

Fluid control valve(2/2 way)

AIRTAC

2KSA Series (Direct-acting and normally opened)



Symbol



Product feature

1. Direct acting and normally opened type 2/2 way fluid 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);
3. It is compact, small size and light weight. Easy to install and dismantle.
4. The valve body is made of SUS304 . Its coil has a Heat resistance classification of Class F. The standard seal material is FPM-F. Please contact us if other seal material are required.
5. The protection class of the coil is IP65 and there is a choice for grommet or terminal electrical entry .

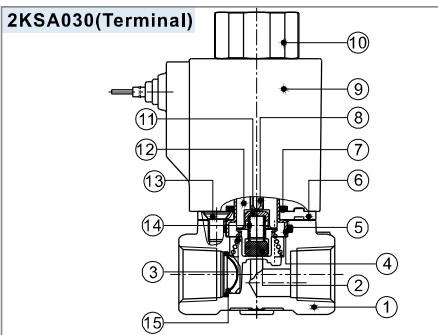
Specification

Model\Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section(mm²)	Weight [Note2](g)	Max.operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2KSAX030	-06 1/8"	1.5	0.10	1.8	245	2.0	300	3.0	450
	-08 1/4"				235				
2KSAH030	-06 1/8"	2.0	0.18	3.0	245	1.5	220		
	-08 1/4"				235				
2KSA030	-06 1/8"	3.0	0.33	6.0	245	0.7	100		
	-08 1/4"				235				
2KSAL030	-06 1/8"	4.0	0.55	10.0	245	0.4	60		
	-08 1/4"				235				
2KSAX050	-10 3/8"	3.0	0.34	6.1	530	2.0	300		
	-15 1/2"				510				
2KSAH050	-10 3/8"	4.0	0.55	10.0	530	1.5	220		
	-15 1/2"				510				
2KSA050	-10 3/8"	5.0	0.83	15.0	530	0.7	100		
	-15 1/2"				510				
2KSAL050	-10 3/8"	7.0	1.40	25.0	530	0.4	60		
	-15 1/2"				510				

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2KSA030 series grommet valve's weight is 10g less than terminal's. 2KSA050series grommet valve's weight is 20g less than terminal's.

Inner structure



No.	Item	No.	Item	No.	Item
1	Body	6	Fixed plate	11	Airtight bush
2	Airtight ring	7	O-ring	12	Electromagnet
3	Spring	8	Mandril	13	Screw
4	Coil axis	9	Coil assembly	14	Spring
5	O-ring	10	Coil nut	15	Filter

Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2KSA□030	CDA110K CLA110K	AC	50	±15%	Terminal (CDA)	15.0VA	Class F	50
			60			11.0VA		45
		DC	-	±10%		6.5W		50
2KSA□050	CDA160K CLA160K	AC	50	±15%	Grommet (CLA)	35.0VA		65
			60			30.0VA		60
		DC	-	±10%		12.0W		50

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

2KSA H 030 08 A □ □						
① Model	② Pressure condition	③ Size series	④ Port size	⑤ Voltage	⑥ Electrical entry	⑦ Thread type
2KSA: 2/2 way direct-acting and normally opened	X: Extra high pressure H: High pressure Blank: Standard L: Large volume	030: 030 Series	06: 1/8" 08: 1/4"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet[Note]	G: G
		050: 050 Series	10: 3/8" 15: 1/2"			

[Note] The wire length is 0.5m.

Ordering code of accessories

Ordering code of accessories is the same as 2WA series valve's, Please refer to P169 for details of ordering code.

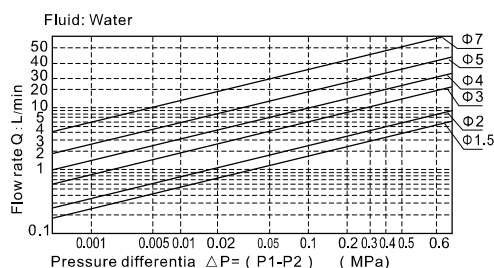
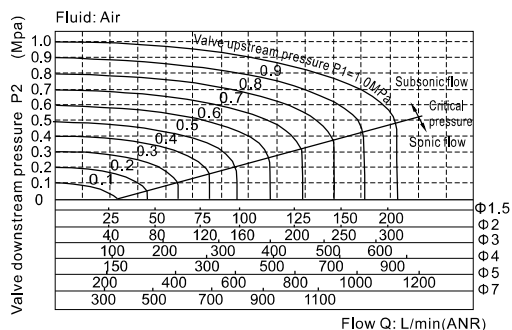


Fluid control valve(2/2 way)

AIRTAC

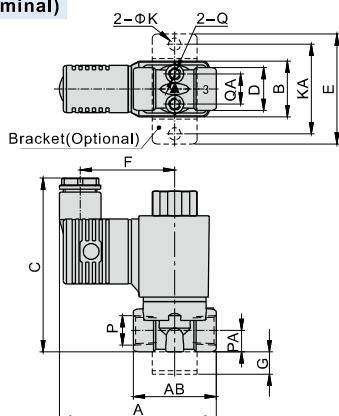
2KSA Series (Direct-acting and normally opened)

Flow chart

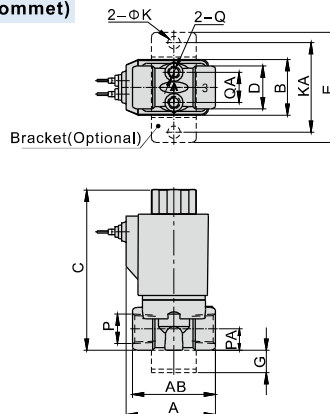


Dimensions

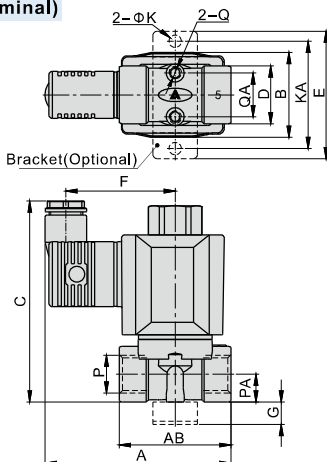
2KSA□030 (Terminal)



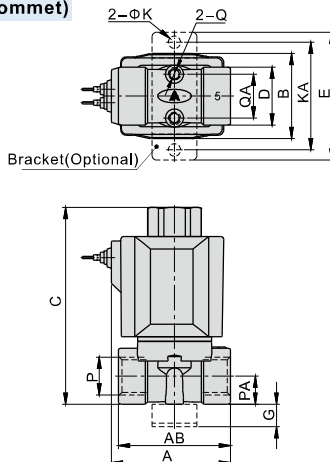
2KSA□030(Grommet)



2KSA□050 (Terminal)



2KSA□050(Grommet)



Model\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2KSA□030-06	70	37	25	77.5	19	49	42	10	5.5	40	1/8"	9.5	M5	13.5
2KSA□030-08	70	37	25	77.5	19	49	42	10	5.5	40	1/4"	9.5	M5	13.5
2KSA□050-10	83	50	38	90	26	57	49	10	5.5	48	3/8"	12.5	M5	19.5
2KSA□050-15	83	50	38	90	26	57	49	10	5.5	48	1/2"	12.5	M5	19.5

Model\Item	A	AB	B	C	D	E	G	K	KA	P	PA	Q	QA
2KSA□030-06	40	37	25	74	19	49	10	5.5	40	1/8"	9.5	M5	13.5
2KSA□030-08	40	37	25	74	19	49	10	5.5	40	1/4"	9.5	M5	13.5
2KSA□050-10	53	50	38	90	26	57	10	5.5	48	3/8"	12.5	M5	19.5
2KSA□050-15	53	50	38	90	26	57	10	5.5	48	1/2"	12.5	M5	19.5



Fluid control valve(2/2 way)

AIRTAC

2KSA Series (Internally piloted and normally opened)



Symbol



Product feature

1. Indirect acting (Internal pilot) and normally opened type 2/2 way fluid valve. It can change direction quickly and has large flow.
2. It is compact, small and light weight. Easy to install and dismantle;
3. The valve body is made of SUS304. The coil has a Heat resistance classification of Class F. The standard seal material is FPM-F. Please contact us if other seal material are required.
4. The protection class of the coil is IP65 and there is a choice for grommet or terminal electrical entry.

Specification

Model/Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm ²)	Weight [Note2](g)	Operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2KSA150-15	1/2"	15.0	5.50	100.0	575	Max:0.7 Min:0.05	Max:100 Min:10	1.5	220
2KSA200-20	3/4"	20.0	9.50	170.0	735				
2KSA250-25	1"	25.0	12.50	220.0	1035				
2KSA320-32	1 1/4"	35.0	23.00	420.0	2287				
2KSA400-40	1 1/2"	40.0	31.00	560.0	2677				
2KSA500-50	2"	50.0	49.00	880.0	3557				

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight.
Grommet valve's weight is 10g 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)
2KSA150	CDA110K	AC	50	±15%	Terminal (CDA)	15.0VA	Class F	50
2KSA200	CLA110K	DC	60			11.0VA		45
2KSA250			-	±10%		6.5W		50
2KSA320	CDA160K	AC	50	±15%	Grommet (CLA)	35.0VA		65
2KSA400	CLA160K	DC	60			30.0VA		60
2KSA500			-	±10%		12.0W		50

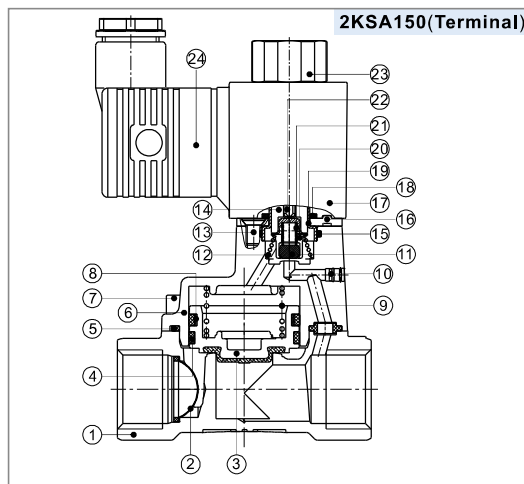
Valve's specification

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.

Inner structure



No.	Item
1	Body
2	Filter
3	Piston
4	Wear ring
5	O-ring
6	Cover
7	Screw
8	Spring
9	Spring
10	Plug
11	Airtight ring
12	Spring
13	Screw
14	Movable core
15	O-ring
16	Fixed plate
17	Coil assembly
18	O-ring
19	Coil axis
20	Airtight ring
21	Spring
22	Man drill
23	Coil nut
24	Connector

Ordering code

Ordering code of valves

2KSA 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
2KSA: 2/2 way internally piloted and normally opened	150: Φ15mm	15: 1/2"	A: AC220V	Blank: Terminal I: Grommet [Note]	G: G
	200: Φ20mm	20: 3/4"	B: DC24V		
	250: Φ25mm	25: 1"	C: AC110V		
	320: Φ35mm	32: 1 1/4"	E: AC24V		
	400: Φ40mm	40: 1 1/2"	F: DC12V		
	500: Φ50mm	50: 2"			

[Note] The wire length is 0.5m.

Ordering code of accessories

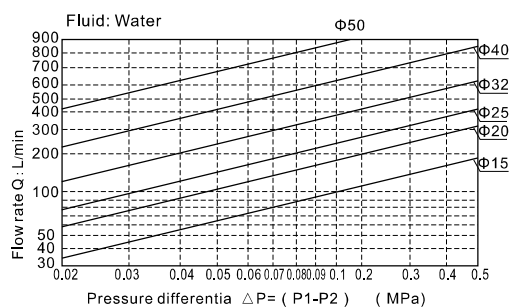
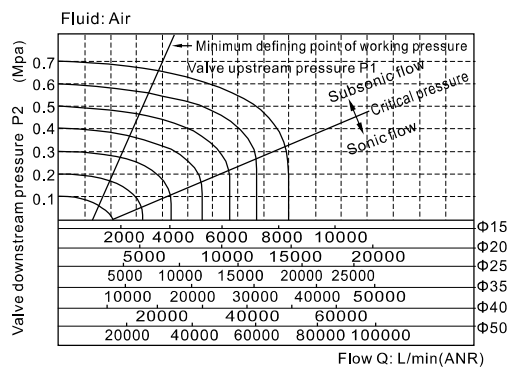
Ordering code of accessories is the same as 2WA series valve's, Please refer to P171 for details of ordering code.

Fluid control valve(2/2 way)

AIRTAC

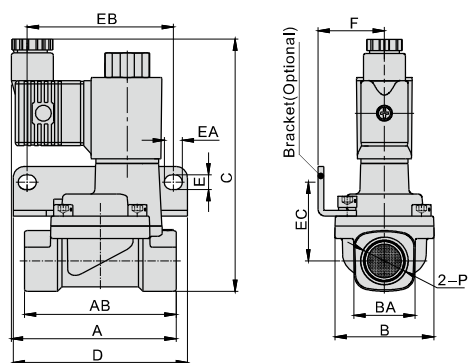
2KSA Series (Internally piloted and normally opened)

Flow chart

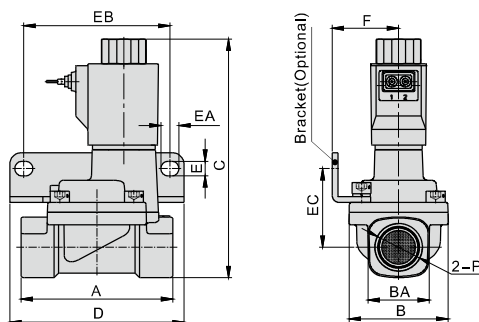


Dimensions

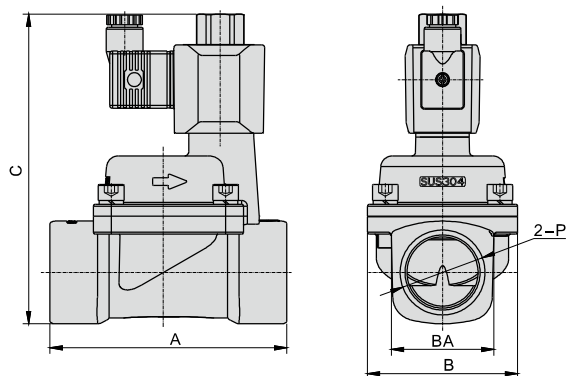
2KSA150~250 (Terminal)



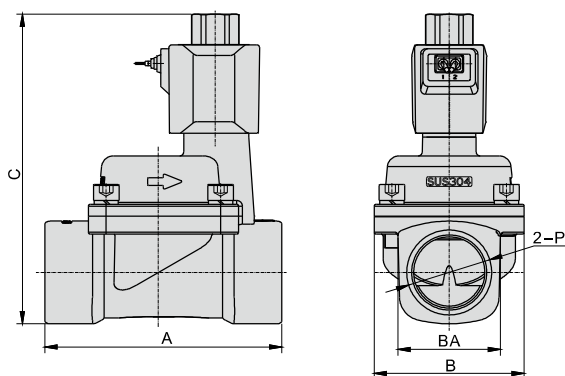
2KSA150~250 (Grommet)



2KSA320~500 (Terminal)



2KSA320~500 (Grommet)



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2KSA150-15	73.5	67.5	44	27.5	112	77.5	6.5	8	65	35	29.5	1/2"
2KSA200-20	75.5	79.5	51	33.5	119	87.5	6.5	8	75	38	33	3/4"
2KSA250-25	77.5	90	57	40.5	126	93	6.5	8	80	42	35	1"
2KSA320-32	120	-	76	52	165.5	-	-	-	-	-	-	1 1/4"
2KSA400-40	126	-	86	58	175.5	-	-	-	-	-	-	1 1/2"
2KSA500-50	144	-	96	70	186.5	-	-	-	-	-	-	2"

Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2KSA150-15	67.5	44	27.5	109	77.5	6.5	8	65	35	29.5	1/2"
2KSA200-20	79.5	51	33.5	116	87.5	6.5	8	75	38	33	3/4"
2KSA250-25	90	57	40.5	123	93	6.5	8	80	42	35	1"
2KSA320-32	120	76	52	156.5	-	-	-	-	-	-	1 1/4"
2KSA400-40	126	86	58	164.5	-	-	-	-	-	-	1 1/2"
2KSA500-50	144	96	70	179.5	-	-	-	-	-	-	2"