

# Fluid control valve(2/2 way)

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



### Specification

Type\Item	Port size <sup>①</sup>	Orifice size (Φ mm)	Cv	Valid area or section(mm <sup>2</sup> )	Weight <sup>②</sup> (g)	Max.operating pressure differentia MPa	psi	Proof pressure MPa	psi
2LH030	-06 1/8"	2.0	0.18	3.0	300	2.0	300	3.0	450
	-08 1/4"				290				
2L030	-06 1/8"	3.0	0.33	6.0	300	1.0	150	3.0	450
	-08 1/4"				290				
2LH050	-10 3/8"	4.0	0.55	10.0	600	2.0	300	3.0	450
	-15 1/2"				590				
2L050	-10 3/8"	5.0	0.83	15.0	600	1.0	150	3.0	450
	-15 1/2"				590				

① PT thread, NPT thread and G thread are available.

② The weight in the table is the terminal valve's weight, 2L030 series grogmet valve's weight is 10g less than terminal's. 2L050series grogmet valve's weight is 20g less than terminal's.

### 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 grogmet or terminal electrical entry .

### Valve's specification

Acting	Direct acting				
Initial stats	Normally closed				
Adaptable fluid <sup>①</sup>	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 <sup>②</sup>	1	-	-	-20

① Note: Please refer to P125 for detail of other's fluid.

② Note: 50CST or less.

### Inner structure

**2L030(Terminal)**

No.	Item	No.	Item	No.	Item
1	Body	6	Fixed cap	11	E Clip
2	Airtight ring	7	Fixed plate	12	Connector
3	Spring	8	Movable core	13	Bead flange
4	Spring	9	Coil assembly	14	Screw
5	O-ring	10	Washer		

### Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2L□030	CDA116 CLA116	AC	50	± 15%	Terminal (CDA)	10.0VA	Class H	35
			60			8.0VA		30
		DC	-	± 10%		6.5W		30
2L□050	CDA170 CLA170	AC	50	± 15%	Grogmet (CLA)	25.0VA	Class H	60
			60			22.0VA		55
		DC	-	± 10%		10.5W		40

### Ordering code

**2L H 030 08 A □ P**

- Model**: 2L: 2/2 way direct-acting and normally closed
- Pressure condition**: H: High pressure, Blank: Standard
- Size series**: 030: 030 Series, 050: 050 Series
- Port size**: 030 Series: 06: 1/8", 08: 1/4"; 050 Series: 10: 3/8", 15: 1/2"
- Thread type**: P: PT, T: NPT, G: G
- Electrical entry**: Blank: Terminal, I: Grogmet
- Voltage**: A: AC220V, B: DC24V, C: AC110V, E: AC24V, F: DC12V

### Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P100 for details of ordering code.

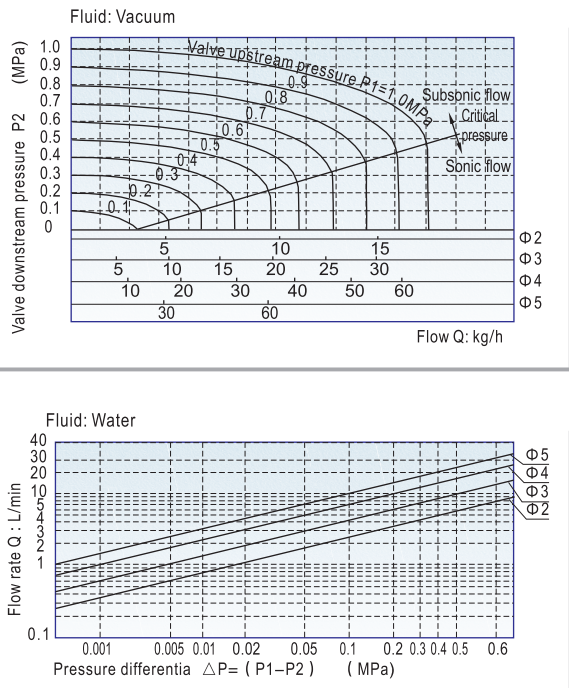


# Fluid control valve(2/2 way)

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



### Flow chart



### Dimensions

#### 2L□030(Terminal)

#### 2L□050(Terminal)

Type\Item	A	B	C	C1	D	E	F	G	H	I	J	K	L	M
2L□030-06	52.5	70.7	10	10	40	1/8"	43.3	M5	29.3	20.2	16	40	5.3	49
2L□030-08	52.5	70.7	10	10	40	1/4"	43.3	M5	29.3	20.2	16	40	5.3	49
2L□050-10	62.7	87	13	10	52	3/8"	51.2	M5	39	26	23	48	5.3	56
2L□050-15	62.7	87	13	10	52	1/2"	51.2	M5	39	26	23	48	5.3	56

#### 2L□030(Grommet)

#### 2L□050(Grommet)

Type\Item	A	B	C	C1	D	E	G	H	I	J	K	L	M
2L□030-06	26	70.7	10	10	40	1/8"	M5	29.3	20.2	16	40	5.3	49
2L□030-08	26	70.7	10	10	40	1/4"	M5	29.3	20.2	16	40	5.3	49
2L□050-10	39	87	13	10	52	3/8"	M5	39	26	23	48	5.3	56
2L□050-15	39	87	13	10	52	1/2"	M5	39	26	23	48	5.3	56



# Fluid control valve(2/2 way)

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



2L

### Specification

Type\Item	Port size①	Orifice size (Φmm)	Cv	Valid area or section(mm²)	Weight ② (g)	Max.operating pressure differentia		Proof pressure	
						MPa	psi	MPa	psi
2L150-15	1/2"	15.0	5.50	100.0	675	Max:1.0 Min:0.05	Max:150 Min:10	1.5	220
2L200-20	3/4"	20.0	9.50	170.0	875				
2L250-25	1"	25.0	12.50	220.0	1120				
2L320-32	1 1/4"	35.0	23.00	420.0	2700				
2L400-40	1 1/2"	40.0	31.00	560.0	3250				
2L500-50	2"	50.0	49.00	880.0	4300				

① PT thread, NPT thread and G thread are available.

② The weight in the table is the terminal valve's weight, 2L150~250series grommet valve's weight is 10g less than terminal's. 2L320~500series grommet valve's weight is 20g less than terminal's.

### 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.

### Valve's specification

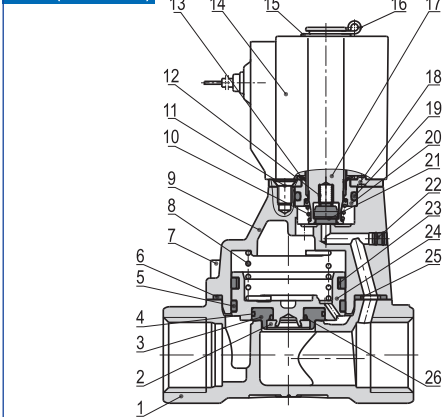
Acting	Internally piloted				
Initial stats	Normally closed				
Adaptable fluid ①	Steam, High temperature Water, Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature(°C)		Oil	Water	Steam	Ambient
	Max.	150	150	183	100
	Min.	-10②	1	-	-20

① Note: Please refer to P125 for detail of other's fluid;

② Note: 50CST or less.

### Inner structure

2L150(Grommet)



No.	Item	No.	Item	No.	Item
1	Body	10	Spring	19	O-ring
2	Fixed ring	11	Screw	20	Fixed plate
3	Airtight bush	12	Spring	21	Airtight ring
4	O-ring	13	Bead flange	22	Spring
5	Wear ring	14	Coil assembly	23	Plug
6	Screw	15	Washer	24	Piston
7	Gasket	16	E Clip	25	Bushing
8	Spring	17	Movable core	26	O-ring
9	Cover	18	Fixed plate		

### Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2L150	CDA116	AC	50	± 15%	Terminal (CDA)	10.0VA	Class H	35
2L200			60			8.0VA		30
2L250		DC	-	± 10%		6.5W		30
2L320	CDA170	AC	50	± 15%	Grommet (CLA)	25.0VA	Class H	60
2L400			60			22.0VA		55
2L500		DC	-	± 10%		10.5W		40

### Ordering code

**2L 150 15 A □ P**

- Model**: 2L: 2/2 way internally piloted and normally closed
- Orifice size**:
  - 150: Φ15mm
  - 200: Φ20mm
  - 250: Φ25mm
  - 320: Φ32mm
  - 400: Φ40mm
  - 500: Φ50mm
- Port size**:
 

Orifice series	Port size
150: Φ15mm	15: 1/2"
200: Φ20mm	20: 3/4"
250: Φ25mm	25: 1"
320: Φ32mm	32: 1 1/4"
400: Φ40mm	40: 1 1/2"
500: Φ50mm	50: 2"
- Thread type**:
  - P: PT
  - T: NPT
  - G: G
- Electrical entry**:
  - Blank: Terminal
  - I: Grommet
- Voltage**:
  - A: AC220V
  - B: DC24V
  - C: AC110V
  - E: AC24V
  - F: DC12V

### Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P102 for details of ordering code.

Note: ⚠ 320\400\500 series valves do not have mounting accessories.

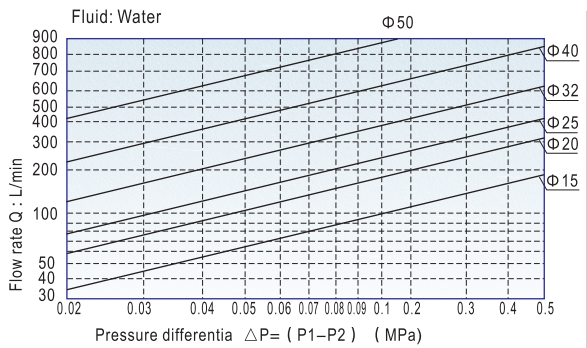
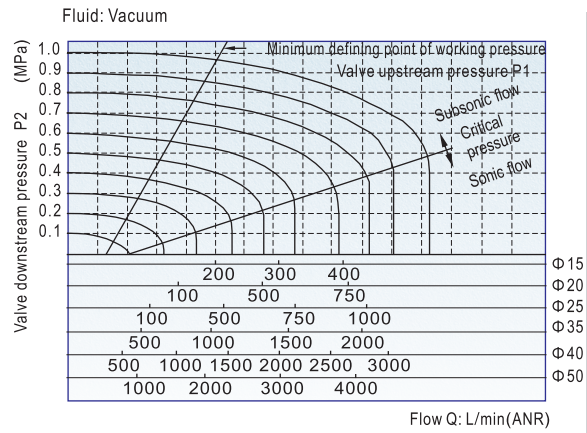


# Fluid control valve(2/2 way)



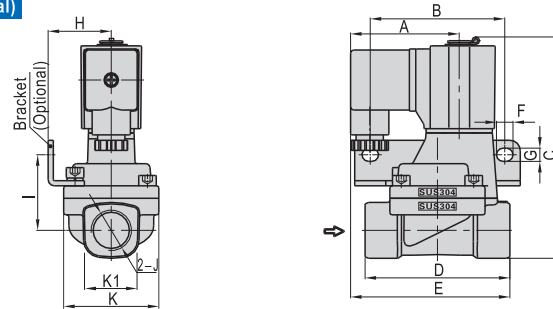
## 2L Series (Internally piloted and normally closed)

### Flow chart

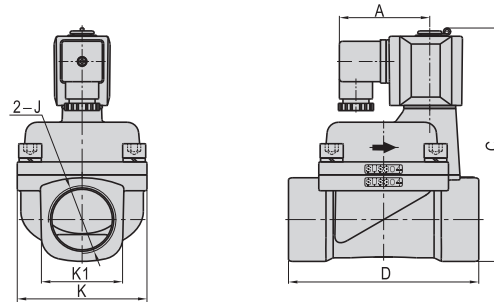


### Dimensions

#### 2L150~250(Terminal)

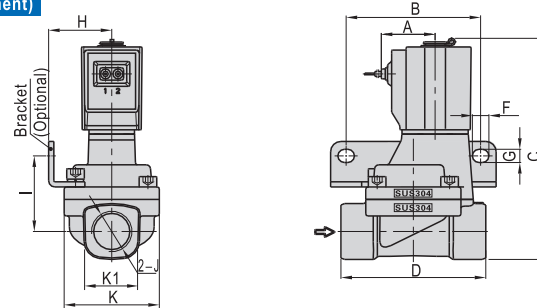


#### 2L320~500(Terminal)

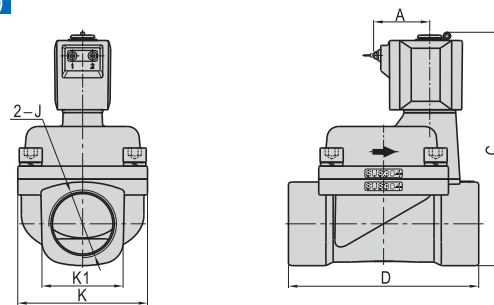


Type\Item	A	B	C	D	E	F	G	H	I	J	K	K1
2L150-15	52.5	65	107	70	77	8	6.4	30.5	36.5	1/2"	46	27.5
2L200-20	52.5	75	115.4	82	78.5	8	6.4	34	40	3/4"	53	33.5
2L250-25	52.5	80	124	92	81	8	6.4	36	44.5	1"	59	40.5
2L320-32	62.7	-	154.3	125	-	-	-	-	-	1 1/4"	80	52
2L400-40	62.7	-	161.8	132	-	-	-	-	-	1 1/2"	90	58
2L500-50	62.7	-	176.8	150	-	-	-	-	-	2"	100	70

#### 2L150~250(Grommet)



#### 2L320~500(Grommet)



Type\Item	A	B	C	D	F	G	H	I	J	K	K1
2L150-15	26	65	107	70	8	6.4	30.5	36.5	1/2"	46	27.5
2L200-20	26	75	115.4	82	8	6.4	34	40	3/4"	53	33.5
2L250-25	26	80	124	92	8	6.4	36	44.5	1"	59	40.5
2L320-32	38.8	-	154.3	125	-	-	-	-	1 1/4"	80	52
2L400-40	38.8	-	161.8	132	-	-	-	-	1 1/2"	90	58
2L500-50	38.8	-	176.8	150	-	-	-	-	2"	100	70



2L

