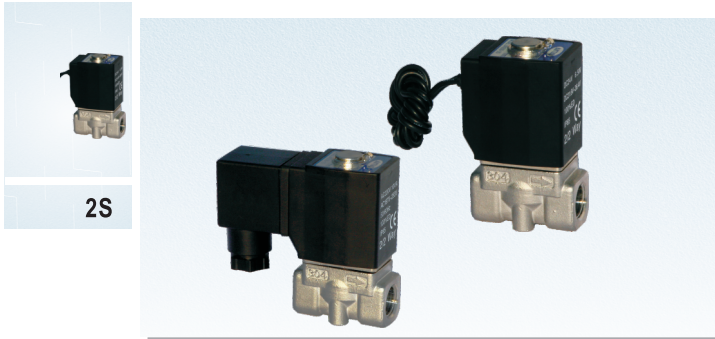


Fluid control valve(2/2way)

2S Series (Direct-acting and normally closed)



2S

Symbol



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 grommet or terminal electrical entry.

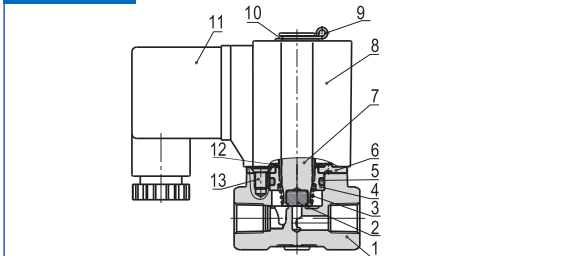
Valve's specification

Acting		Direct acting			
Initial stats		Normally closed			
Adaptable fluid ①		Air, Water, Oil			
Viscosity limit		Under 20CST			
Ambient and fluid temperature(°C)		Water	Air	Oil	Ambient
	Max.	80	90	80	70
	Min.	1	-20 ②	-10 ③	-20

- ① Note: Please refer to P125 for detail of other's fluid.
 ② Note: Dew point: -20(°C) or less. ③ Note: 50CST or less.

Inner structure

2S030 Terminal



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

Specification

Type\Item	Port size ①	Orifice size (Φmm)	Cv	Valid area or section(mm²)	Weight (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				

- ① PT thread, NPT thread and G thread are available.
 ② The weight in the table is the terminal valve's weight, 2S030 series grommet valve's weight is 10g less than terminal's. 2S050 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)
2S□030	CDA116 CLA116	AC	50	± 15%	Terminal (CDA) Grommet (CLA)	10.0VA	Class B	35
			60			8.0VA		30
	DC	-	± 10%	6.5W		30		
		CDA170 CLA170	AC	50		± 15%		25.0VA
60	22.0VA			55				
DC	-	± 10%	10.5W	40				

Ordering code

2S L 030 08 A □ P

- Model**: 2S: 2/2 way direct-acting and normally closed
- Pressure condition**: X: Extra high pressure, H: High pressure, Blank: Standard, L: Large volume, T: Extra large volume
- Size series**: 030: 030 Series, 050: 050 Series
- Port size**: Size series Port size: 06: 1/8", 030 Series 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

F-2S030-P1

- Accessories code**: F: Mounting accessories
- Accessories type**: P1: LB type
- Valve type**: 2S030: 030 Series body, 2S050: 050 Series body

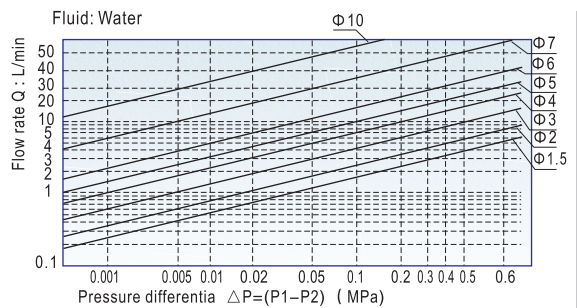
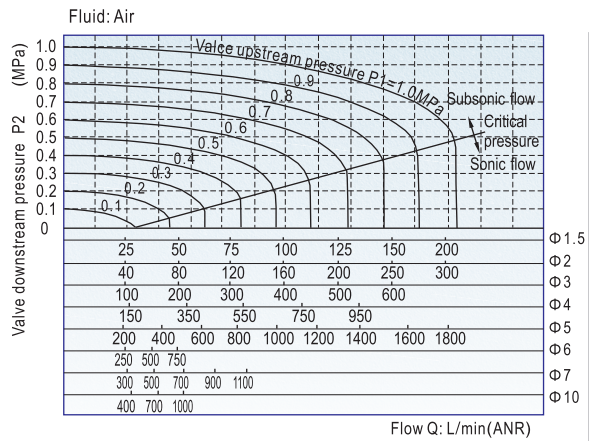


Fluid control valve(2/2way)

2S Series (Direct-acting and normally closed)

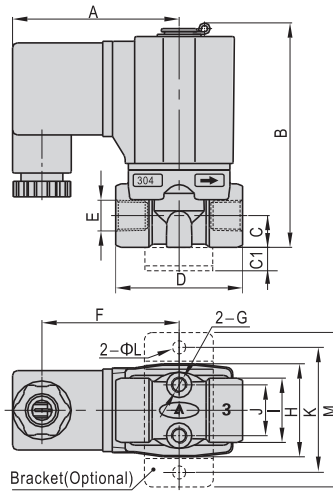


Flow Chart

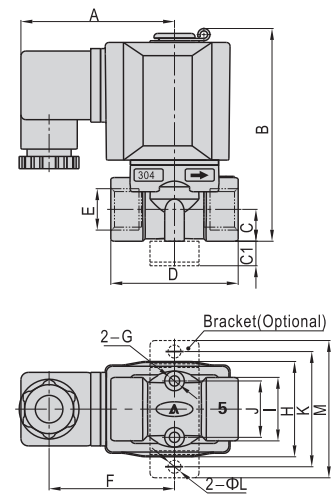


Dimensions

2S□030(Terminal)

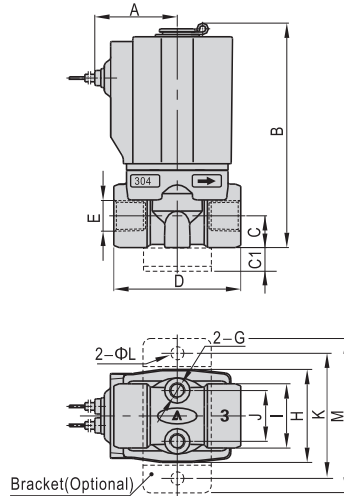


2S□050(Terminal)

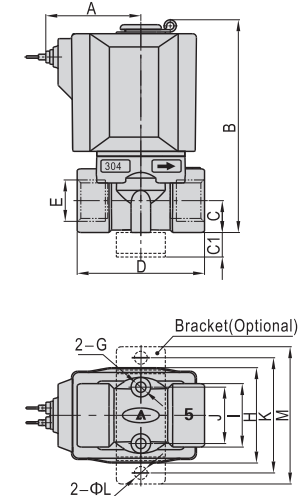


Type\Item	A	B	C	C1	D	E	F	G	H	I	J	K	L	M
2S□030-06	52.5	70.7	10	10	40	1/8"	43.3	M5	29.3	20.2	16	40	5.3	49
2S□030-08	52.5	70.7	10	10	40	1/4"	43.3	M5	29.3	20.2	16	40	5.3	49
2S□050-10	62.7	87	13	10	52	3/8"	51.2	M5	39	26	23	48	5.3	56
2S□050-15	62.7	87	13	10	52	1/2"	51.2	M5	39	26	23	48	5.3	56

2S□030(Grommet)



2S□050(Grommet)



Type\Item	A	B	C	C1	D	E	G	H	I	J	K	L	M
2S□030-06	26	70.7	10	10	40	1/8"	M5	29.3	20.2	16	40	5.3	49
2S□030-08	26	70.7	10	10	40	1/4"	M5	29.3	20.2	16	40	5.3	49
2S□050-10	39	87	13	10	52	3/8"	M5	39	26	23	48	5.3	56
2S□050-15	39	87	13	10	52	1/2"	M5	39	26	23	48	5.3	56



2S

Fluid control valve(2/2way)

2S Series (Internally piloted and normally closed)



Specification

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

① PT thread, NPT thread and G thread are available.

② The weight in the table is the terminal valve's weight, 2S150-250 series grommet valve's weight is 10g less than terminal's. 2S320-5000series grommet valve's weight is 20g less than terminal's.

Symbol



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 grommet or terminal electrical entry.

Valve's specification

Acting	Internally piloted				
Initial stats	Normally closed				
Adaptable fluid ^①	Air, Water, Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature(°C)		Water	Air	Oil	Ambient
	Max.	80	90	80	70
	Min.	1	-20 ^②	-10 ^③	-20

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

② Note: Dew point: -20(°C) or less. ③ Note: 50CST or less.

Inner structure

2S150(Grommet)

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

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	AC	50	± 15%	(Terminal) (CDA)	10.0VA	Class B	35		
			60			8.0VA		30		
2S200	CLA116	DC	-	± 10%		(Grommet) (CLA)		6.5W	30	
			50					25.0VA	60	
2S320	CDA170	AC	60	± 15%	(Terminal) (CDA)	22.0VA	Class B	55		
			50			25.0VA		60		
2S400	CLA170	DC	-	± 10%		(Grommet) (CLA)		10.5W	Class B	40
			60					22.0VA		55

Ordering code

2S 150 15 A □ P

- Model**: 2S: 2/2 way internally piloted and normally closed
- Orifice size**:
 - 150: Φ15mm
 - 200: Φ20mm
 - 250: Φ25mm
 - 320: Φ32mm
 - 400: Φ40mm
 - 500: Φ50mm
- Port size**:

Orifice series	Port size
150: Φ15mm	15: 1/2"
200: Φ20mm	20: 3/4"
250: Φ25mm	25: 1"
320: Φ32mm	32: 1 1/4"
400: Φ40mm	40: 1 1/2"
500: Φ50mm	50: 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

F-2S150-P1

- Accessories code**: F: Mounting accessories
- Accessories type**: P1: LB type
- Valve type**:
 - 2S150: 150 Series body
 - 2S200: 200 Series body
 - 2S250: 250 Series body

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

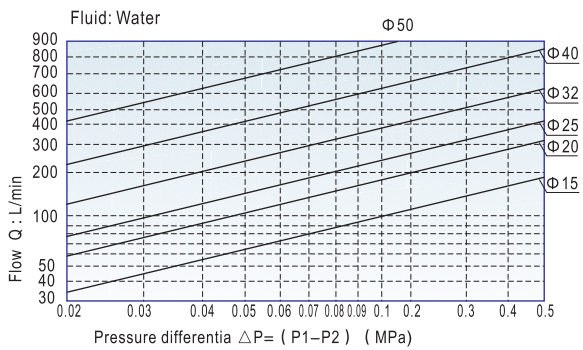
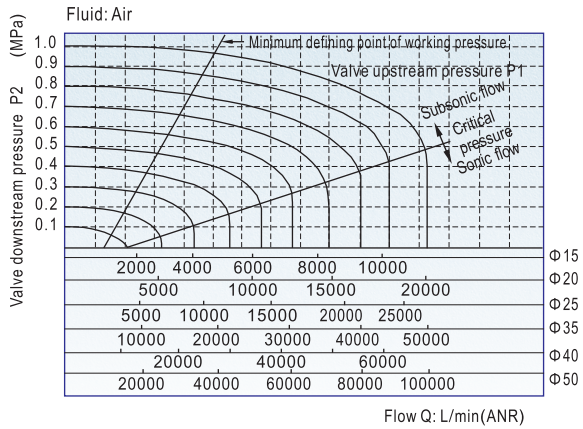


Fluid control valve(2/2way)



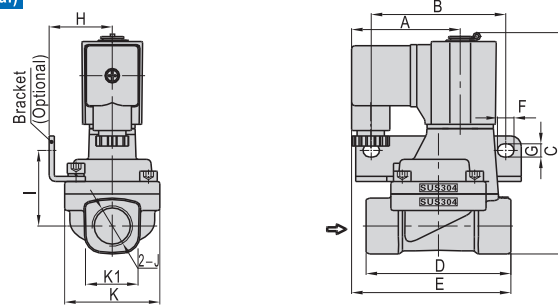
2S Series (Internally piloted and normally closed)

Flow chart

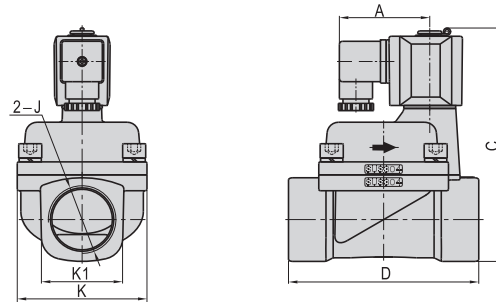


Dimensions

2S150~250(Terminal)

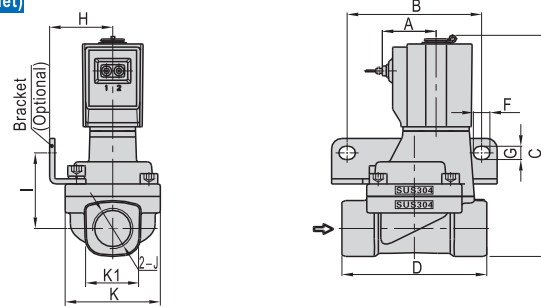


2S320~500(Terminal)

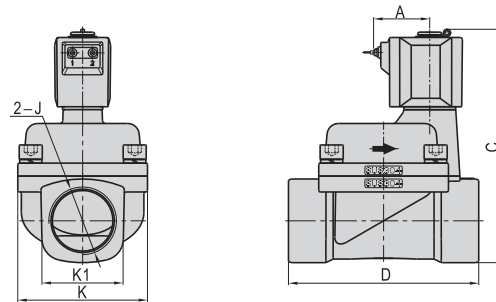


Type\Item	A	B	C	D	E	F	G	H	I	J	K	K1
2S150-15	52.5	65	107	70	77	8	6.4	30.5	36.5	1/2"	46	27.5
2S200-20	52.5	75	115.4	82	78.5	8	6.4	34	40	3/4"	53	33.5
2S250-25	52.5	80	124	92	81	8	6.4	36	44.5	1"	59	40.5
2S320-32	62.7	-	154.3	125	-	-	-	-	-	1 1/4"	80	52
2S400-40	62.7	-	161.8	132	-	-	-	-	-	1 1/2"	90	58
2S500-50	62.7	-	176.8	150	-	-	-	-	-	2"	100	70

2S150~250(Grommet)



2S320~500(Grommet)



Type\Item	A	B	C	D	F	G	H	I	J	K	K1
2S150-15	26	65	107	70	8	6.4	30.5	36.5	1/2"	46	27.5
2S200-20	26	75	115.4	82	8	6.4	34	40	3/4"	53	33.5
2S250-25	26	80	124	92	8	6.4	36	44.5	1"	59	40.5
2S320-32	38.8	-	154.3	125	-	-	-	-	1 1/4"	80	52
2S400-40	38.8	-	161.8	132	-	-	-	-	1 1/2"	90	58
2S500-50	38.8	-	176.8	150	-	-	-	-	2"	100	70

