

# Fluid control valve(2/2 way)

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



### Symbol



### Product feature

1. Direct acting and normally closed type 2/2 way solenoid valve. Its high sensibility allows it to change direction quickly;
2. It has wide pressure range, including standard high pressure (H) 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 SUS304 . Its coil has a Heat resistance classification of Class H. The standard seal material is PTFE(Teflon) which is suitable for a variety of working medium such as water with high temperature and vapour.
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
2LAH030	-06 1/8"	2.0	0.18	3.0	244.5	2.0	300	3.0	450
	-08 1/4"				234.5				
2LA030	-06 1/8"	3.0	0.33	6.0	244.5	1.0	150	3.0	450
	-08 1/4"				234.5				
2LAH050	-10 3/8"	4.0	0.55	10.0	529	2.0	300	3.0	450
	-15 1/2"				509				
2LA050	-10 3/8"	5.0	0.83	15.0	529	1.0	150	3.0	450
	-15 1/2"				509				

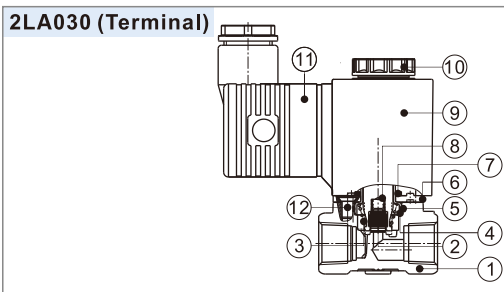
[Note1] PT thread, G thread and NPT thread are available.

[Note2] The weight in the table is the terminal valve's weight, 2LA030 series grommet valve's weight is 10g less than terminal's. 2LA050series 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)
2LA□030	CDA110H CLA110H	AC	50	±15%	Terminal (CDA)	10.0VA	Class H	50
			60			8.0VA		45
		DC	-	±10%		6.5W		50
2LA□050	CDA160H CLA160H	AC	50	±15%	Grommet (CLA)	25.0VA	Class H	65
			60			22.0VA		60
		DC	-	±10%		12.0W		50

### Inner structure



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

### Valve's specification

Acting	Direct acting				
	Initial state	Normally closed			
Adaptable fluid	Steam, High temperature Water,Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature ( °C )		Oil	Water	Steam	Ambient
	Max.	150	150	183	100
	Min.	-10 [Note1]	1	-	-20

[Note1] 50CST or less.

### Ordering code

#### Ordering code of valves

2LA H 030 08 A □ □



① Model	② Pressure condition	③ Size series	④ Port size	⑤ Voltage	⑥ Electrical entry	⑦ Thread type
2LA: 2/2 way direct-acting and normally closed	H: High pressure Blank: Standard	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.

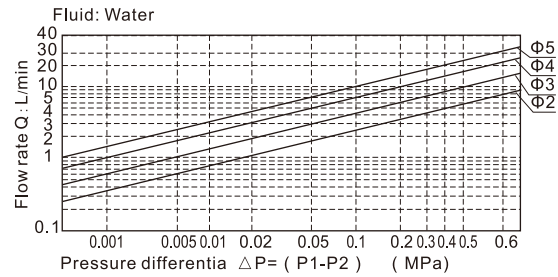
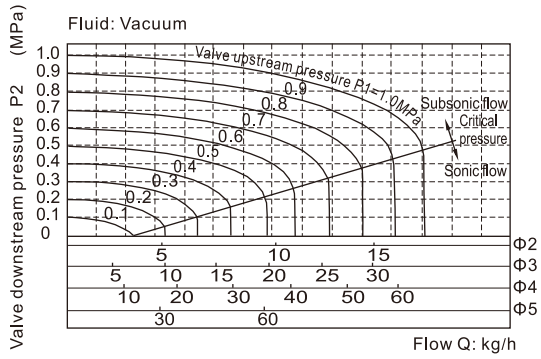
#### Ordering code of accessories

Ordering code of accessories is the same as 2WA series valve's, Please refer to P19 for details of ordering code.

# Fluid control valve(2/2 way)

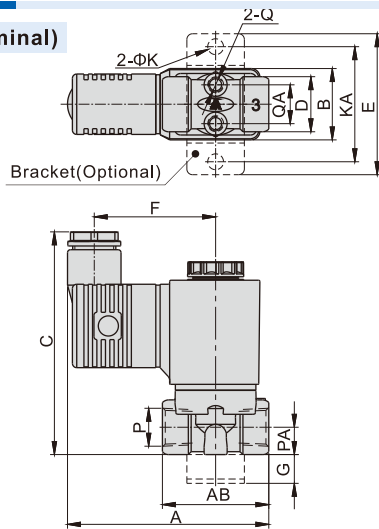
## 2LA Series (Direct-acting and normally closed)

### Flow chart

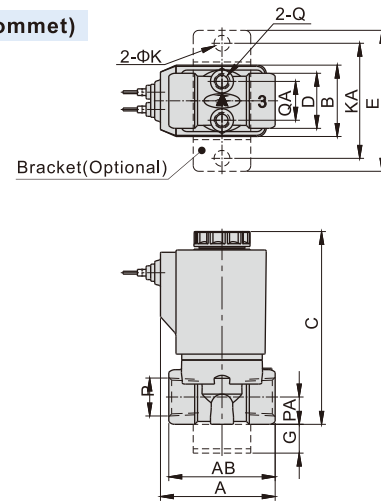


### Dimensions

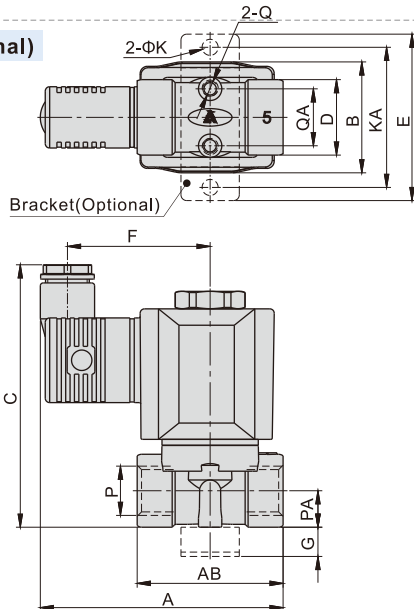
#### 2LA□030(Terminal)



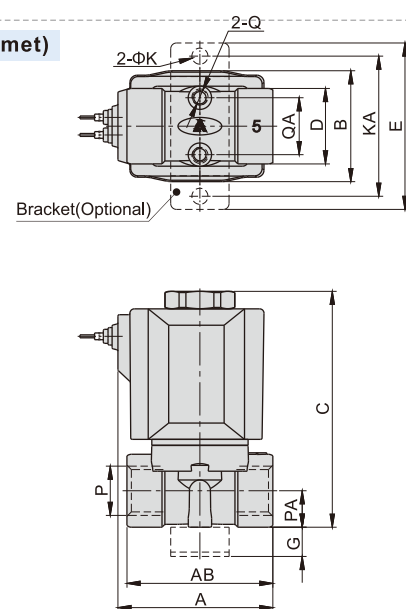
#### 2LA□030(Grommet)



#### 2LA□050(Terminal)



#### 2LA□050(Grommet)



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

# Fluid control valve(2/2 way)

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



### Symbol

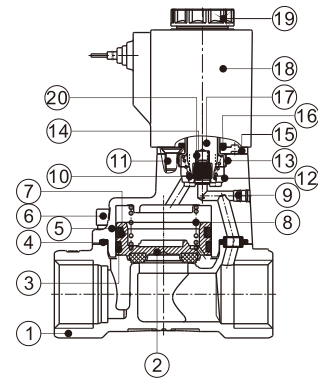


### Product feature

1. Indirect acting (Internal pilot) and normally closed type 2/2 way solenoid valve. Its high sensibility allows it to change direction quickly.
2. It is compact, small size and light weight. It is easy to install and dismantle.
3. The valve body is made of SUS304. Its coil has a Heat resistance classification of Class H. The standard seal material is PTFE (Teflon) which is suitable for a variety of working medium such as water with high temperature and vapour.
4. The protection class of the coil is IP65 and there is a choice for grommet or terminal electrical entry.

### Inner structure

#### 2LA150 (Grommet)



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

### 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
2LA150-15	1/2"	15.0	5.50	100.0	570	Max:0.7 Min:0.05	Max:100 Min:10	1.5	220
2LA200-20	3/4"	20.0	9.50	170.0	723				
2LA250-25	1"	25.0	12.50	220.0	1027				
2LA320-32	1 1/4"	35.0	23.00	420.0	2262				
2LA400-40	1 1/2"	40.0	31.00	560.0	2642				
2LA500-50	2"	50.0	49.00	880.0	3509				

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

[Note2] The weight in the table is the terminal valve's weight, 2LA150~250 series grommet valve's weight is 10g less than terminal's. 2LA320~500 series 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)		
2LA150	CDA110H	AC	50	± 15%	Terminal (CDA)	10.0VA	Class H	50		
			60			8.0VA		45		
2LA200	CLA110H	DC	-	± 10%		6.5W		50		
2LA250			25.0VA			65				
2LA320	CDA160H	AC	50	± 15%		Grommet (CLA)		22.0VA	Class H	60
2LA400			60					12.0W		65
2LA500	CLA160H	DC	-	± 10%	12.0W		50			

### Valve's specification

Acting	Internally piloted				
Initial state	Normally closed				
Adaptable fluid	Steam, High temperature Water, Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature (°C)		Oil	Water	Steam	Ambient
	Max.	150	150	183	100
	Min.	-10 [Note1]	1	-	-20

[Note1] 50CST or less.

### Ordering code

#### Ordering code of valves

2LA 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
2LA: 2/2 way internally piloted and normally closed	150: Φ15mm	15: 1/2"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet [Note]	Blank: PT G: G T: NPT
	200: Φ20mm	20: 3/4"			
	250: Φ25mm	25: 1"			
	320: Φ35mm	32: 1 1/4"			
	400: Φ40mm	40: 1 1/2"			
	500: Φ50mm	50: 2"			

#### Ordering code of accessories

Ordering code of accessories is the same as 2WA series valve's, please refer to P21 for details of ordering code.

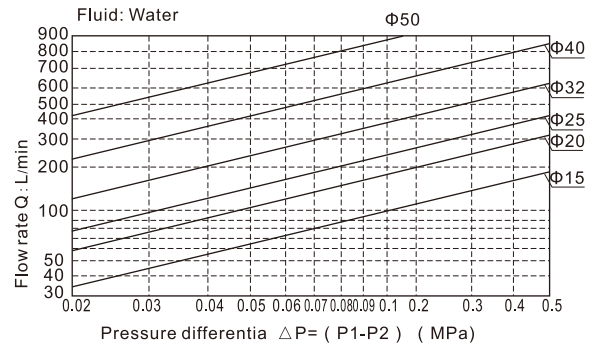
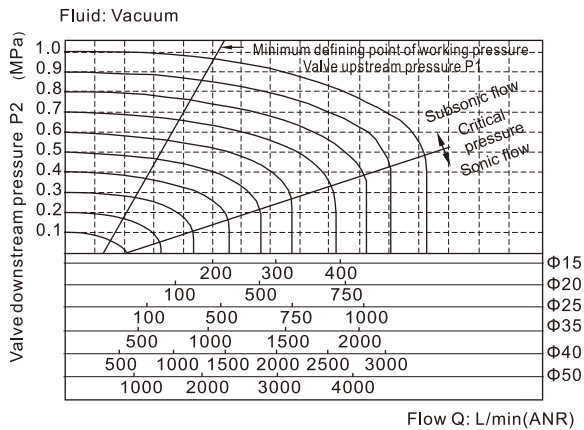
[Note] 320\400\500 series valves do not have mounting accessories.

[Note] The wire length is 0.5m.

# Fluid control valve(2/2 way)

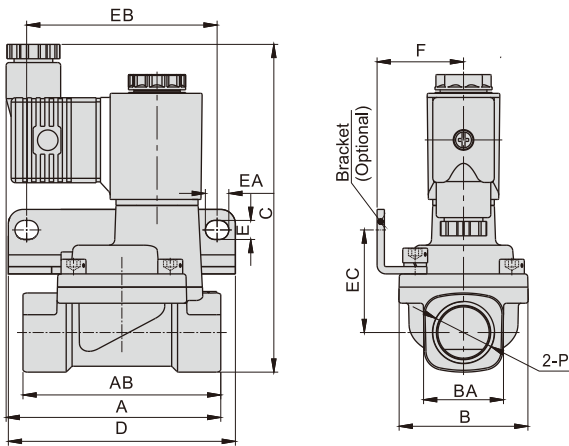
## 2LA Series (Internally piloted and normally closed)

### Flow chart

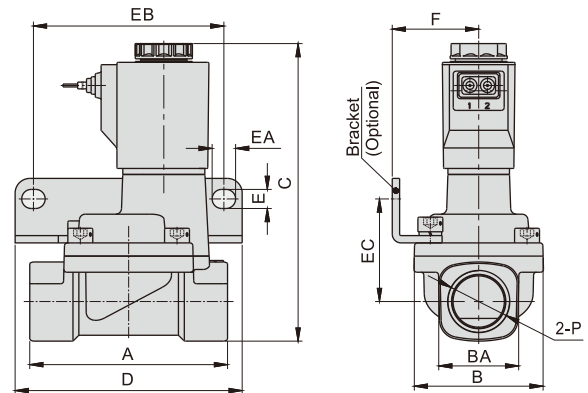


### Dimensions

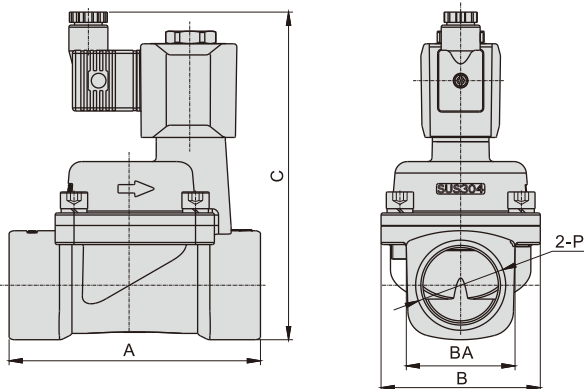
#### 2LA150~250(Terminal)



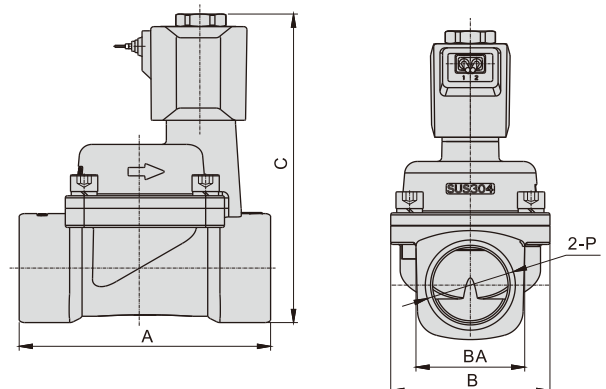
#### 2LA150~250(Grommet)



#### 2LA320~500(Terminal)



#### 2LA320~500(Grommet)



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2LA150-15	73.5	67.5	44	27.5	112	77.5	6.5	8	65	35	29.5	1/2"
2LA200-20	75.5	79.5	51	33.5	119	87.5	6.5	8	75	38	33	3/4"
2LA250-25	77.5	90	57	40.5	126	93	6.5	8	80	42	35	1"
2LA320-32	120	-	76	52	156	-	-	-	-	-	-	1 1/4"
2LA400-40	126	-	86	58	166	-	-	-	-	-	-	1 1/2"
2LA500-50	144	-	96	70	177	-	-	-	-	-	-	2"

Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2LA150-15	67.5	44	27.5	102	77.5	6.5	8	65	35	29.5	1/2"
2LA200-20	79.5	51	33.5	109	87.5	6.5	8	75	38	33	3/4"
2LA250-25	90	57	40.5	116	93	6.5	8	80	42	35	1"
2LA320-32	120	76	52	147	-	-	-	-	-	-	1 1/4"
2LA400-40	126	86	58	155	-	-	-	-	-	-	1 1/2"
2LA500-50	144	96	70	170	-	-	-	-	-	-	2"