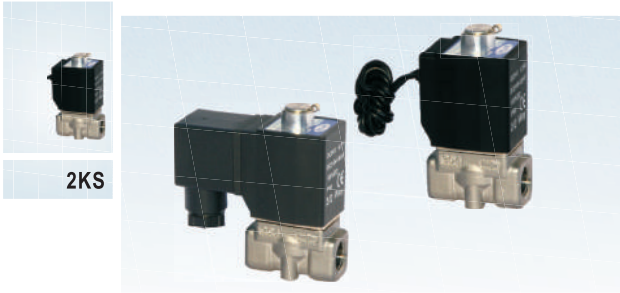


# Fluid control valve(2/2way)

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



2KS

### 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 SUS304 . 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 .

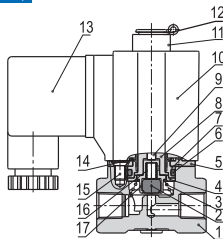
### Valve's specification

Acting		Direct acting				
Initial stats		Normally closed				
Adaptable fluid ①		Air, Water, Oil				
Viscosity limit		Under 20CST				
Ambient and fluid temperature(°C)	Max.	Water 80	Air 90	Oil 80	Ambient 70	
	Min.	1	-20 ②	-10 ③	-20	

- ① Note: Please refer to P125 for detail of other's fluid.  
 ② Note: Dew point: -20(°C) or less. ③ Note: 50CST or less.

### Inner structure

2KS030(Terminal)



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

### Specification

Type\Item	Port size ①	Orifice size (Φmm)	Cv	Valid area or section(mm²)	Weight ② (g)	Max. operating pressure differentia		Proof pressure	
						MPa	psi	MPa	psi
2KSX030	-06 1/8"	1.5	0.10	1.8	305	2.0	300	3.0	450
	-08 1/4"				295				
2KSH030	-06 1/8"	2.0	0.18	3.0	305	1.5	220		
	-08 1/4"				295				
2KS030	-06 1/8"	3.0	0.33	6.0	305	0.7	100		
	-08 1/4"				295				
2KSL030	-06 1/8"	4.0	0.55	10.0	305	0.4	60		
	-08 1/4"				295				
2KSX050	-10 3/8"	3.0	0.34	6.1	610	2.0	300		
	-15 1/2"				600				
2KSH050	-10 3/8"	4.0	0.55	10.0	610	1.5	220		
	-15 1/2"				600				
2KS050	-10 3/8"	5.0	0.83	15.0	610	0.7	100		
	-15 1/2"				600				
2KSL050	-10 3/8"	7.0	1.40	25.0	610	0.4	60		
	-15 1/2"				600				

- ① PT thread, NPT thread and G thread are available.  
 ② The weight in the table is the terminal valve's weight, 2KS030 series grommet valve's weight is 10g less than terminal's. 2KS050series 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)
2KS□030	CDA116 CLA116	AC	50	± 15%	(Terminal) (CDA)	15.0VA	Class B	50
			60			11.0VA		40
		DC	-	± 10%		6.5W		30
2KS□050	CDA170 CLA170	AC	50	± 15%	(Grommet) (CLA)	35.0VA	Class B	65
			60			30.0VA		60
		DC	-	± 10%		10.5W		40

### Ordering code

**2KS H 030 08 A □ P**

- Model**  
2KS: 2/2 way direct-acting and normally opened
- Pressure condition**  
X: Extra high pressure  
H: High pressure  
Blank: Standard  
L: Large volume
- Size series**  
030: 030 Series  
050: 050 Series
- Port size**  
Size 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: 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 P100 for details of ordering code.

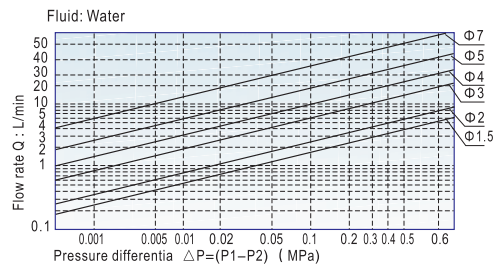
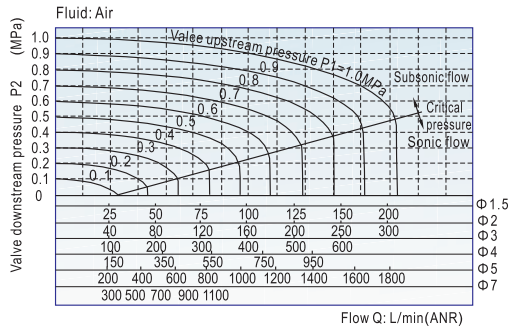


# Fluid control valve(2/2way)



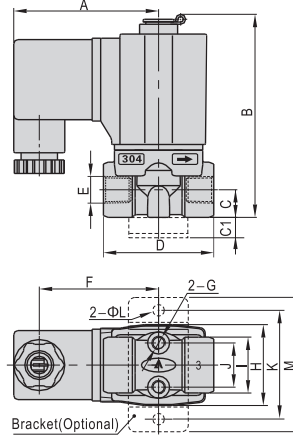
## 2KS Series (Direct-acting and normally opened)

### Flow Chart

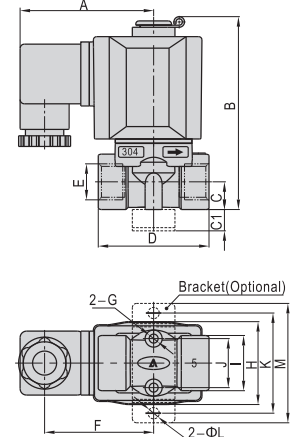


### Dimensions

#### 2KS□030(Terminal)

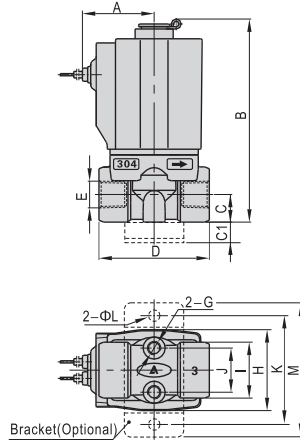


#### 2KS□050(Terminal)

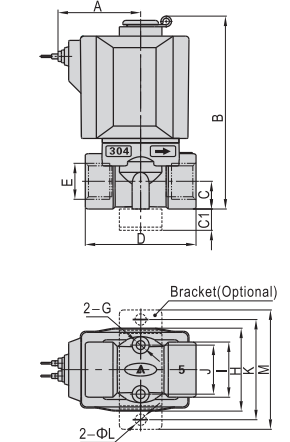


Type\Item	A	B	C	C1	D	E	F	G	H	I	J	K	L	M
2KS□030-06	52.5	76	10	10	40	1/8"	43.3	M5	29.3	20.2	16	40	5.3	49
2KS□030-08	52.5	76	10	10	40	1/4"	43.3	M5	29.3	20.2	16	40	5.3	49
2KS□050-10	62.7	92	13	10	52	3/8"	51.2	M5	39	26	23	48	5.3	56
2KS□050-15	62.7	92	13	10	52	1/2"	51.2	M5	39	26	23	48	5.3	56

#### 2KS□030(Grommet)



#### 2KS□050(Grommet)



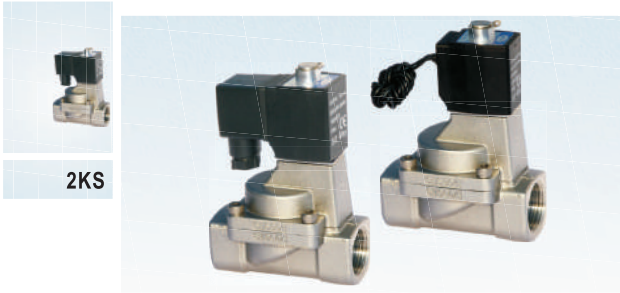
Type\Item	A	B	C	C1	D	E	G	H	I	J	K	L	M
2KS□030-06	26	76	10	10	40	1/8"	M5	29.3	20.2	16	40	5.3	49
2KS□030-08	26	76	10	10	40	1/4"	M5	29.3	20.2	16	40	5.3	49
2KS□050-10	39	92	13	10	52	3/8"	M5	39	26	23	48	5.3	56
2KS□050-15	39	92	13	10	52	1/2"	M5	39	26	23	48	5.3	56



# Fluid control valve(2/2way)



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



### Specification

Type\Item	Port size <sup>①</sup>	Orifice size (Φmm)	Cv	Valid area or section(mm <sup>2</sup> )	Weight (g)	Max. operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2KS150-15	1/2"	15.0	5.50	100.0	680	Max:0.7 Min:0.05	Max:100 Min:10	1.5	220
2KS200-20	3/4"	20.0	9.50	170.0	880				
2KS250-25	1"	25.0	12.50	220.0	1125				
2KS320-32	1 1/4"	35.0	23.00	420.0	2710				
2KS400-40	1 1/2"	40.0	31.00	560.0	3260				
2KS500-50	2"	50.0	49.00	880.0	4310				

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

② The weight in the table is the terminal valve's weight, 2S150-250 series grommet valve's weight is 10g less than terminal's. 2S320-5000series grommet valve's weight is 20g 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 SUS304. 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.

### Valve's specification

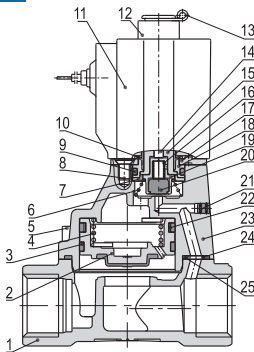
Acting	Internally piloted				
Initial state	Normally opened				
Adaptable fluid ①	Air, Water, Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature(°C)		Water	Air	Oil	Ambient
	Max.	80	90	80	70
	Min.	1	-20 ②	-10 ③	-20

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

② Note: Dew point: -20(°C) or less. ③ Note: 50CST or less.

### Inner structure

#### 2KS150(Grommet)



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

### Coil specification

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2KS150	CDA116 CLA116	AC	50	± 15%	(Terminal) (CDA)	15.0VA	Class B	50
2KS200			60			11.0VA		40
2KS250		DC	—			± 10%		6.5W
2KS320	CDA170 CLA170	AC	50	± 15%	(Grommet) (CLA)	35.0VA		65
2KS400			60			± 10%		30.0VA
2KS500		DC	—			± 10%	10.5W	40

### Ordering code

**2KS 150 15 A □ P**

- Model**: 2KS: 2/2 way internally piloted and normally opened
- Orifice size**:
  - 150: Φ 15mm
  - 200: Φ 20mm
  - 250: Φ 25mm
  - 320: Φ 32mm
  - 400: Φ 40mm
  - 500: Φ 50mm
- Port size**:
 

Orifice series	Port size
150: Φ 15mm	15: 1/2"
200: Φ 20mm	20: 3/4"
250: Φ 25mm	25: 1"
320: Φ 32mm	32: 1 1/4"
400: Φ 40mm	40: 1 1/2"
500: Φ 50mm	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.

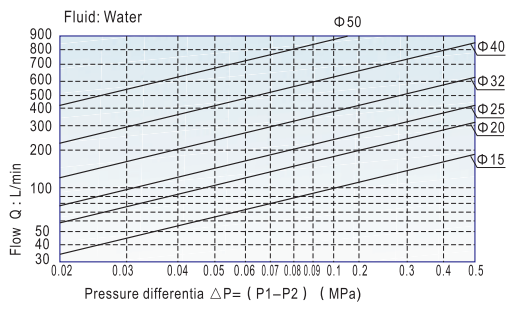
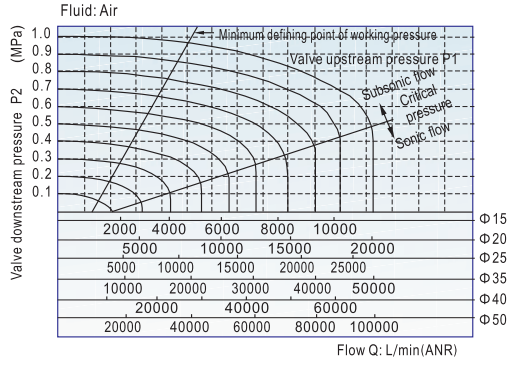


# Fluid control valve(2/2way)



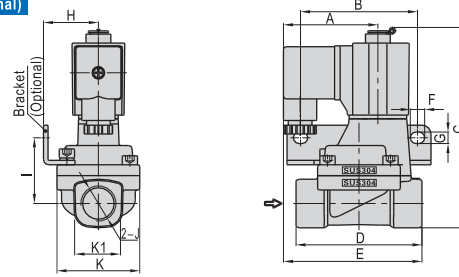
## 2KS Series (Internally piloted and normally opened)

### Flow chart

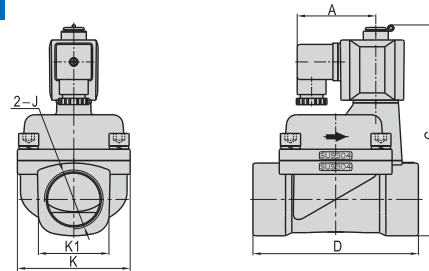


### Dimensions

#### 2KS150-250(Terminal)

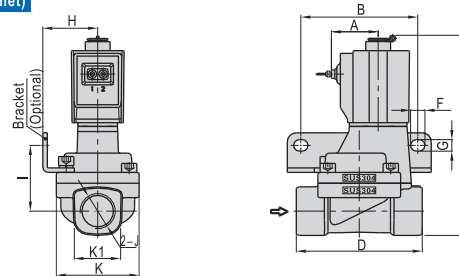


#### 2KS320-500(Terminal)

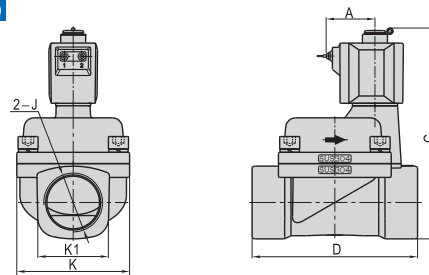


Type\Item	A	B	C	D	E	F	G	H	I	J	K	K1
2KS150-15	52.5	65	112.3	70	77	8	6.4	30.5	36.5	1/2"	46	27.5
2KS200-20	52.5	75	120.8	82	78.5	8	6.4	34	40	3/4"	53	33.5
2KS250-25	52.5	80	129.3	92	81	8	6.4	36	44.5	1"	59	40.5
2KS320-32	62.7	-	159.6	125	-	-	-	-	-	1 1/4"	80	52
2KS400-40	62.7	-	167.1	132	-	-	-	-	-	1 1/2"	90	58
2KS500-50	62.7	-	182.1	150	-	-	-	-	-	2"	100	70

#### 2KS150-250(Grommet)



#### 2KS320-500(Grommet)



Type\Item	A	B	C	D	F	G	H	I	J	K	K1
2KS150-15	26	65	112.3	70	8	6.4	30.5	36.5	1/2"	46	27.5
2KS200-20	26	75	120.8	82	8	6.4	34	40	3/4"	53	33.5
2KS250-25	26	80	129.3	92	8	6.4	36	44.5	1"	59	40.5
2KS320-32	38.8	-	159.6	125	-	-	-	-	1 1/4"	80	52
2KS400-40	38.8	-	167.1	132	-	-	-	-	1 1/2"	90	58
2KS500-50	38.8	-	182.1	150	-	-	-	-	2"	100	70

