

# Fluid control valve(2/2way)

## 2SA 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 SUS304. 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.

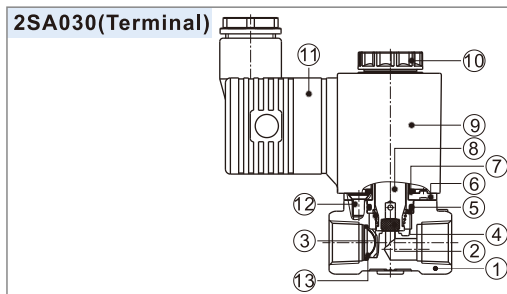
### Specification

Model/Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Max.operating pressure differentia		Proof pressure	
						MPa	psi	MPa	psi
2SAX030	-06	1/8"	1.5	1.8	245	3.0	450	5.0	750
	-08	1/4"			235				
2SAH030	-06	1/8"	2.0	3.0	245	2.0	300		
	-08	1/4"			235				
2SA030	-06	1/8"	3.0	6.0	245	1.0	150		
	-08	1/4"			235				
2SAL030	-06	1/8"	4.0	10.0	245	0.5	75		
	-08	1/4"			235				
2SAT030	-06	1/8"	6.0	12.0	245	0.1	15		
	-08	1/4"			235				
2SAX050	-10	3/8"	3.0	6.1	530	3.0	450		
	-15	1/2"			510				
2SAH050	-10	3/8"	4.0	10.0	530	2.0	300		
	-15	1/2"			510				
2SA050	-10	3/8"	5.0	15.0	530	1.0	150		
	-15	1/2"			510				
2SAL050	-10	3/8"	7.0	25.0	530	0.5	75		
	-15	1/2"			510				
2SAT050	-10	3/8"	10.0	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, 2SA030 series grommet valve's weight is 10g less than terminal's. 2SA050series grommet valve's weight is 20g less than terminal's.

### Inner structure



No.	Item	No.	Item	No.	Item
1	Body	6	Fixed plate	11	Connector
2	Airtight ring	7	O-ring	12	Screw
3	Spring	8	Movable core	13	Filter [Note]
4	Steel bushing	9	Coil assembly		
5	O-ring	10	Coil nut		

[Note] Extra large volume type has no filter element.

### Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2SA□030	CDA110 CLA110	AC	50	±15%	Terminal (CDA)	10.0VA	Class F	35
			60			8.0VA		30
		DC	-	±10%		6.5W		30
			2SA□050	CDA160 CLA160		AC		50
60	22.0VA	55						
DC	-	±10%			12.0W	40		

### 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.

### Ordering code

#### Ordering code of valves

2SA L 030 08 A □ □



① Model	② Pressure condition	③ Size series	④ Port size	⑤ Voltage	⑥ Electrical entry	⑦ Thread type
2SA: 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  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.

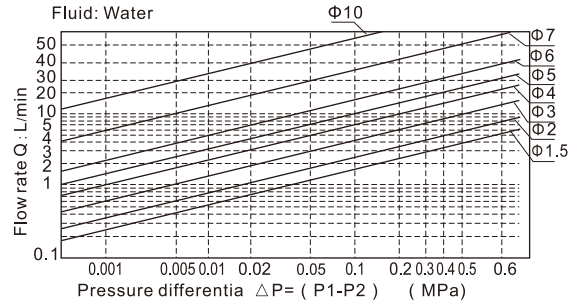
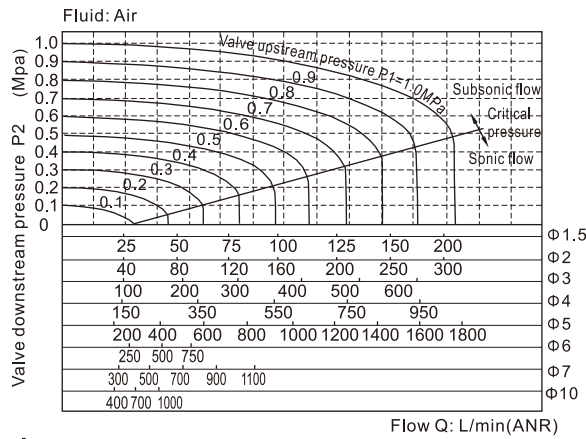
#### Ordering code of accessories

Ordering code of accessories is the same as 2WA series valve's, Please refer to P164 for details of ordering code.

# Fluid control valve(2/2way)

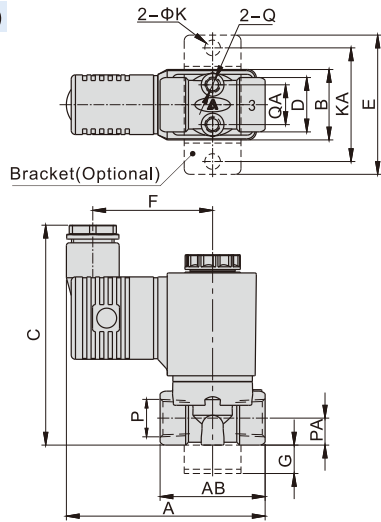
## 2SA Series (Direct-acting and normally closed)

### Flow chart

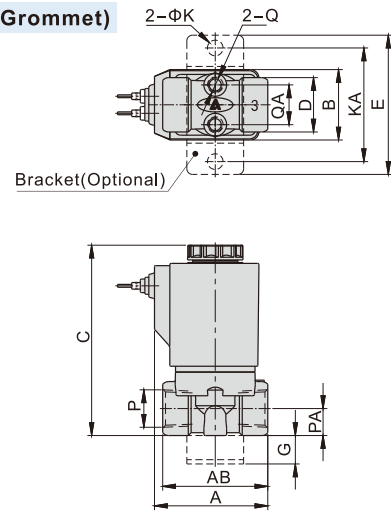


### Dimensions

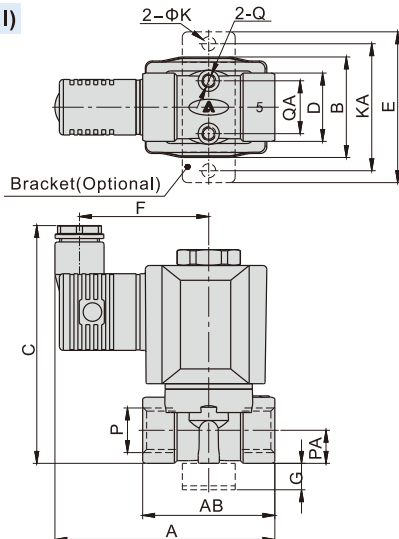
#### 2SA□030 (Terminal)



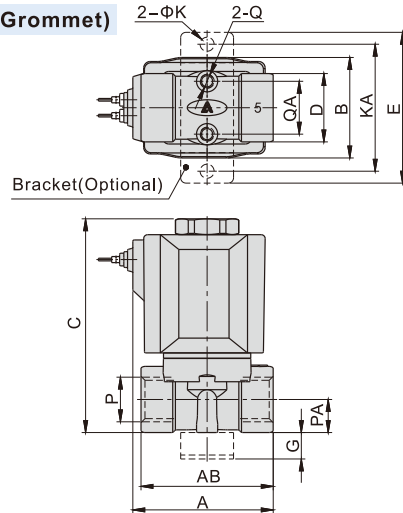
#### 2SA□030(Grommet)



#### 2SA□050 (Terminal)



#### 2SA□050(Grommet)



Model/Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2SA□030-06	70	37	25	77.5	19	49	42	10	5.5	40	1/8"	9.5	M5	13.5
2SAT□030-06	71.5	39.5	25	77.5	19	49	42	10	5.5	40	1/8"	9.5	M5	13.5
2SA□030-08	70	37	25	77.5	19	49	42	10	5.5	40	1/4"	9.5	M5	13.5
2SAT□030-08	71.5	39.5	25	77.5	19	49	42	10	5.5	40	1/4"	9.5	M5	13.5
2SA□050-10	83	50	38	90	26	57	49	10	5.5	48	3/8"	12.5	M5	19.5
2SAT□050-10	84	51	38	90	26	57	49	10	5.5	48	3/8"	12.5	M5	19.5
2SA□050-15	83	50	38	90	26	57	49	10	5.5	48	1/2"	12.5	M5	19.5
2SAT□050-15	84	51	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
2SA□030-06	40	37	25	67	19	49	10	5.5	40	1/8"	9.5	M5	13.5
2SAT□030-06	41.5	39.5	25	67	19	49	10	5.5	40	1/8"	9.5	M5	13.5
2SA□030-08	40	37	25	67	19	49	10	5.5	40	1/4"	9.5	M5	13.5
2SAT□030-08	41.5	39.5	25	67	19	49	10	5.5	40	1/4"	9.5	M5	13.5
2SA□050-10	53	50	38	81	26	57	10	5.5	48	3/8"	12.5	M5	19.5
2SAT□050-10	54	51	38	81	26	57	10	5.5	48	3/8"	12.5	M5	19.5
2SA□050-15	53	50	38	81	26	57	10	5.5	48	1/2"	12.5	M5	19.5
2SAT□050-15	54	51	38	81	26	57	10	5.5	48	1/2"	12.5	M5	19.5