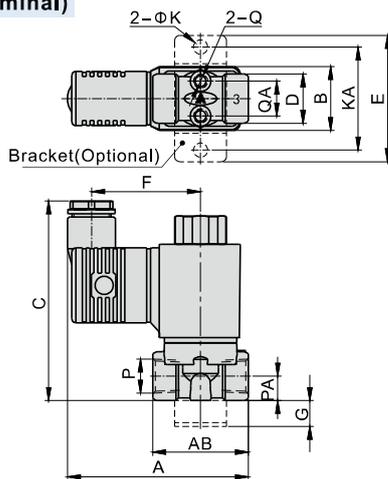
## 2KWA Series (Direct-acting and normally opened)

### Flow chart

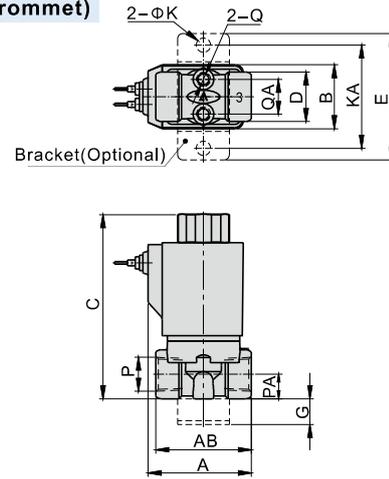


### Dimensions

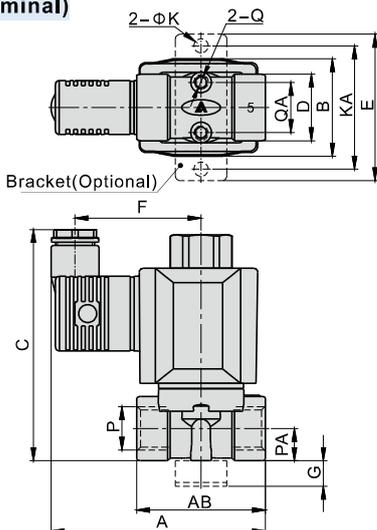
#### 2KWA□030 (Terminal)



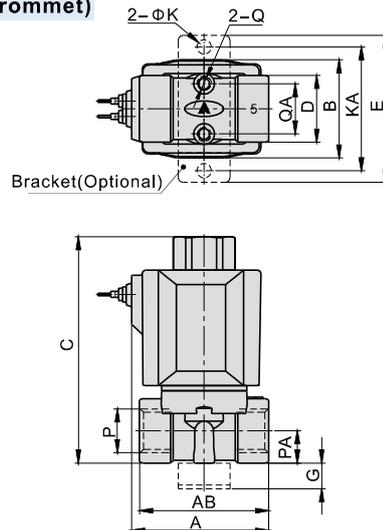
#### 2KWA□030 (Grommet)



#### 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