

# Fluid control valve(2/2way)



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



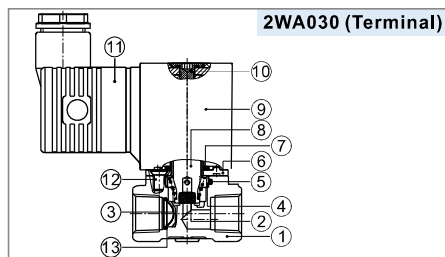
### Symbol



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

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

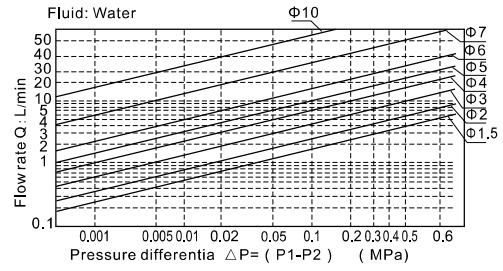
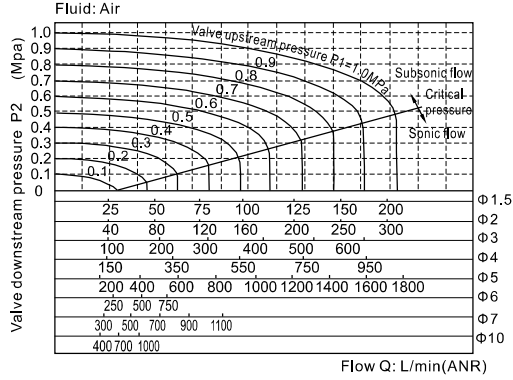


# Fluid control valve(2/2way)

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

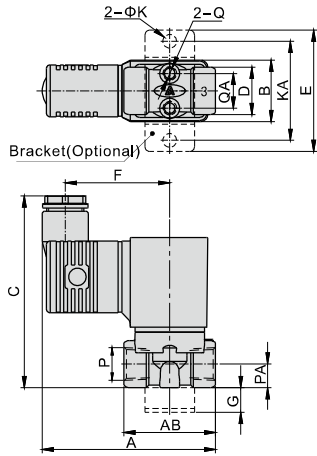


### Flow chart

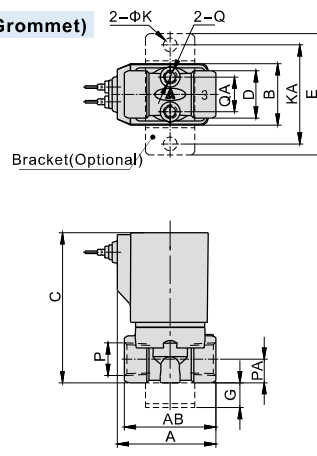


### Dimensions

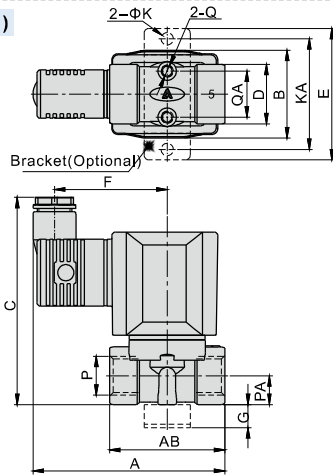
#### 2WA□030 (Terminal)



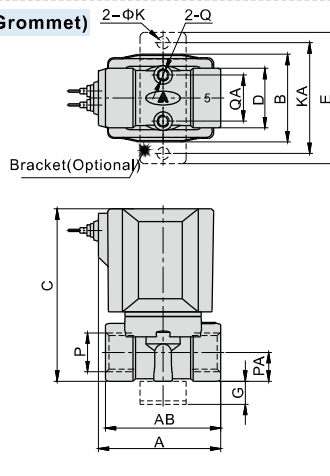
#### 2WA□030 (Grommet)



#### 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	61	19	49	10	5.5	40	PT1/8	9.5	M5	13.5
2WAT□030-06	41.5	39.5	25	61	19	49	10	5.5	40	PT1/8	9.5	M5	13.5
2WA□030-08	40	37	25	61	19	49	10	5.5	40	PT1/4	9.5	M5	13.5
2WAT□030-08	41.5	39.5	25	61	19	49	10	5.5	40	PT1/4	9.5	M5	13.5
2WA□050-10	53	50	38	78	26	57	10	5.5	48	PT3/8	12.5	M5	19.5
2WAT□050-10	54	51	38	78	26	57	10	5.5	48	PT3/8	12.5	M5	19.5
2WA□050-15	53	50	38	78	26	57	10	5.5	48	PT1/2	12.5	M5	19.5
2WAT□050-15	54	51	38	78	26	57	10	5.5	48	PT1/2	12.5	M5	19.5



# Fluid control valve(2/2way)



## 2WA Series (Internally piloted and normally closed)



### Specification

Model/Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2WA150-15	1/2"	15.0	5.50	100.0	575	Max: 1.0 Min: 0.05	Max: 150 Min: 10	1.5	220
2WA200-20	3/4"	20.0	9.50	170.0	735				
2WA250-25	1"	25.0	12.5	220.0	1035				

[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

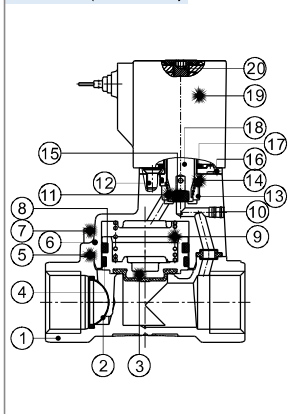
1. Indirect acting (Internal pilot) and normally closed type 2/2 way fluid valve. It can change direction quickly and has large flow.
2. It is compact, small and light weight. Easy to install and dismantle;
3. The valve body is made of brass. The coil has a Heat resistance classification of Class F. 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.

### Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise (°C)
2WA150	CDA110	AC	50	±15%	Terminal (CDA)	10.0VA	Class F	35
2WA200	CLA110		60			8.0VA		30
2WA250		DC	-	±10%	Grommet (CLA)	6.5W		30

### Inner structure

2WA150 (Grommet)



No.	Item
1	Body
2	Filter
3	Piston
4	Wear ring
5	O-ring
6	Cover
7	Screw
8	Spring
9	Spring
10	Plug
11	Spring
12	Screw
13	Steel bushing
14	O-ring
15	Airtight ring
16	Fixed plate
17	O-ring
18	Movable core
19	Coil assembly
20	Bolt

### Valve's specification

Acting	Internally piloted				
	Initial state	Normally closed			
Adaptability 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	2WA	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	
2WA: 2/2 way internally piloted and normally closed	150: Φ15mm 200: Φ20mm 250: Φ25mm	15: 1/2" 20: 3/4" 25: 1"	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-2WA150	LB	
	①	②	③
① Accessories code	② Valve type	③ Accessories type	
F: Mounting accessories	2WA150: 150 Series valve 2WA200: 200 Series valve 2WA250: 250 Series valve	LB: LB Type	

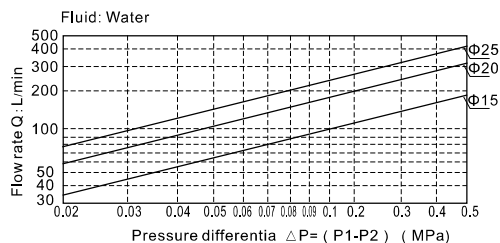
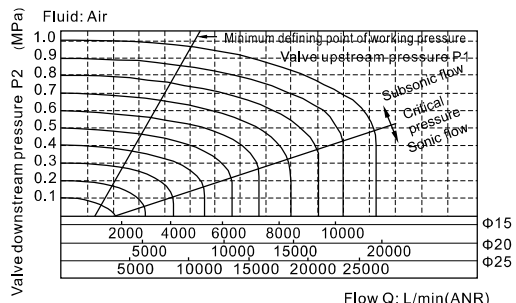


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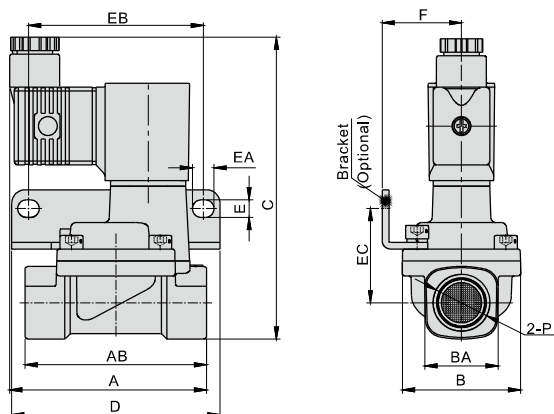
## 2WA Series (Internally piloted and normally closed)

### Flow chart



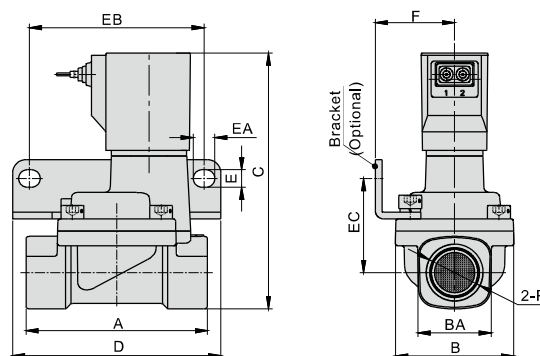
### Dimensions

#### Terminal



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2WA150-15	73.5	67.5	44	27.5	112	77.5	6.5	8	65	35	29.5	1/2"
2WA200-20	75.5	79.5	51	33	119	87.5	6.5	8	75	38	33	3/4"
2WA250-25	77.5	90	57	40	126	93	6.5	8	80	42	35	1"

#### Grommet



Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2WA150-15	67.5	44	27.5	96	77.5	6.5	8	65	35	29.5	PT1/2
2WA200-20	79.5	51	33.5	103	87.5	6.5	8	75	38	33	PT3/4
2WA250-25	90	57	40.5	110	93	6.5	8	80	42	35	PT1