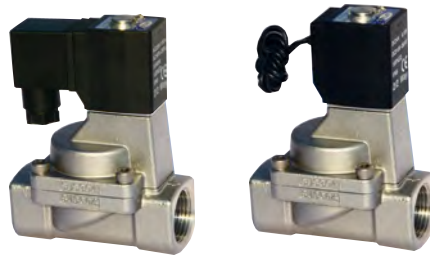


# Fluid control valve(2/2way)

## 2S Series (Internally piloted and normally closed )



### Ordering code

Ordering code of valves

**2S 150 15 A □ T**

① ② ③ ④ ⑤ ⑥

① Model	② Orifice size	③ Port size	④ Voltage	⑤ Electrical entry	⑥ Thread type
2S: 2/2 way internally piloted and normally closed	150: Φ15mm	15: 1/2"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Flying leads[Note]	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"			

[Note]: The wire length is 0.5m.

Ordering code of accessories

**F-2S150 LB**

① ② ③

① Accessories code	② Valve type	③ Accessories type
F: Mounting accessories	2S150: 150 Series valve 2S200: 200 Series valve 2S250: 250 Series valve	LB: LB Type

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

### Specification

Model\Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Operating pressure differentia		Proof pressure	
						MPa	psi	MPa	psi
2S150-15	1/2"	15.0	5.50	100.0	675	Max: 1.0 Min: 0.05	Max: 150 Min: 10	1.5	220
2S200-20	3/4"	20.0	9.50	170.0	875				
2S250-25	1"	25.0	12.50	220.0	1120				
2S320-32	1 1/4"	35.0	23.00	420.0	2700				
2S400-40	1 1/2"	40.0	31.00	560.0	3250				
2S500-50	2"	50.0	49.00	880.0	4300				

[Note1] NPT thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2S150~250 series Flying leads valve's weight is 10g less than terminal's. 2S320~500 series Flying leads valve's weight is 20g less than terminal's.

# Fluid control valve(2/2way)

## 2S Series (Internally piloted and normally closed )

### Product feature

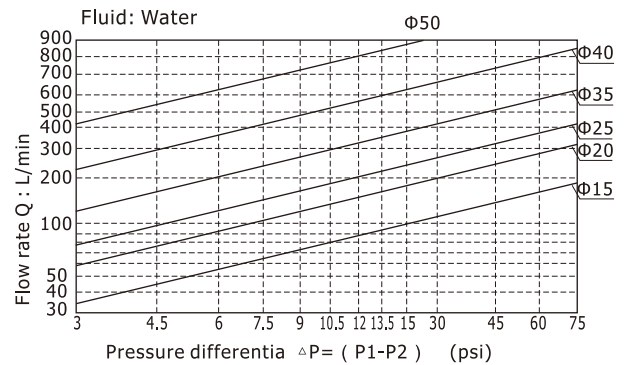
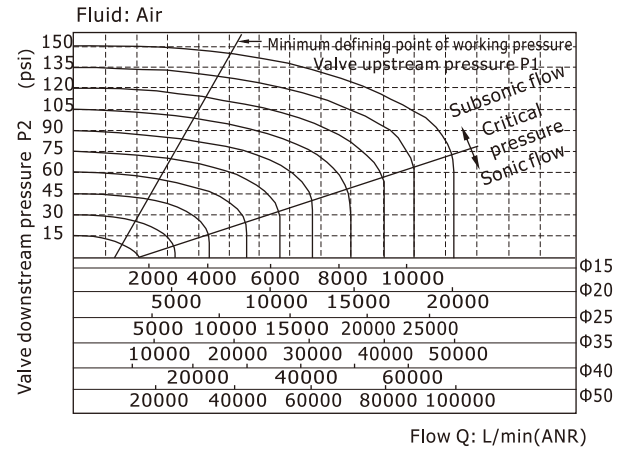
1. Indirect acting(Internal pilot) and normally closed type 2/2 way solenoid valve. Its can change direction quickly and has large flow.
2. It is compact, small and light weight. It is easy to install and dismantle;
3. The valve body is made of SUS304 . The coil has a Heat resistance classification of 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 Flying leads or terminal electrical entry .

### Valve's specification

Acting		Internally piloted				
Initial state		Normally closed				
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	

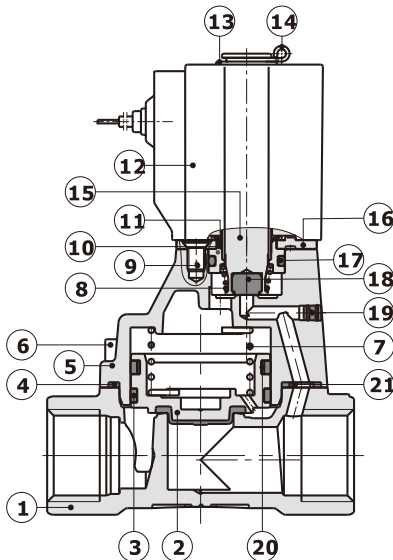
[Note1] Dew point: -20(°C) or less, [Note2] 50CST or less.

### Flow chart



### Inner structure

#### 2S150(Flying leads)



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

### Specification of coil

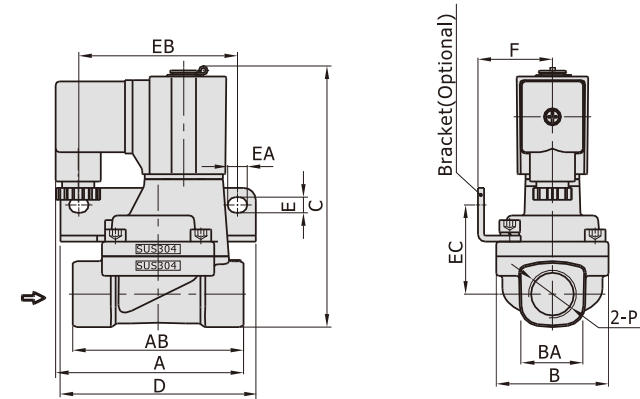
Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2S150	CDA116 CLA116	AC	50	±15%	Terminal (CDA) Flying leads (CLA)	10.0VA	Class B	35
2S200			60			8.0VA		30
2S250		DC	-	±10%		6.5W		30
2S320	CDA170 CLA170	AC	50	±15%		25.0VA		60
2S400			60			22.0VA		55
2S500		DC	-	±10%		12.0W		40

# Fluid control valve(2/2way)

## 2S Series (Internally piloted and normally closed)

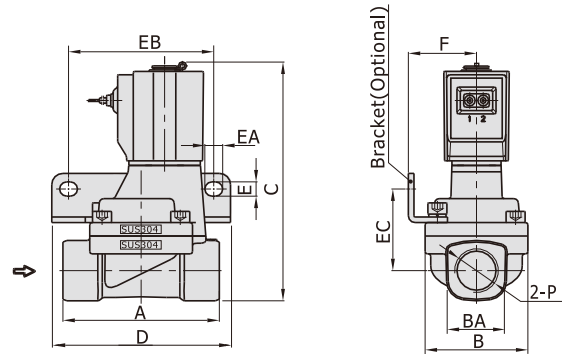
### Dimensions

#### 2S150~250 (Terminal)

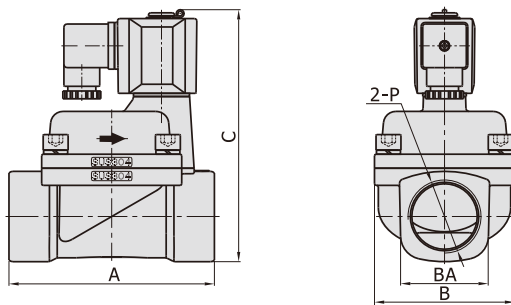


#### 2S150~250(Flying leads)

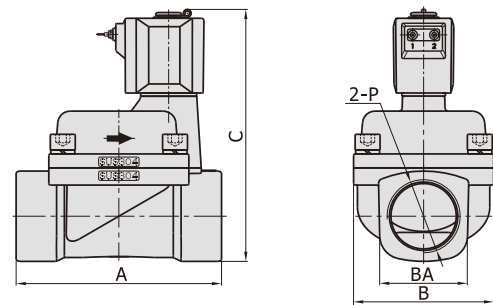
[Unit: mm]



#### 2S320~500 (Terminal)



#### 2S320~500(Flying leads)

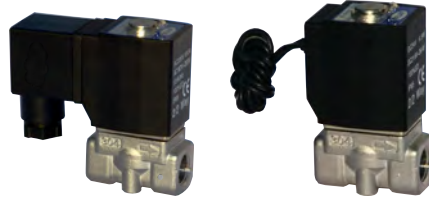


Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2S150-15	77	70	46	27.5	107	80	6.4	8	65	36.5	30.5	1/2"
2S200-20	78.5	82	53	33.5	115.5	90	6.4	8	75	40	34	3/4"
2S250-25	81	92	59	40.5	124	95	6.4	8	80	44.5	36	1"
2S320-32	125	-	80	52	154.5	-	-	-	-	-	-	1 1/4"
2S400-40	132	-	90	58	162	-	-	-	-	-	-	1 1/2"
2S500-50	150	-	100	70	177	-	-	-	-	-	-	2"

Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2S150-15	70	46	27.5	107	80	6.4	8	65	36.5	30.5	1/2"
2S200-20	82	53	33.5	115.5	90	6.4	8	75	40	34	3/4"
2S250-25	92	59	40.5	124	95	6.4	8	80	44.5	36	1"
2S320-32	125	80	52	154.5	-	-	-	-	-	-	1 1/4"
2S400-40	132	90	58	162	-	-	-	-	-	-	1 1/2"
2S500-50	150	100	70	177	-	-	-	-	-	-	2"

# Fluid control valve(2/2way)

## 2S Series (Direct-acting and normally closed )



### Ordering code

Ordering code of valves

**2S L 030 08 A □ T**

① ② ③ ④ ⑤ ⑥ ⑦

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

[Note]: The wire length is 0.5m.

Ordering code of accessories

**F-2S030 LB**

① ② ③

① Accessories code	② Valve type	③ Accessories type
F: Mounting accessories	2S030: 030 Series valve 2S050: 050 Series valve	LB: LB Type

### Specification

Model\Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Max.operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2SX030	-06 1/8"	1.5	0.10	1.8	300	3.0	450	5.0	750
	-08 1/4"				295				
2SH030	-06 1/8"	2.0	0.18	3.0	300	2.0	300		
	-08 1/4"				290				
2S030	-06 1/8"	3.0	0.33	6.0	300	1.0	150		
	-08 1/4"				290				
2SL030	-06 1/8"	4.0	0.55	10.0	300	0.5	75		
	-08 1/4"				290				
2ST030	-06 1/8"	6.0	1.10	12.0	300	0.1	15		
	-08 1/4"				290				
2SX050	-10 3/8"	3.0	0.34	6.1	600	3.0	450		
	-15 1/2"				590				
2SH050	-10 3/8"	4.0	0.55	10.0	600	2.0	300		
	-15 1/2"				590				
2S050	-10 3/8"	5.0	0.83	15.0	600	1.0	150		
	-15 1/2"				590				
2SL050	-10 3/8"	7.0	1.40	25.0	600	0.5	75		
	-15 1/2"				590				
2ST050	-10 3/8"	10.0	2.20	40.0	600	0.1	15		
	-15 1/2"				590				

[Note1] NPT thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2S030 series Flying leads valve's weight is 10g less than terminal's. 2S050series Flying leads valve's weight is 20g less than terminal's.

# Fluid control valve(2/2way)

## 2S Series (Direct-acting and normally closed )

### Product feature

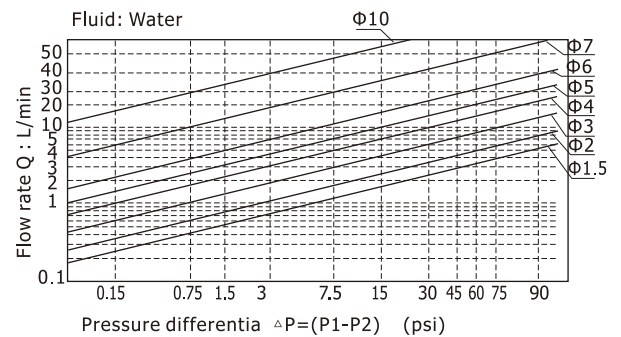
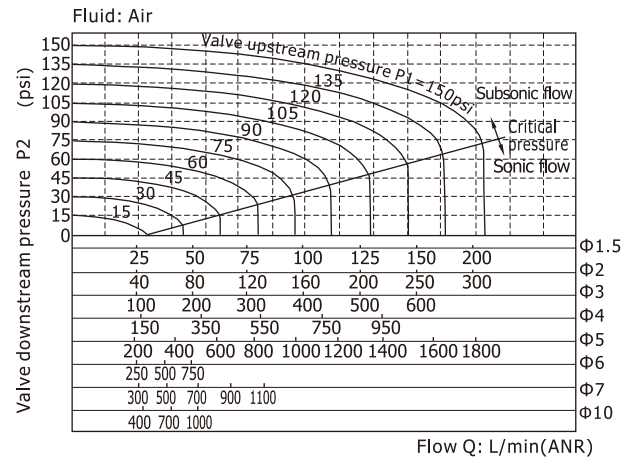
1. Direct acting and normally closed type 2/2 way solenoid valve.  
Its high sensibility allows it to change direction quickly;
2. It has wide pressure range, including extra high pressure (X), high pressure (H), standard , large volume(L) and extra large volume (T) to choose from;
3. It is compact, 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 Flying leads or terminal electrical entry .

### Valve's specification

Acting		Direct acting			
Initial state		Normally closed			
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

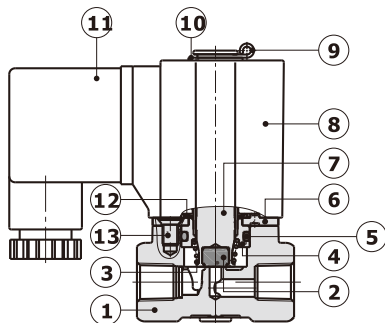
[Note1] Dew point: -20(°C) or less ; [Note2] 50CST or less.

### Flow chart



### Inner structure

#### 2S030(Terminal)



No.	Item	No.	Item
1	Body	8	Coil assembly
2	Airtight ring	9	E Clip
3	Spring	10	Gasket
4	Fixed cap	11	Connector
5	O-ring	12	Washer
6	Fixed plate	13	Screw
7	Movable core		

### Specification of coil

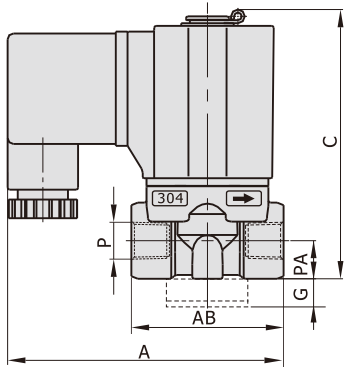
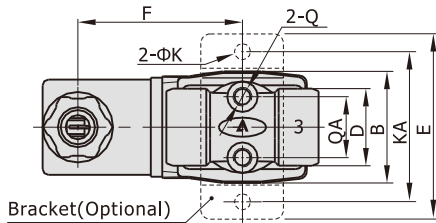
Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Power Consumption (VA/W)	Electrical entry	Insulation	Temp.rise (°C)
2S□030	CDA116 CLA116	AC	50	±15%	10.0VA	Terminal (CDA) Flying leads (CLA)	Class B	35
			60		8.0VA			30
2S□050	CDA170 CLA170	DC	-	±10%	6.5W			30
			50		25.0VA			60
		AC	50	±15%	22.0VA	55		
			60		12.0W	40		

# Fluid control valve(2/2way)

## 2S Series (Direct-acting and normally closed )

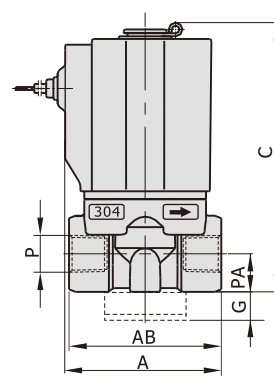
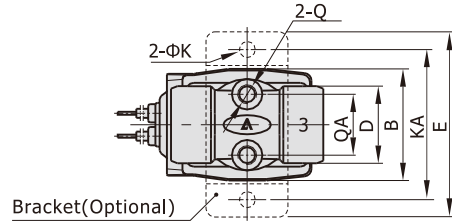
### Dimensions

#### 2S□030 (Terminal)

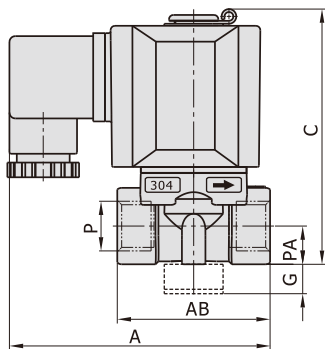
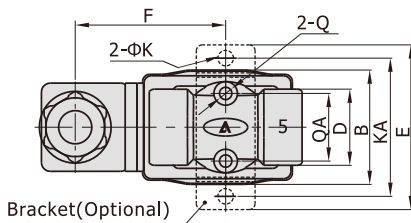


#### 2S□030(Flying leads)

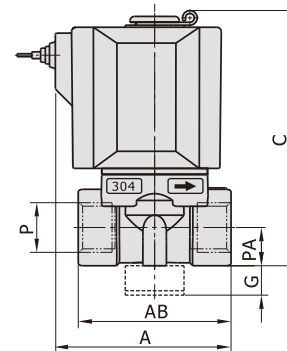
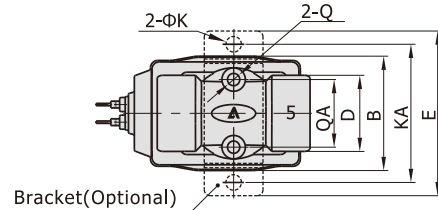
[Unit: mm]



#### 2S□050 (Terminal)



#### 2S□050(Flying leads)



Model\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2S□030-06	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2S□030-08	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2S□050-10	89.5	52	39	87	26	56	51	10	5.3	48	3/8"	13	M5	23
2S□050-15	89.5	52	39	87	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
2S□030-06	41	40	29.5	71	20	49	10	5.3	40	1/8"	10	M5	16
2S□030-08	41	40	29.5	71	20	49	10	5.3	40	1/4"	10	M5	16
2S□050-10	60	52	39	87	26	56	10	5.3	48	3/8"	13	M5	23
2S□050-15	60	52	39	87	26	56	10	5.3	48	1/2"	13	M5	23