

Fluid control valve(2/2 way)

2KL Series (Internally piloted and normally opened)



2KL

Specification

Type\Item	Port size ^①	Orifice size (Φ mm)	Cv	Valid area or section(mm ²)	Weight ^② (g)	Max. operating pressure differentia		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.

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.	-10 ^②	1	-	-20

① Note: Please refer to P121 for detail of other's fluid.

② Note: 50CST or less.

Inner structure

2KL150(Grommet)

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		

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	
						11.0VA		40	
2KL200	CLA116	DC	-	± 10%		6.5W		30	
						35.0VA		65	
2KL250	CDA170	AC	50	± 15%		30.0VA		60	
						10.5W		40	
2KL400	CLA170	DC	-	± 10%					

Ordering code

2KL 150 15 A □ □

- 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**:
 - Blank: 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"

Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P98 for details of ordering code.

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

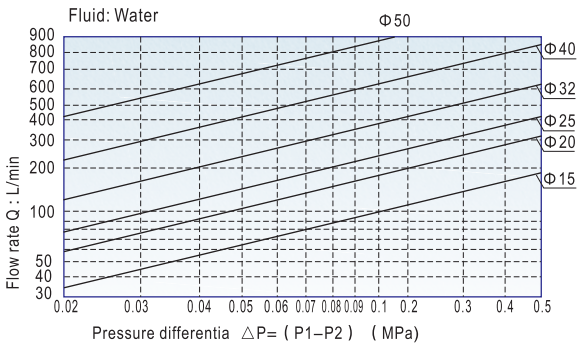
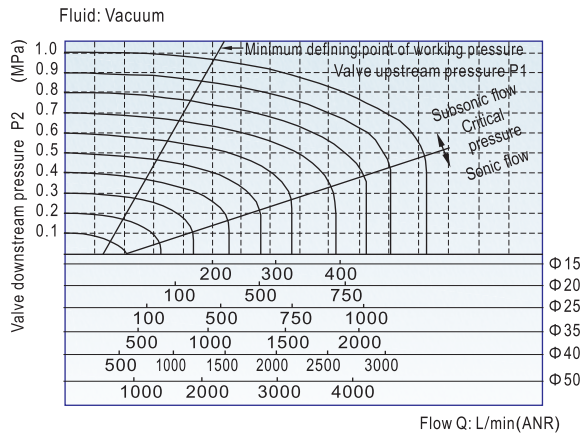


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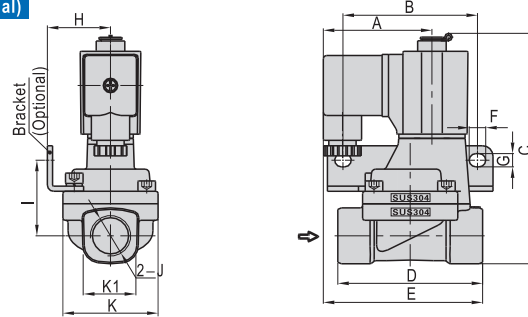


Flow chart

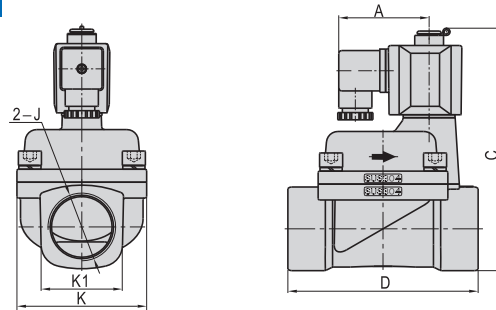


Dimensions

2KL150-250(Terminal)

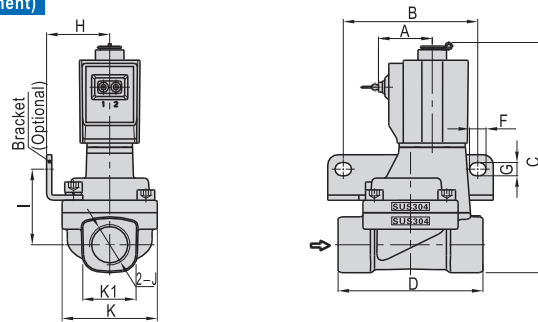


2KL320-500(Terminal)

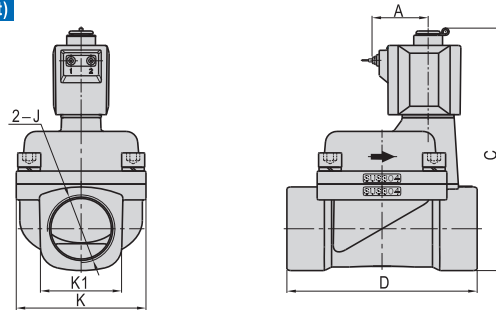


Type\Item	A	B	C	D	E	F	G	H	I	J	K	K1
2KL150-15	52.5	65	112.3	70	77	8	6.4	30.5	36.5	1/2"	46	27.5
2KL200-20	52.5	75	120.8	82	78.5	8	6.4	34	40	3/4"	53	33.5
2KL250-25	52.5	80	129.3	92	81	8	6.4	36	44.5	1"	59	40.5
2KL320-32	62.7	-	159.6	125	-	-	-	-	-	1 1/4"	80	52
2KL400-40	62.7	-	167.1	132	-	-	-	-	-	1 1/2"	90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

