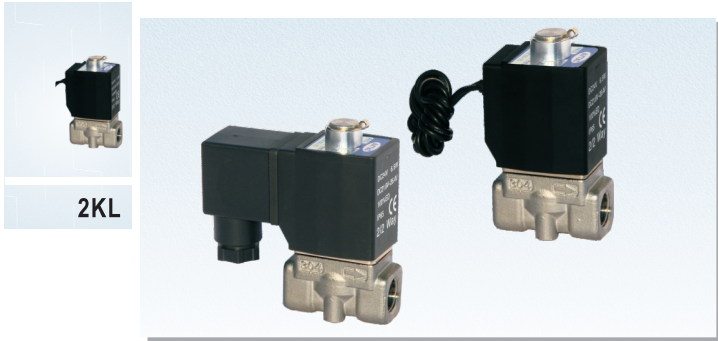


Fluid control valve(2/2 way)

2KL Series (Direct-acting and normally opened)



2KL

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 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.

Valve's specification

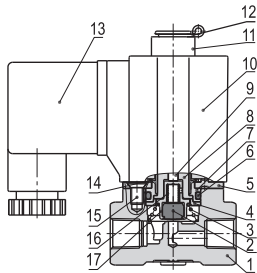
Acting		Direct acting			
Initial stats		Normally opened			
Adaptable fluid ①		Steam, High temperature Water, Oil			
Viscosity limit		Under 20CST			
Ambient and fluid temperature(°C)		Oil	Water	Steam	Ambient
	Max.	150	150	183	100
	Min.	-10②	1	-	-20

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

② Note: 50CST or less.

Inner structure

2KL030(Terminal)



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

Specification

Type\Item	Port size①	Orifice size (Φ mm)	Cv	Valid area or section(mm ²)	Weight (g)	Max.operating pressure differentia	Proof pressure
						MPa	psi
2KLH030	-06	1/8"	2.0	3.0	305	1.5	220
	-08	1/4"			295		
2KL030	-06	1/8"	3.0	6.0	305	0.7	100
	-08	1/4"			295		
2KLH050	-10	3/8"	4.0	10.0	610	1.5	220
	-15	1/2"			600		
2KL050	-10	3/8"	5.0	15.0	610	0.7	100
	-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, 2KL030 series grommet valve's weight is 10g less than terminal's. 2KL050series 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)
2KL□030	CDA116 CLA116	AC	50	± 15%	Terminal (CDA)	15.0VA	Class H	50
			60			11.0VA		40
		DC	-	± 10%		6.5W		30
2KL□050	CDA170 CLA170	AC	50	± 15%	Grommet (CLA)	35.0VA	Class H	65
			60			30.0VA		60
		DC	-	± 10%		10.5W		40

Ordering code

2KL H 030 08 A □ P

- Model**: 2KL: 2/2 way direct-acting and normally opened
- Pressure condition**: H: High pressure, Blank: Standard
- 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.

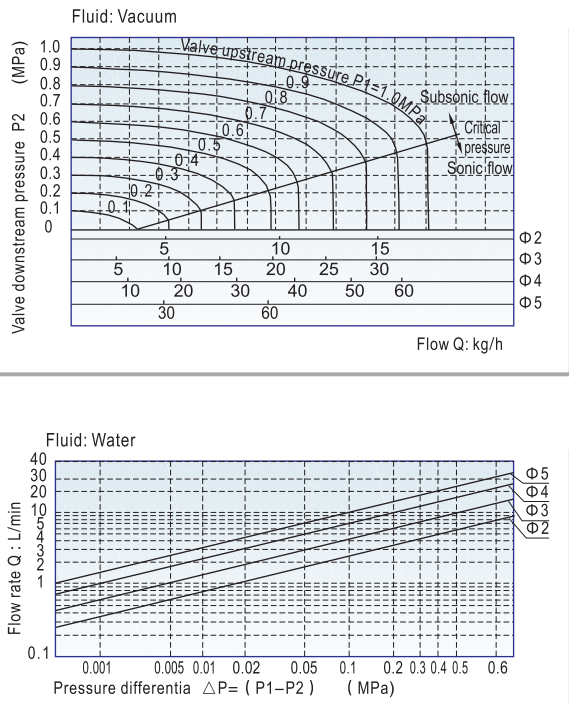


Fluid control valve(2/2 way)

2KL Series (Direct-acting and normally opened)

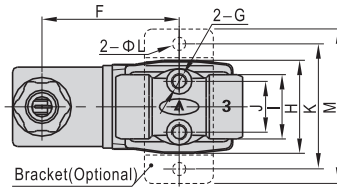
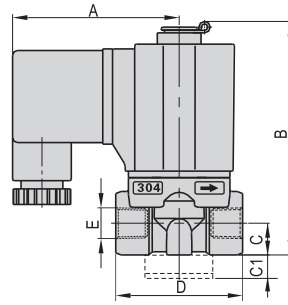


Flow chart

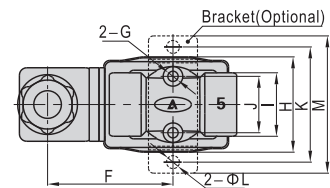
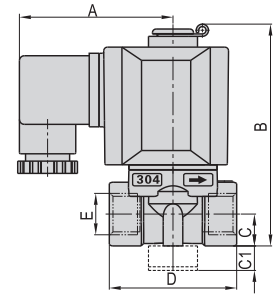


Dimensions

2KL□030(Terminal)

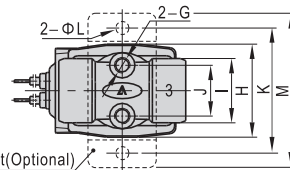
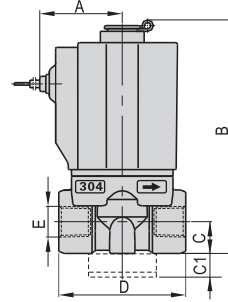


2KL□050(Terminal)

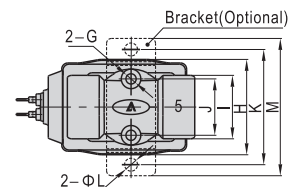
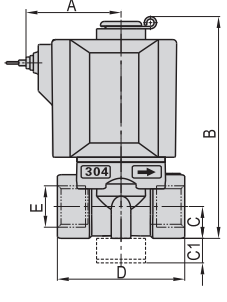


Type\Item	A	B	C	C1	D	E	F	G	H	I	J	K	L	M
2KL□030-06	52.5	76	10	10	40	1/8"	43.3	M5	29.3	20.2	16	40	5.3	49
2KL□030-08	52.5	76	10	10	40	1/4"	43.3	M5	29.3	20.2	16	40	5.3	49
2KL□050-10	62.7	92	13	10	52	3/8"	51.2	M5	39	26	23	48	5.3	56
2KL□050-15	62.7	92	13	10	52	1/2"	51.2	M5	39	26	23	48	5.3	56

2KL□030(Grommet)



2KL□050(Grommet)



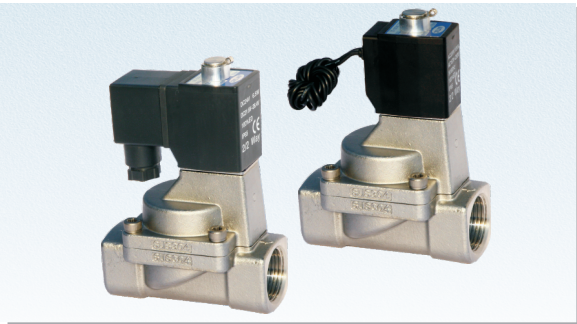
Type\Item	A	B	C	C1	D	E	G	H	I	J	K	L	M
2KL□030-06	26	76	10	10	40	1/8"	M5	29.3	20.2	16	40	5.3	49
2KL□030-08	26	76	10	10	40	1/4"	M5	29.3	20.2	16	40	5.3	49
2KL□050-10	39	92	13	10	52	3/8"	M5	39	26	23	48	5.3	56
2KL□050-15	39	92	13	10	52	1/2"	M5	39	26	23	48	5.3	56



2KL

Fluid control valve(2/2 way)

2KL Series (Internally piloted and normally opened)

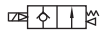


Specification

Type\Item	Port size ①	Orifice size (Φmm)	Cv	Valid area or section(mm ²)	Weight ② (g)	Max. operating pressure differential		Proof pressure	
						Mpa	psi	MPa	psi
2KL150-15	1/2"	15.0	5.50	100.0	675	Max:0.7 Min:0.05	Max:100 Min:10	1.5	220
2KL200-20	3/4"	20.0	9.50	170.0	880				
2KL250-25	1"	25.0	12.50	220.0	1125				
2KL320-32	1 1/4"	35.0	23.00	420.0	2710				
2KL400-40	1 1/2"	40.0	31.00	560.0	3260				
2KL500-50	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, 2KL150~250 series grommet valve's weight is 10g less than terminal's. 2KL320~500series 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 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.

Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2KL150	CDA116	AC	50	± 15%	Terminal (CDA) Grommet (CLA)	15.0VA	Class H	50
			60			11.0VA		40
2KL200 2KL250	CLA116	DC	-	± 10%		6.5W		30
			50	± 15%		35.0VA		65
2KL320 2KL400 2KL500	CDA170 CLA170	AC	60	± 15%	30.0VA	60		
			-	± 10%	10.5W	40		

Ordering code

2KL 150 15 A □ P

- Model**: 2KL: 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
- 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
- Port size**:

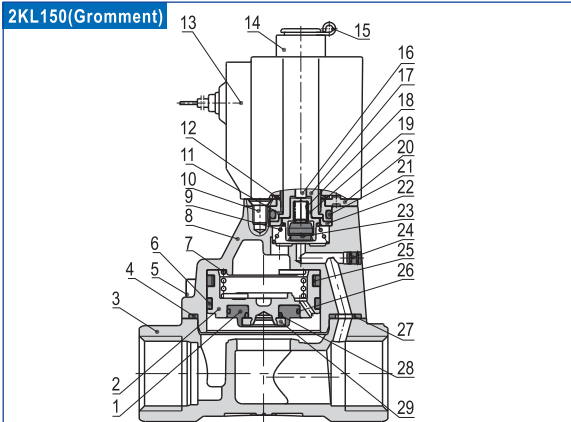
Orifice series	Port size
150: Φ 15mm	15: 1/2"
200: Φ 20mm	20: 3/4"
250: Φ 25mm	25: 1"
320: Φ 32mm	32: 1 1/4"
400: Φ 40mm	40: 1 1/2"
500: Φ 50mm	50: 2"

Valve's specification

Acting	Internally piloted				
Initial stats	Normally opened				
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



No.	Item	No.	Item	No.	Item
1	Gasket	11	Fixed cap	21	O-ring
2	Piston	12	Bead flange	22	Fixed ring
3	Body	13	Coil assembly	23	Airtight ring
4	Gasket	14	Position ring	24	Plug
5	Screw	15	E Clip	25	Spring
6	Wear ring	16	Man drill	26	O-ring
7	Spring	17	Electromagnet	27	Bush
8	Cover	18	Spring	28	O-ring
9	Spring	19	Airtight bush	29	Fixed ring
10	Screw	20	Fixed plate		

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.

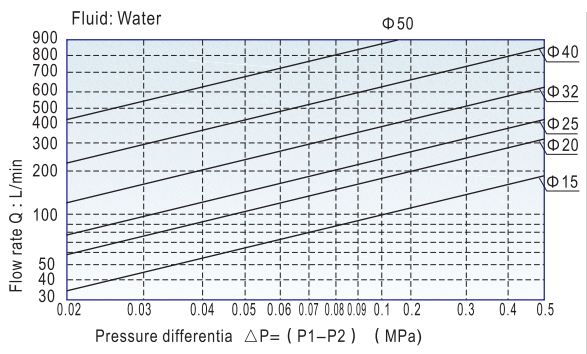
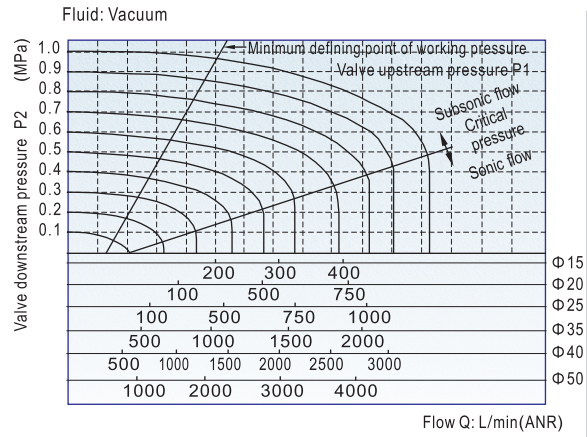


Fluid control valve(2/2 way)

2KL Series (Internally piloted and normally opened)

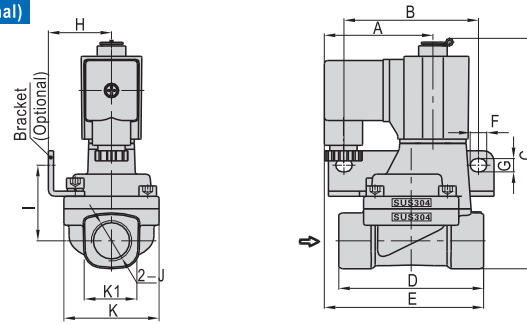


Flow chart

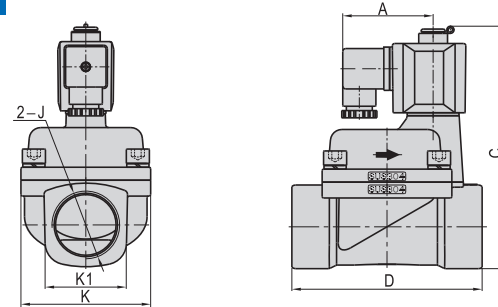


Dimensions

2KL150~250(Terminal)

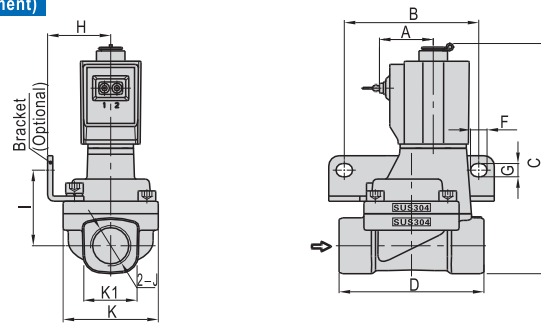


2KL320~500(Terminal)

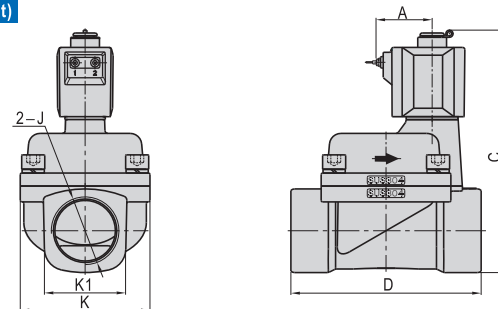


Type\Item	A	B	C	D	E	F	G	H	I	J	K	K1
2KL150-15	52.5	65	112.3	70	77	8	6.4	30.5	36.5	1/2"	46	27.5
2KL200-20	52.5	75	120.8	82	78.5	8	6.4	34	40	3/4"	53	33.5
2KL250-25	52.5	80	129.3	92	81	8	6.4	36	44.5	1"	59	40.5
2KL320-32	62.7	-	159.6	125	-	-	-	-	-	1 1/4"	80	52
2KL400-40	62.7	-	167.1	132	-	-	-	-	-	1 1/2"	90	58
2KL500-50	62.7	-	182.1	150	-	-	-	-	-	2"	100	70

2KL150~250(Grommet)



2KL320~500(Grommet)



Type\Item	A	B	C	D	F	G	H	I	J	K	K1
2KL150-15	26	65	112.3	70	8	6.4	30.5	36.5	1/2"	46	27.5
2KL200-20	26	75	120.8	82	8	6.4	34	40	3/4"	53	33.5
2KL250-25	26	80	129.3	92	8	6.4	36	44.5	1"	59	40.5
2KL320-32	38.8	-	159.6	125	-	-	-	-	1 1/4"	80	52
2KL400-40	38.8	-	167.1	132	-	-	-	-	1 1/2"	90	58
2KL500-50	38.8	-	182.1	150	-	-	-	-	2"	100	70

