

# Fluid control valve(2/2 way)

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



### Symbol

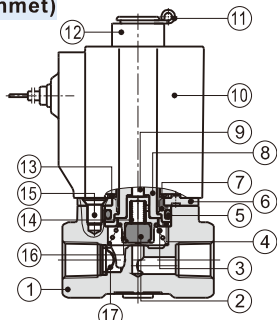


### Product feature

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 brass. 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

2KW030(Grommet)



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

### Specification

Model\Item	Port size [Note1]	Orifice size (Φ mm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Max.operating pressure differentia		Proof pressure	
						MPa	psi	MPa	psi
2KW030	-06 1/8"	1.5	0.10	1.8	315	2.0	300	3.0	450
	-08 1/4"								
2KWH030	-06 1/8"	2.0	0.18	3.0	315	1.5	220		
	-08 1/4"								
2KW030	-06 1/8"	3.0	0.33	6.0	315	0.7	100		
	-08 1/4"								
2KWL030	-06 1/8"	4.0	0.55	10.0	315	0.4	60		
	-08 1/4"								
2KWX050	-10 3/8"	3.0	0.34	6.1	635	2.0	300		
	-15 1/2"								
2KWH050	-10 3/8"	4.0	0.55	10.0	635	1.5	220		
	-15 1/2"								
2KW050	-10 3/8"	5.0	0.83	15.0	635	0.7	100		
	-15 1/2"								
2KWL050	-10 3/8"	7.0	1.40	25.0	635	0.4	60		
	-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, 2KW030 series grommet valve's weight is 10g less than terminal's. 2KW050series 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)
2KW□030	CDA116 CLA116	AC	50	± 15%	Terminal (CDA)	15.0VA	Class B	50
			60			11.0VA		40
		DC	-	± 10%		6.5W		30
2KW□050	CDA170 CLA170	AC	50	± 15%	Grommet (CLA)	35.0VA		65
			60			30.0VA		60
		DC	-	± 10%		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 )	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.

### Ordering code

#### Ordering code of valves

2KW H 030 08 A □ □



① Model	② Pressure condition	③ Size series	④ Port size	⑤ Voltage	⑥ Electrical entry	⑦ Thread type
2KW: 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	Blank: PT G: G T: NPT

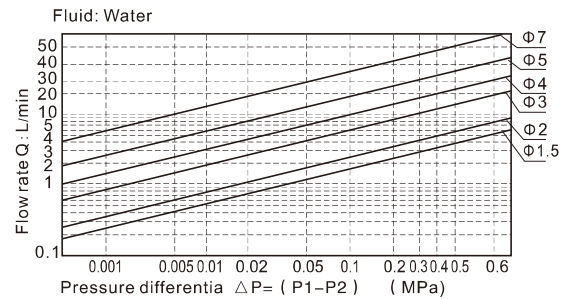
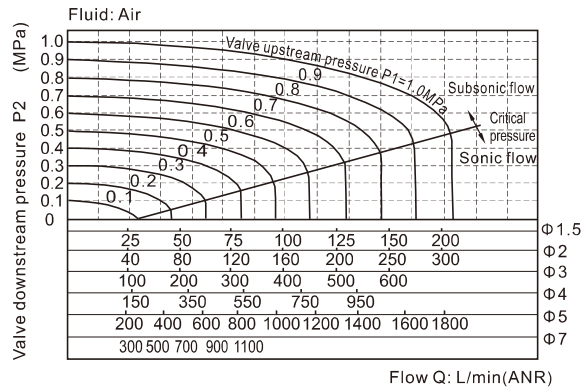
#### Ordering code of accessories

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)

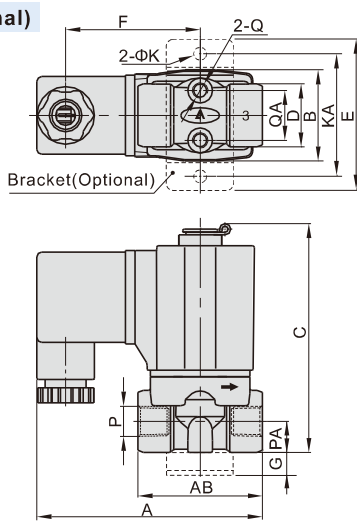
## 2KW Series (Direct-acting and normally opened)

### Flow chart

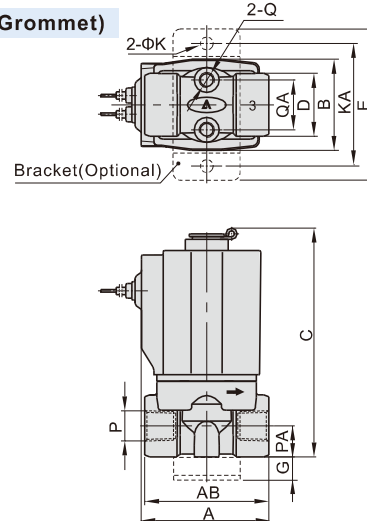


### Dimensions

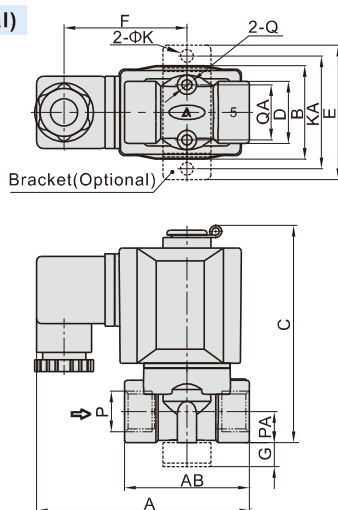
#### 2KW□030 (Terminal)



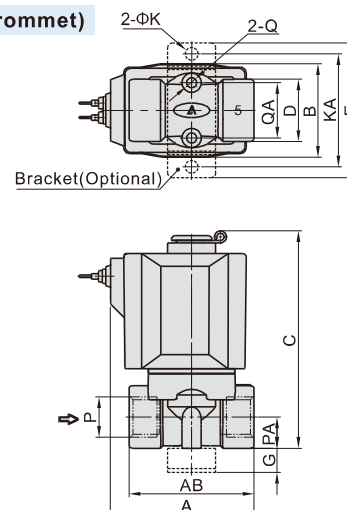
#### 2KW□030 (Grommet)



#### 2KW□050 (Terminal)



#### 2KW□050 (Grommet)



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

# Fluid control valve(2/2 way)

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



### Specification

Model\Item	Port size [Note1]	Orifice size (Φ mm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Operating pressure differentia		Proof pressure	
						MPa	psi	MPa	psi
2KW150-15	1/2"	15.0	5.50	100.0	730	Max: 0.7 Min: 0.05	Max: 100 Min: 10	1.5	220
2KW200-20	3/4"	20.0	9.50	170.0	960				
2KW250-25	1"	25.0	12.5	220.0	1210				

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

[Note2] The weight in the table is the terminal valve's weight, grommet valve's weight is 10g less than terminal's.

### Symbol



### Product feature

1. Indirect acting (Internal pilot) and normally opened type 2/2 way solenoid valve. Its can change direction quickly and has large flow.
2. It is compact, small and light weight. It is easy to install and dismantle;
3. The valve body is made of brass . The coil has a Heat resistance classification of Class B. The standard seal material is FPM-F. Please contact us if other material are required.
4. The protection class of the coil is IP65 and there is a choice for grommet or terminal electrical entry .

### Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2KW150	CDA116	AC	50	± 15%	Terminal (CDA)	15.0VA	Class B	50
2KW200			60			11.0VA		40
2KW250	CLA116	DC	-	± 10%	Grommet (CLA)	6.5W		30

### Valve's specification

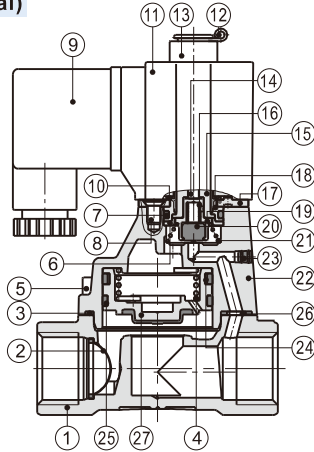
Acting		Internally piloted				
Initial state		Normally opened				
Adaptable fluid		Air, Water, Oil				
Viscosity limit		Under 20CST				
Ambient and fluid temperature ( °C )		Water		Air	Oil	Ambient
		Max.	80	90	80	70
		Min.	1	-20 [Note1]	-10 [Note2]	-20

[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

### Inner structure

#### 2KW150 (Terminal)



No.	Item	No.	Item	No.	Item
1	Body	10	Washer	19	Airtight bushing
2	Filter	11	Coil assembly	20	Airtight ring
3	O-ring	12	E Clip	21	Spring
4	Spring	13	Position ring	22	Cover
5	Screw	14	Man drill	23	Plug
6	Clip	15	Movable core	24	Bonnet spring
7	O-ring	16	Spring	25	Wear ring
8	Screw	17	Fixed plate	26	Bushing
9	Connector	18	Fixed cap	27	Piston

### Ordering code

#### Ordering code of valves

2KW 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
2KW: 2/2 way internally piloted and normally opened	150: Φ15mm	15: 1/2"	A: AC220V B: DC24V	Blank: Terminal I: Grommet	Blank:PT G: G T: NPT
	200: Φ20mm	20: 3/4"	C: AC110V E: AC24V		
	250: Φ25mm	25: 1"	F: DC12V		

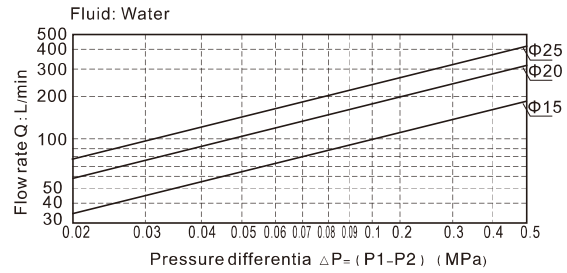
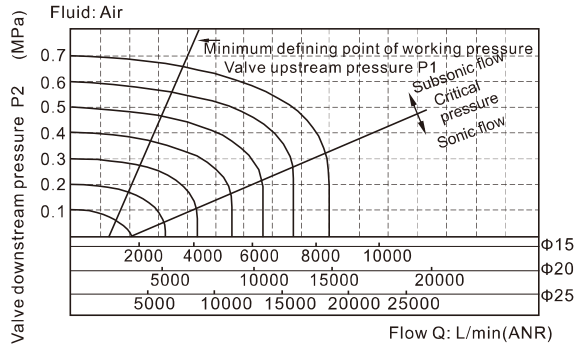
#### Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P150 for details of ordering code.

# Fluid control valve(2/2 way)

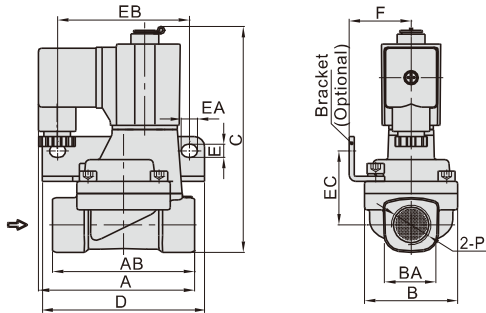
## 2KW Series (Internally piloted and normally opened)

### Flow chart



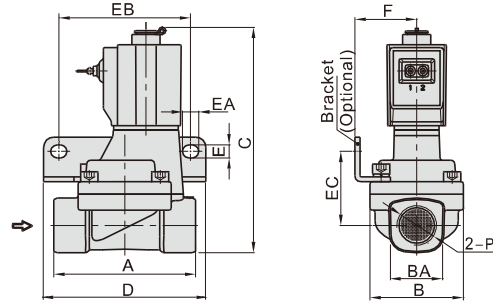
### Dimensions

#### Terminal



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2KW150-15	77	70	46	27.5	112.5	80	6.4	8	65	36.5	30.5	1/2"
2KW200-20	78.5	82	53	33.5	121	90	6.4	8	75	40	34	3/4"
2KW250-25	81	92	59	40.5	129.5	95	6.4	8	80	44.5	36	1"

#### Grommet



Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2KW150-15	70	46	27.5	112.5	80	6.4	8	65	36.5	30.5	1/2"
2KW200-20	82	53	33.5	121	90	6.4	8	75	40	34	3/4"
2KW250-25	92	59	40.5	129.5	95	6.4	8	80	44.5	36	1"