

# Fluid control valve(2/2way)



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



### Ordering code

Ordering code of valves

**2KWA H 030 08 A □ T**

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	030: 030 Series	06: 1/8" 08: 1/4"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet[Note]	T: NPT
	H: High pressure Blank: Standard L: Large volume	050: 050 Series	10: 3/8" 15: 1/2"			

[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 P178 for details of ordering code.

### 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] NPT 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.



# Fluid control valve(2/2way)

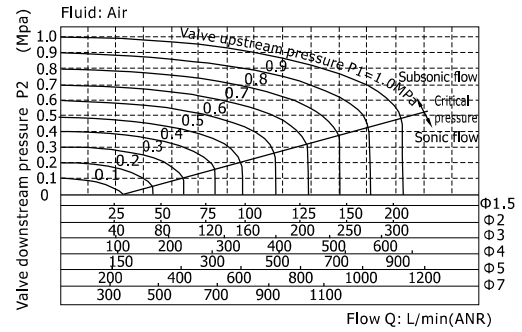


## 2KWA Series (Direct-acting and normally opened)

### 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 .

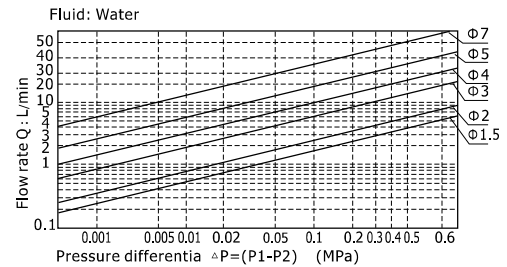
### Flow chart



### 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

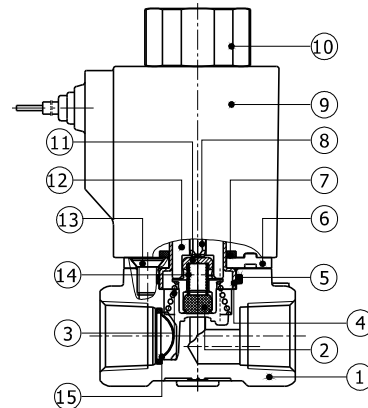
[Note1] Dew point: -20(°C) or less. [Note2] 50CST or less.



### Inner structure

#### 2KWA030(Grommet)

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 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		40
		DC	-	±10%		6.5W		30
2KWA□050	CDA160K CLA160K	AC	50	±15%	Grommet (CLA)	35.0VA		65
			60			30.0VA		60
		DC	-	±10%		12.0W		40



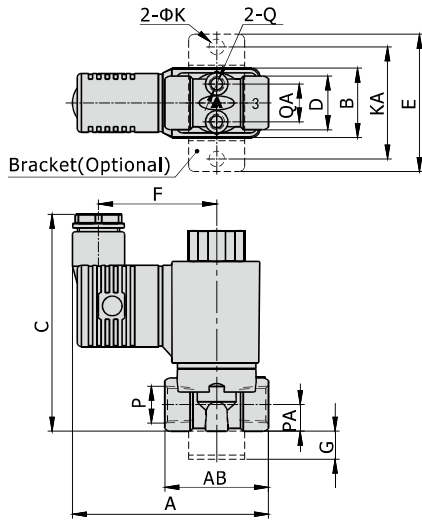
# Fluid control valve(2/2way)



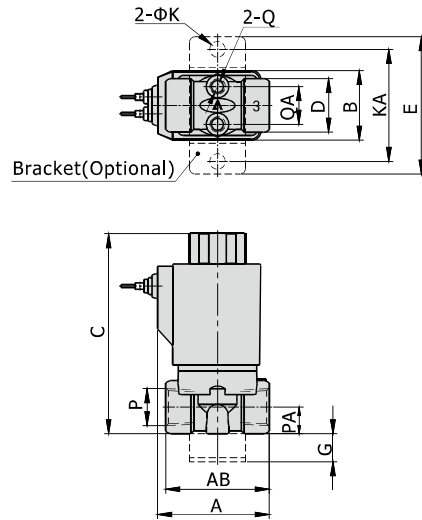
## 2KWA Series (Direct-acting and normally opened)

### Dimensions

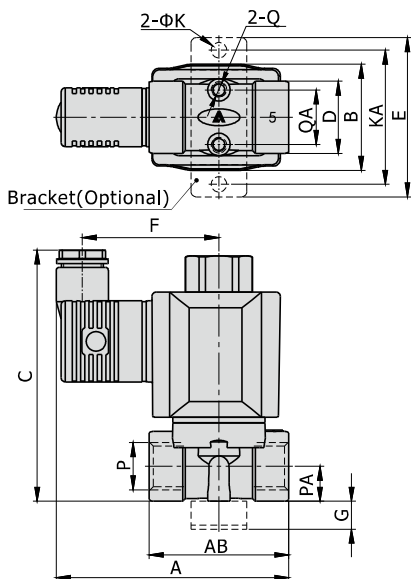
#### 2KWA□030 (Terminal)



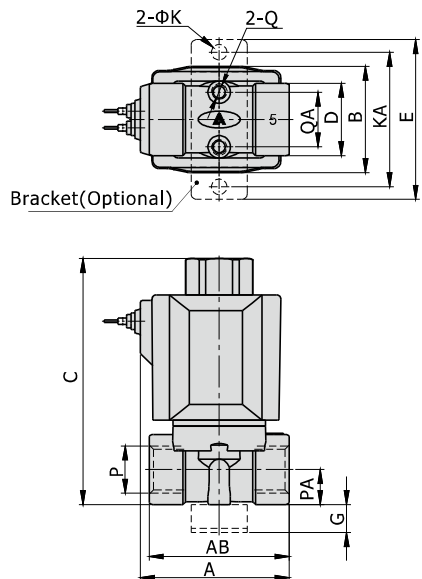
#### 2KWA□030(Grommet)



#### 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	105.5	40	1/8"	9.5	M5	13.5	
2KWA□030-08	70	37	25	77.5	19	49	42	105.5	40	1/4"	9.5	M5	13.5	
2KWA□050-10	83	50	38	90	26	57	49	105.5	48	3/8"	12.5	M5	19.5	
2KWA□050-15	83	50	38	90	26	57	49	105.5	48	1/2"	12.5	M5	19.5	

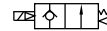
Model\Item	A	AB	B	C	D	E	G	K	KA	P	PA	Q	QA
2KWA□030-06	40	37	25	74	19	49	10	5.5	40	1/8"	9.5	M5	13.5
2KWA□030-08	40	37	25	74	19	49	10	5.5	40	1/4"	9.5	M5	13.5
2KWA□050-10	53	50	38	90	26	57	10	5.5	48	3/8"	12.5	M5	19.5
2KWA□050-15	53	50	38	90	26	57	10	5.5	48	1/2"	12.5	M5	19.5



# Fluid control valve(2/2way)



## 2KWA Series (Internally piloted and normally opened )



### Ordering code

#### Ordering code of valves

**2KWA 150 15 A □ T**

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 B: DC24V	Blank: Terminal I: Grommet [Note]	T: NPT
	200: Φ20mm	20: 3/4"	C: AC110V E: AC24V		
	250: Φ25mm	25: 1"	F: DC12V		

[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 P181 for details of ordering code.

### Specification

Model\Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Operating pressure differentia		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] NPT 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.



# Fluid control valve(2/2way)



## 2KWA Series (Internally piloted and normally opened )

### Product feature

1. Indirect acting(Internal pilot) and normally opened type 2/2 way fluid valve. Its 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		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.

### Inner structure

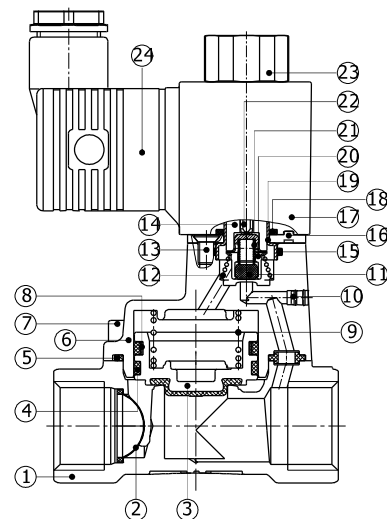
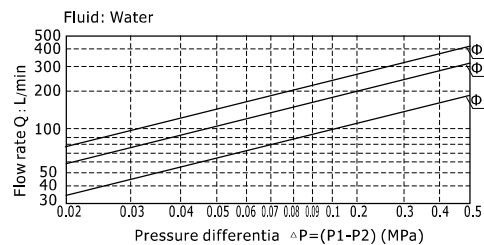
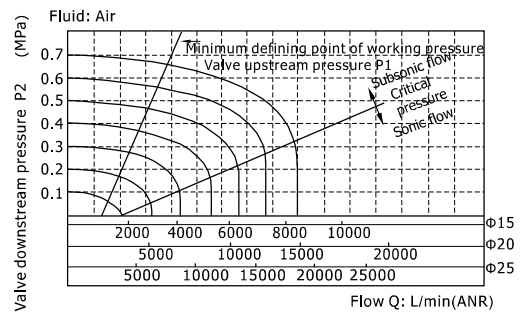
#### 2KWA150 (Terminal)

No.	Item	No.	Item	No.	Item
1	Body	9	Spring	17	Coil assembly
2	Filter	10	Plug	18	O-ring
3	Piston	11	Airtight ring	19	Coil axis
4	Wear ring	12	Spring	20	Airtight ring
5	O-ring	13	Screw	21	Spring
6	Cover	14	Electromagnet	22	Mandril
7	Screw	15	O-ring	23	Coil nut
8	Bonnet spring	16	Fixed plate	24	Connector

### Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2KWA150 2KWA200 2KWA250	CDA110K CLA110K	AC	50	±15%	Terminal (CDA) Grommet (CLA)	15.0VA	Class F	50
			60			11.0VA		40
		DC	-	±10%		6.5W		30

### Flow chart



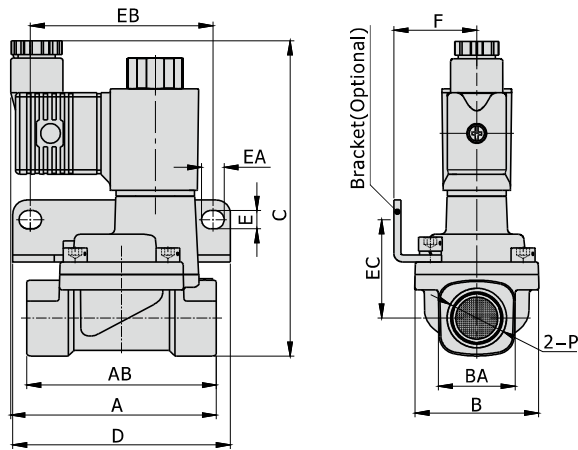
# Fluid control valve(2/2way)



## 2KWA Series (Internally piloted and normally opened )

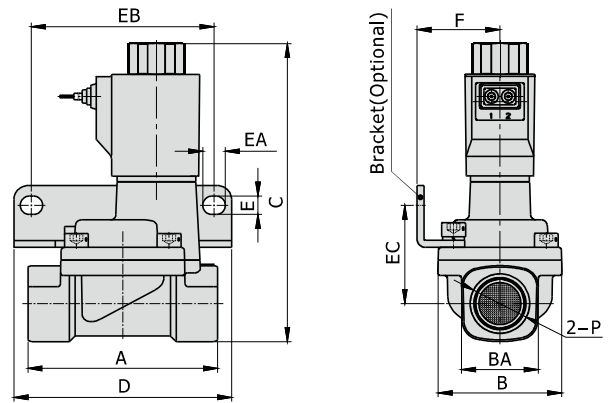
### Dimensions

#### 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"

