

Fluid control valve(2/2 way)

2KS Series (Direct-acting and normally opened)



Symbol

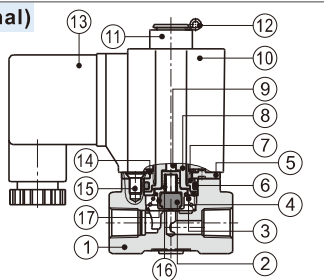


Product feature

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.

Inner structure

2KS030(Terminal)



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

Specification

Model\Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm ²)	Weight [Note2](g)	Max. operating pressure differential		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	3.0	450
	-08 1/4"				295				
2KS030	-06 1/8"	3.0	0.33	6.0	305	0.7	100	3.0	450
	-08 1/4"				295				
2KSL030	-06 1/8"	4.0	0.55	10.0	305	0.4	60	3.0	450
	-08 1/4"				295				
2KSX050	-10 3/8"	3.0	0.34	6.1	610	2.0	300	3.0	450
	-15 1/2"				600				
2KSH050	-10 3/8"	4.0	0.55	10.0	610	1.5	220	3.0	450
	-15 1/2"				600				
2KS050	-10 3/8"	5.0	0.83	15.0	610	0.7	100	3.0	450
	-15 1/2"				600				
2KSL050	-10 3/8"	7.0	1.40	25.0	610	0.4	60	3.0	450
	-15 1/2"				600				

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

[Note2] 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

Valve's specification

Acting		Direct acting				
Initial state		Normally opened				
Adaptable fluid		Air, Water, Oil				
Viscosity limit		Under 20CST				
Ambient and fluid temperature (°C)			Water	Air	Oil	Ambient
		Max.	80	90	80	70
		Min.	1	-20 [Note1]	-10 [Note2]	-20

[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

Ordering code

Ordering code of valves

2KS H 030 08 A □ □



① Model	② Pressure condition	③ Size series	④ Port size	⑤ Voltage	⑥ Electrical entry	⑦ Thread type
2KS: 2/2 way direct-acting and normally opened	X: Extra high pressure H: High pressure Blank: Standard L: Large volume	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	Blank: PT G: G T: NPT

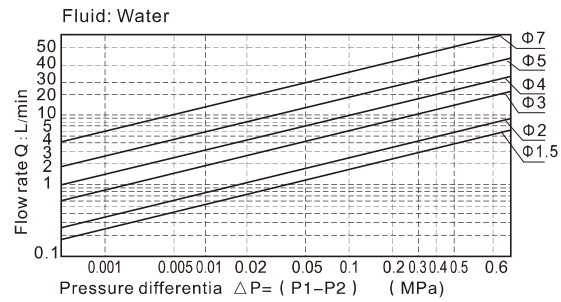
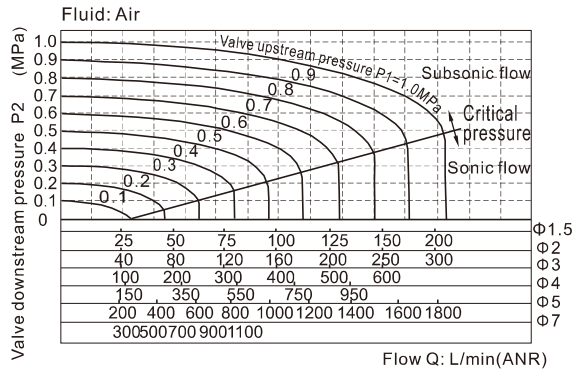
Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P148 for details of ordering code.

Fluid control valve(2/2 way)

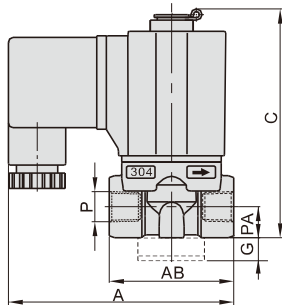
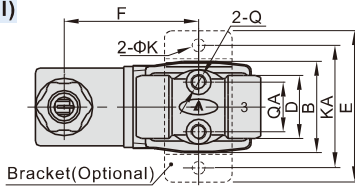
2KS Series (Direct-acting and normally opened)

Flow chart

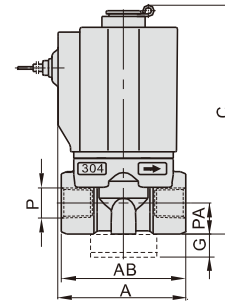
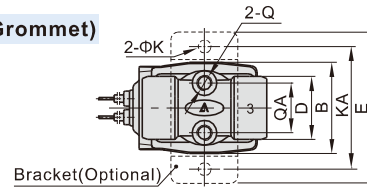


Dimensions

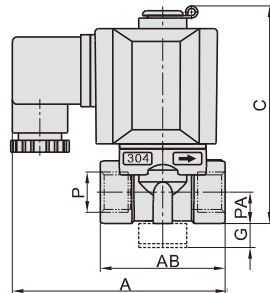
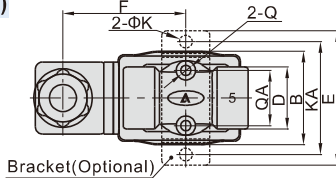
2KS□030 (Terminal)



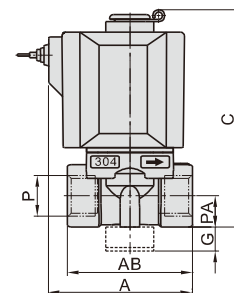
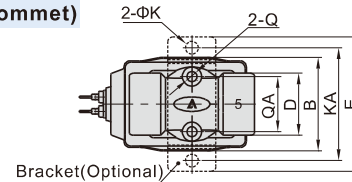
2KS□030 (Grommet)



2KS□050 (Terminal)



2KS□050 (Grommet)



Model/Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2KS□030-06	72.5	40	29.5	76	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2KS□030-08	72.5	40	29.5	76	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2KS□050-10	89.5	52	39	92	26	56	51	10	5.3	48	3/8"	13	M5	23
2KS□050-15	89.5	52	39	92	26	56	51	10	5.3	48	1/2"	13	M5	23

Model/Item	A	AB	B	C	D	E	G	K	KA	P	PA	Q	QA
2KS□030-06	41	40	29.5	76	20	49	10	5.3	40	1/8"	10	M5	16
2KS□030-08	41	40	29.5	76	20	49	10	5.3	40	1/4"	10	M5	16
2KS□050-10	60	52	39	92	26	56	10	5.3	48	3/8"	13	M5	23
2KS□050-15	60	52	39	92	26	56	10	5.3	48	1/2"	13	M5	23

Fluid control valve(2/2 way)

2KS Series (Internally piloted and normally opened)



Symbol

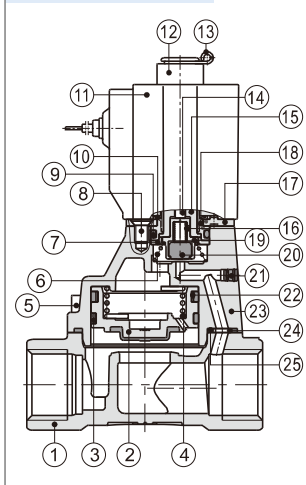


Product feature

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 .

Inner structure

2KS150(Grommet)



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

Ordering code

Ordering code of valves

2KS 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
2KS: 2/2 way internally piloted and normally opened	150: Φ15mm	15: 1/2"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet	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"				

Specification

Model\Item	Port size [Note1]	Orifice size (Φ mm)	Cv	Valid area or section (mm ²)	Weight [Note2](g)	Operating pressure differentia		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				

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

[Note2] The weight in the table is the terminal valve's weight, 2KS150~250 series grommet valve's weight is 10g less than terminal's. 2KS320~500 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)	
2KS150 2KS200 2KS250	CDA116 CLA116	AC	50	± 15%	Terminal (CDA)	15.0VA	Class B	50	
			60			11.0VA		40	
		DC	-	± 10%		6.5W		30	
2KS320 2KS400 2KS500	CDA170 CLA170	AC	50	± 15%	Grommet (CLA)	35.0VA		Class B	65
			60			30.0VA			60
		DC	-	± 10%		10.5W			40

Valve's specification

Acting	Internally piloted				
Initial state	Normally opened				
Adaptable fluid	Air, Water, Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature (°C)		Water	Air	Oil	Ambient
	Max.	80	90	80	70
	Min.	1	-20 [Note1]	-10 [Note2]	-20

[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

Ordering code of accessories

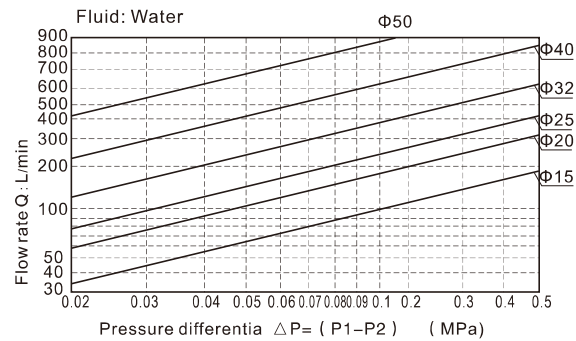
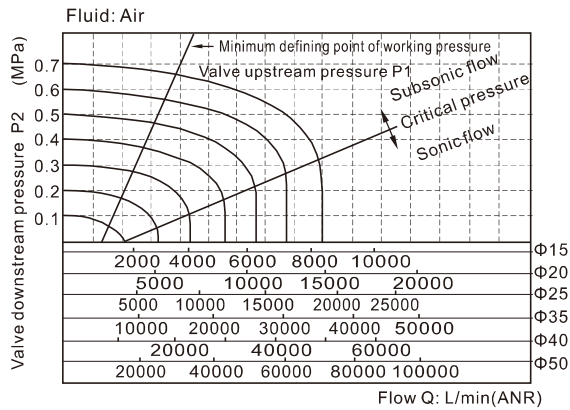
Ordering code of accessories is the same as 2S series valve's, please refer to P150 for details of ordering code.

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

Fluid control valve(2/2 way)

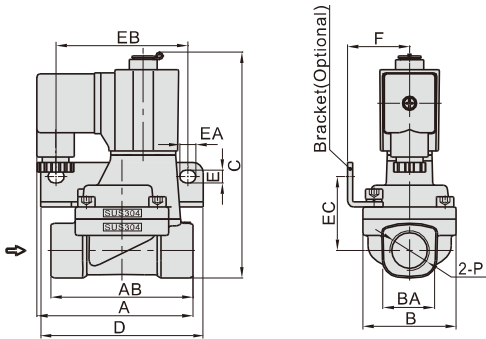
2KS Series (Internally piloted and normally opened)

Flow chart

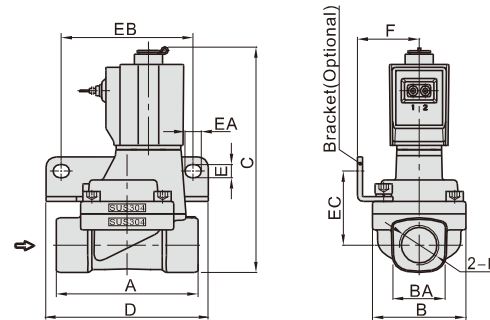


Dimensions

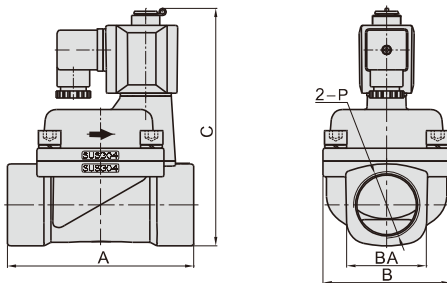
2KS150~250 (Terminal)



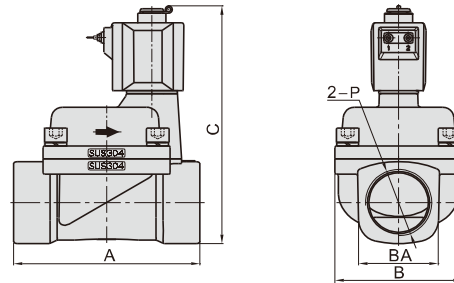
2KS150~250(Grommet)



2KS320~500 (Terminal)



2KS320~500(Grommet)



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2KS150-15	77	70	46	27.5	112.5	80	6.4	8	65	36.5	30.5	1/2"
2KS200-20	78.5	82	53	33.5	121	90	6.4	8	75	40	34	3/4"
2KS250-25	81	92	59	40.5	129.5	95	6.4	8	80	44.5	36	1
2KS320-32	125	-	80	52	160	-	-	-	-	-	-	1 1/4"
2KS400-40	132	-	90	58	167	-	-	-	-	-	-	1 1/2"
2KS500-50	150	-	100	70	182	-	-	-	-	-	-	2"

Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P	
2KS150-15	70	46	27.5	112.5	80	6.4	8	65	36.5	30.5	1/2"	
2KS200-20	82	53	33.5	121	90	6.4	8	75	40	34	3/4"	
2KS250-25	92	59	40.5	129.5	95	6.4	8	80	44.5	36	1	
2KS320-32	125	80	52	160	-	-	-	-	-	-	-	1 1/4"
2KS400-40	132	90	58	167	-	-	-	-	-	-	-	1 1/2"
2KS500-50	150	100	70	182	-	-	-	-	-	-	-	2"