



Fluid control valve(2/2way)

Compendium of Fluid control valve

P155	Product feature	Photo	P157	Product feature	Photo
2S Series direct-acting and normally closed	● Shut-off structure ● Width operation pressure ● Body material: SUS304 ● Adopt many fluids ● Terminal and Grommet ● 2/2 way		2S Series internally piloted and normally closed	● Piston piloted structure ● Width operation pressure ● Body material: SUS304 ● Adopt many fluids ● Terminal and Grommet ● 2/2 way	
P159	Product feature	Photo	P161	Product feature	Photo
2KS Series direct-acting and normally opened	● Shut-off structure ● Width operation pressure ● Body material: SUS304 ● Adopt many fluids ● Terminal and Grommet ● 2/2 way		2KS Series internally piloted and normally opened	● Piston piloted structure ● Width operation pressure ● Body material: SUS304 ● Adopt many fluids ● Terminal and Grommet ● 2/2 way	
P163	Product feature	Photo	P165	Product feature	Photo
2W Series direct-acting and normally closed	● Shut-off structure ● Width operation pressure ● Body material: Brass ● Adopt many fluids ● Terminal and Grommet ● 2/2 way		2W Series internally piloted and normally closed	● Piston piloted structure ● Width operation pressure ● Body material: Brass ● Adopt many fluids ● Terminal and Grommet ● 2/2 way	
P167	Product feature	Photo	P169	Product feature	Photo
2KW Series direct-acting and normally opened	● Shut-off structure ● Width operation pressure ● Body material: Brass ● Adopt many fluids ● Terminal and Grommet ● 2/2 way		2KW Series internally piloted and normally opened	● Piston piloted structure ● Width operation pressure ● Body material: Brass ● Adopt many fluids ● Terminal and Grommet ● 2/2 way	
P171	Product feature	Photo	P173	Product feature	Photo
2L Series direct-acting and normally closed	● Shut-off structure ● Width operation pressure ● Body material: SUS304 ● Adopt many fluids and higher temperature ● Terminal and Grommet ● 2/2 way		2L Series internally piloted and normally closed	● Piston piloted structure ● Width operation pressure ● Body material: SUS304 ● Adopt many fluids and higher temperature ● Terminal and Grommet ● 2/2 way	
P175	Product feature	Photo	P177	Product feature	Photo
2KL Series direct-acting and normally opened	● Shut-off structure ● Width operation pressure ● Body material: SUS304 ● Adopt many fluids and higher temperature ● Terminal and Grommet ● 2/2 way		2KL Series internally piloted and normally opened	● Piston piloted structure ● Width operation pressure ● Body material: SUS304 ● Adopt many fluids and higher temperature ● Terminal and Grommet ● 2/2 way	
P180	Product feature	Photo	P182	Product feature	Photo
2V Series	● Direct-acting and diaphragm piloted optional ● Body material: Stainless steel or brass ● Adopt many fluids ● Terminal and Grommet ● 2/2 way		2J Series angle seat valve	● Air piloted structure ● Body and pitman material: Stainless steel ● The structure of valve is angles at 45° degrees with streamline inner chamber design ● Adopt many fluids and higher temperature	

Installation and Application

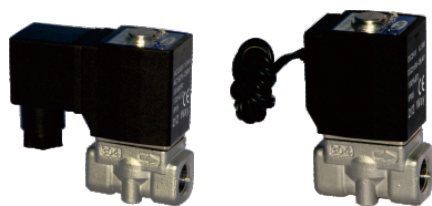


1. Before installing, be sure the valve hasn't been damaged via transportation.
2. The coil must be pure vertical, the inlet and outlet on body must be horizontal. it's suggested to use the medium lubricated by 40 μm filter element. Be aware of the flow direction and port size.
3. Please notice whether the installation condition accords with technical requirements (such as "voltage", "actuation frequency", "working pressure" and "scope of application temperature"), then the equipment can be installed and used.
4. Take measure to avoid vibration and frozen.
5. Before using the fittings and tubes make sure they are clean. When connecting to fittings, be sure the PTFE Thread Seal Tape is used correctly.
6. To keep the dust away, Default paragraph font; Never forget to install dirt-proof boot in air intake and outlet during dismounting.



Fluid control valve(2/2way)

2S Series (Direct-acting and normally closed)



Symbol

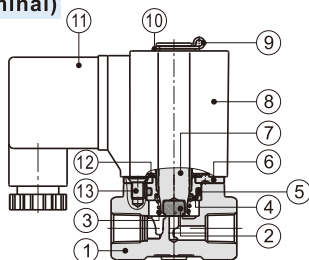


Product feature

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.

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

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
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] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2S030 series grommet valve's weight is 10g less than terminal's. 2S050series 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)	10.0VA	Class B	35	
			60			8.0VA		30	
		DC	—	± 10%		6.5W		30	
2S□050	CDA170 CLA170	AC	50	± 15%	Grommet (CLA)	25.0VA		60	
			60			22.0VA		55	
		DC	—	± 10%		10.5W		40	
			—						

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.

Ordering code

Ordering code of valves

2S L 030 08 A □ G

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: Grommet	G: G Thread
		050: 050 Series	10: 3/8" 15: 1/2"			

Ordering code of accessories

F-2S030 LB

① ② ③

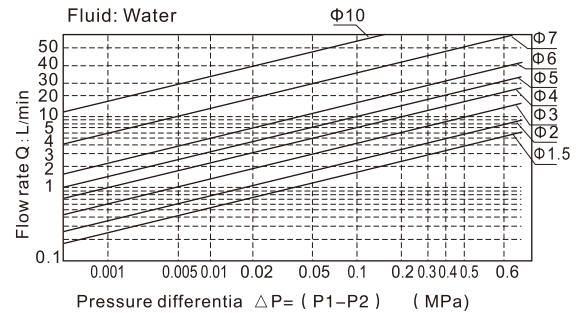
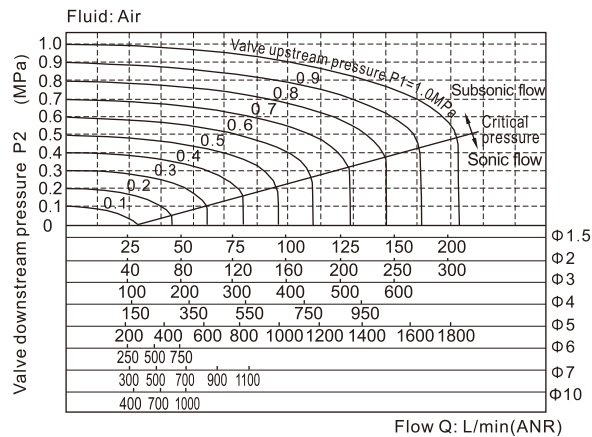
① Accessories code	② Valve type	③ Accessories type
F: Mounting accessories	2S030: 030 Series valve 2S050: 050 Series valve	LB: LB Type



Fluid control valve(2/2way)

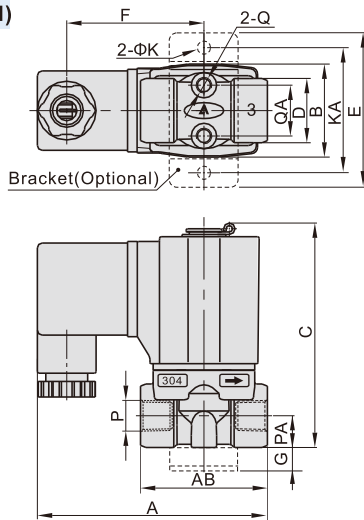
2S Series (Direct-acting and normally closed)

Flow chart

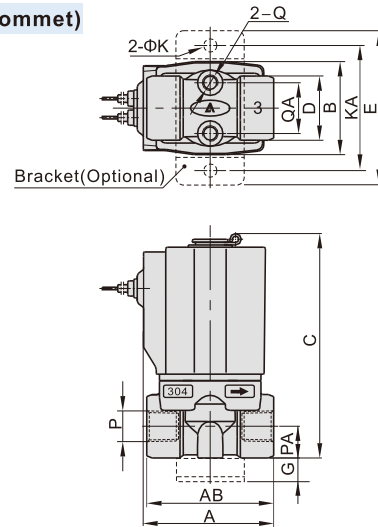


Dimensions

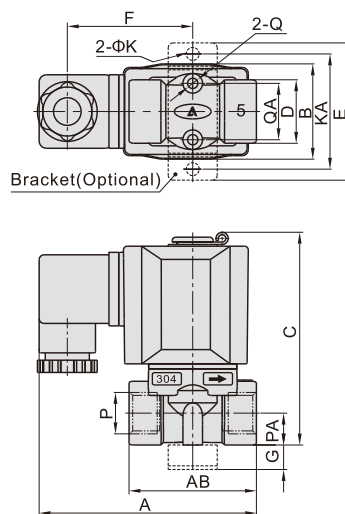
2S□030 (Terminal)



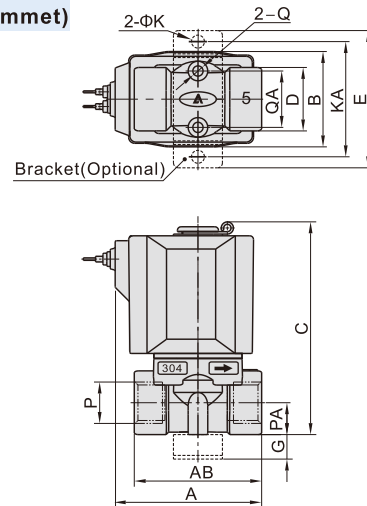
2S□030(Grommet)



2S□050 (Terminal)



2S□050(Grommet)

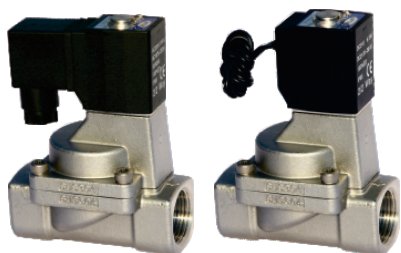


Model\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2S□030-06	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2S□030-08	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2S□050-10	89.5	52	39	87	26	56	51	10	5.3	48	3/8"	13	M5	23
2S□050-15	89.5	52	39	87	26	56	51	10	5.3	48	1/2"	13	M5	23

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

Fluid control valve(2/2way)

2S Series (Internally piloted and normally closed)



Symbol

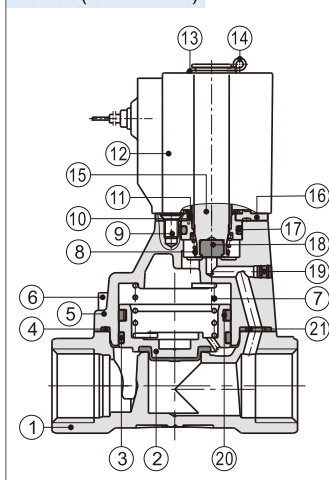


Product feature

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.

Inner structure

2S150(Grommet)



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

Model\Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm²)	Weight [Note2](g)	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				

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2S150~250 series grommet valve's weight is 10g less than terminal's. 2S320~500 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)
2S150 2S200 2S250	CDA116 CLA116	AC	50 60	± 15%	Terminal (CDA)	10.0VA	Class B	35
		DC	—	± 10%		8.0VA		30
					Grommet (CLA)	6.5W		30
2S320 2S400 2S500	CDA170 CLA170	AC	50 60	± 15%		25.0VA		60
		DC	—	± 10%		22.0VA		55
						10.5W		40

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.

Ordering code

Ordering code of valves

2S 150 15 A □ G					
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: Grommet	G: G Thread
	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"			

Ordering code of accessories

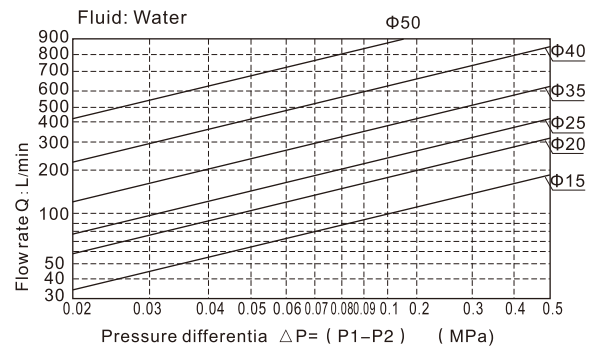
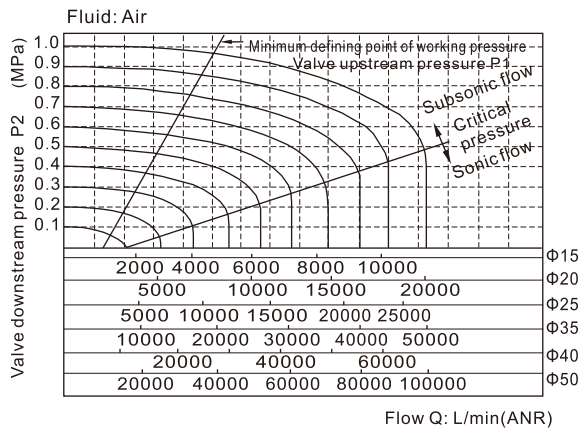
F-2S150 LB		
① Accessories code	② Valve type	③ Accessories type
F: Mounting accessories	2S150: 150 Series valve 2S200: 200 Series valve 2S250: 250 Series valve	LB: LB Type

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

Fluid control valve(2/2way)

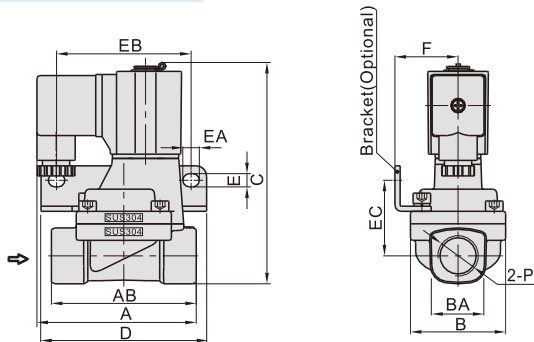
2S Series (Internally piloted and normally closed)

Flow chart

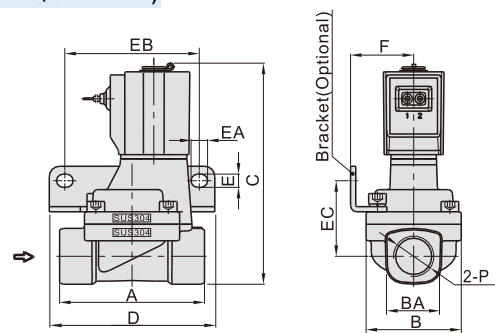


Dimensions

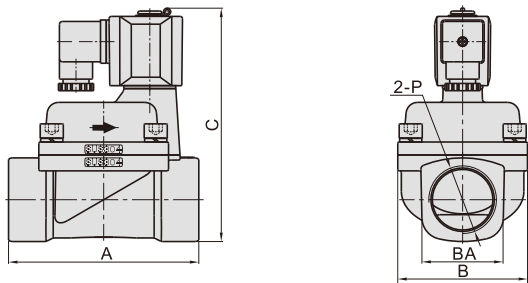
2S150~250 (Terminal)



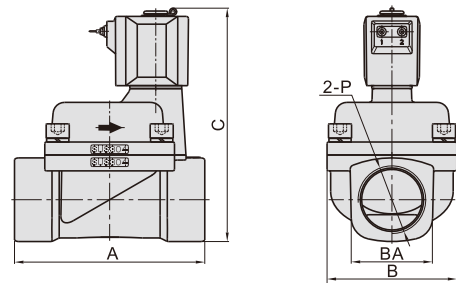
2S150~250(Grommet)



2S320~500 (Terminal)



2S320~500(Grommet)

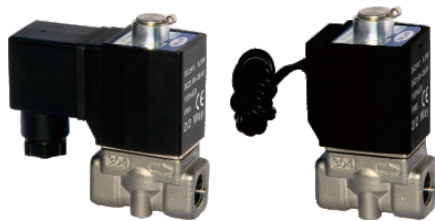


Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2S150-15	77	70	46	27.5	107	80	6.4	8	65	36.5	30.5	1/2"
2S200-20	78.5	82	53	33.5	115.5	90	6.4	8	75	40	34	3/4"
2S250-25	81	92	59	40.5	124	95	6.4	8	80	44.5	36	1
2S320-32	125	-	80	52	154.5	-	-	-	-	-	-	1 1/4"
2S400-40	132	-	90	58	162	-	-	-	-	-	-	1 1/2"
2S500-50	150	-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

2KS Series (Direct-acting and normally opened)



Symbol

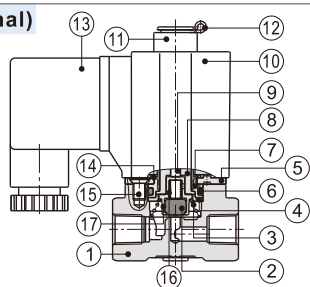


Product feature

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		
	-08	1/4"				295				
2KS030	-06	1/8"	3.0	0.33	6.0	305	0.7	100		
	-08	1/4"				295				
2KSL030	-06	1/8"	4.0	0.55	10.0	305	0.4	60		
	-08	1/4"				295				
2KSX050	-10	3/8"	3.0	0.34	6.1	610	2.0	300		
	-15	1/2"				600				
2KSH050	-10	3/8"	4.0	0.55	10.0	610	1.5	220		
	-15	1/2"				600				
2KS050	-10	3/8"	5.0	0.83	15.0	610	0.7	100		
	-15	1/2"				600				
2KSL050	-10	3/8"	7.0	1.40	25.0	610	0.4	60		
	-15	1/2"				600				

[Note1] G thread is 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(℃)
2KS□030	CDA116 CLA116	AC	50	± 15 %	Terminal (CDA)	15.0VA	Class B	50
			60			11.0VA		40
2KS□050	CDA170 CLA170	DC	—	± 10 %	Grommet (CLA)	6.5W		30
		AC	50			35.0VA		65
			60			30.0VA		60
		DC	—			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 (℃)	Max.	Water 80	Air 90	Oil 80	Ambient 70
	Min.	1	-20 [Note1]	-10 [Note2]	-20

[Note1] Dew point: -20(℃) or less;

[Note2] 50CST or less.

Ordering code

Ordering code of valves

2KS H 030 08 A □ G

① ② ③ ④ ⑤ ⑥ ⑦

①Model	②Pressure condition	③Size series	④Port size	⑤Voltage	⑥Electrical entry	⑦Thread 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	06: 1/8" 08: 1/4"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet	G: G Thread
		050: 050 Series	10: 3/8" 15: 1/2"			

Ordering code of accessories

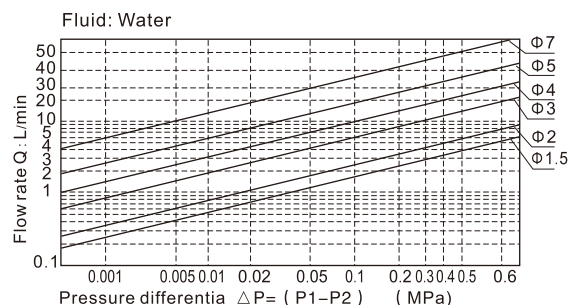
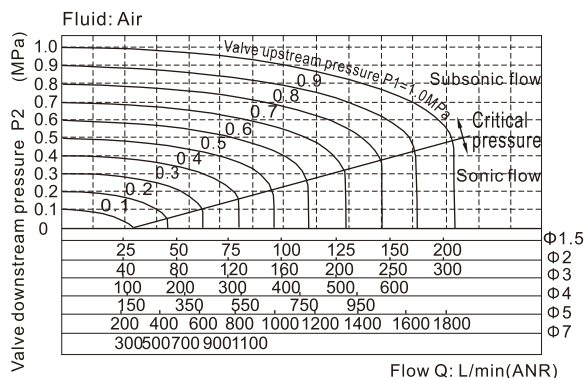
Ordering code of accessories is the same as 2S series valve's, Please refer to P155 for details of ordering code.



Fluid control valve(2/2 way)

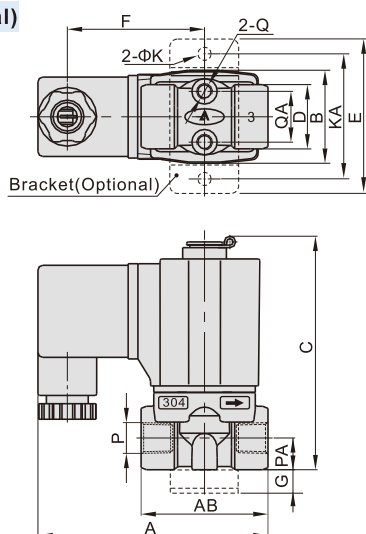
2KS Series (Direct-acting and normally opened)

Flow chart

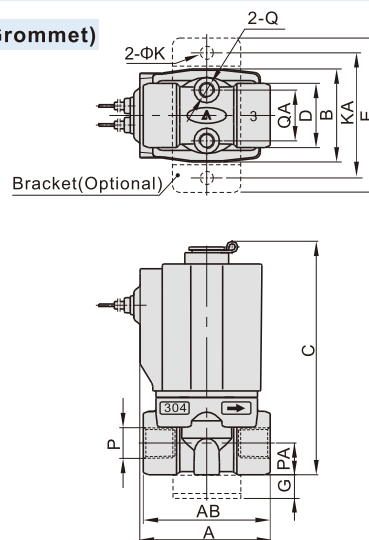


Dimensions

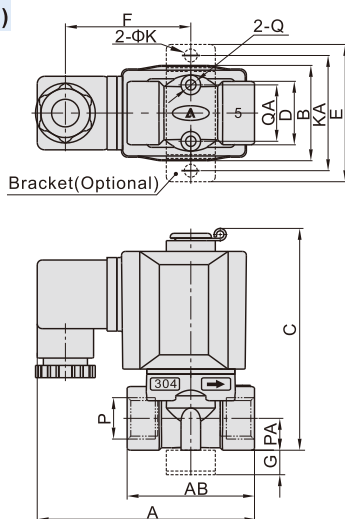
2KS□030 (Terminal)



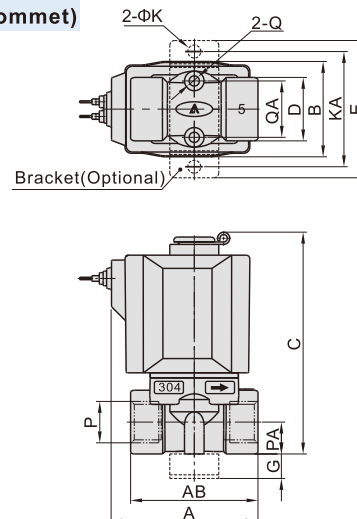
2KS□030(Grommet)



2KS□050 (Terminal)



2KS□050(Grommet)

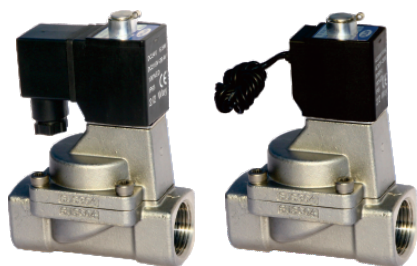


Model\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2KS□030-06	72.5	40	29.5	76	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2KS□030-08	72.5	40	29.5	76	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2KS□050-10	89.5	52	39	92	26	56	51	10	5.3	48	3/8"	13	M5	23
2KS□050-15	89.5	52	39	92	26	56	51	10	5.3	48	1/2"	13	M5	23

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

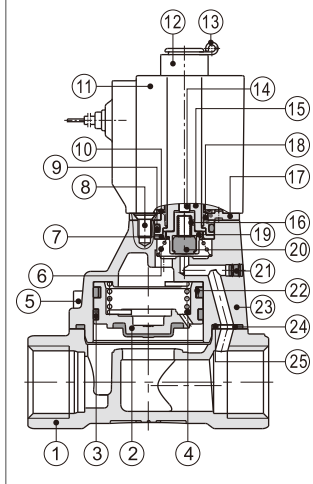


Product feature

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 □ G

1 2 3 4 5 6

①Model	②Orifice size	③Port size	④Voltage	⑤Electrical entry	⑥Thread 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	G: G Thread
	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 (Φmm)	Cv	Valid area or section (mm ²)	Weight [Note2](g)	Operating pressure differential		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] G thread is 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		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	-20

[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

Ordering code of accessories

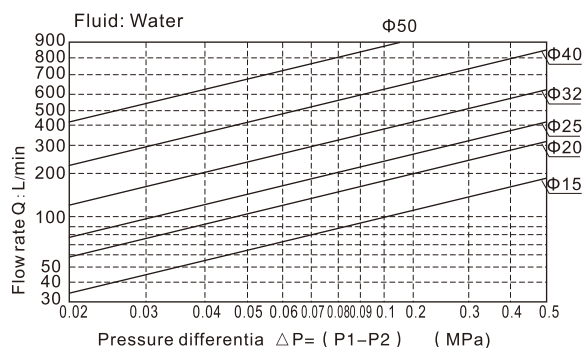
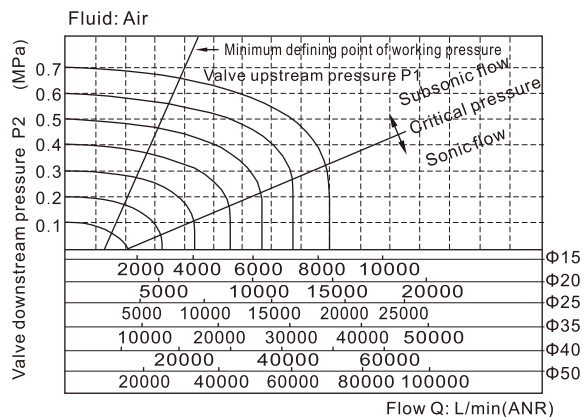
Ordering code of accessories is the same as 2S series valve's, please refer to P157 for details of ordering code.

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

Fluid control valve(2/2 way)

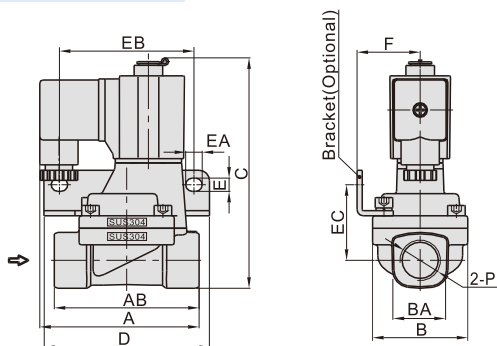
2KS Series (Internally piloted and normally opened)

Flow chart

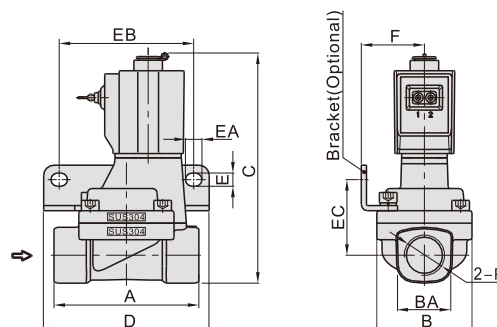


Dimensions

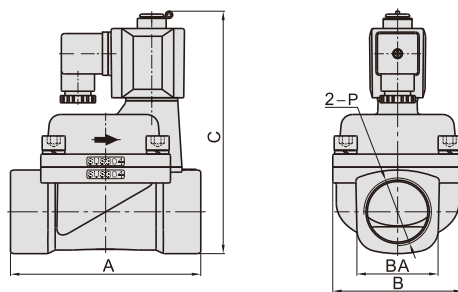
2KS150~250 (Terminal)



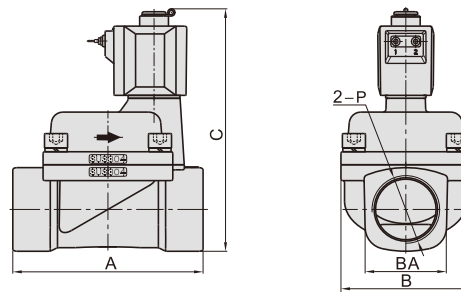
2KS150~250(Grommet)



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"

Fluid control valve(2/2way)

2W Series (Direct-acting and normally closed)



Symbol

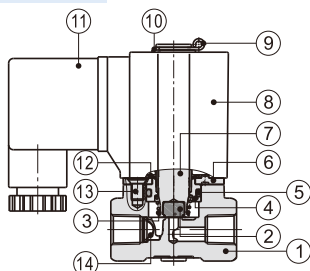


Product feature

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 brass . 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

2W030 (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	14	Filter [Note]

[Note] Extra large volume type has no filter element.

Ordering code

Ordering code of valves

2W L 030 08 A □ G

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
2W: 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: Grommet	G: G Thread
		050: 050 Series	10: 3/8" 15: 1/2"			

Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P155 for details of ordering code.

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
2WX030	-06 1/8"	1.5	0.10	1.8	305	3.0	450	5.0	750
	-08 1/4"				295				
2WH030	-06 1/8"	2.0	0.18	3.0	305	2.0	300		
	-08 1/4"				295				
2W030	-06 1/8"	3.0	0.33	6.0	305	1.0	150		
	-08 1/4"				295				
2WL030	-06 1/8"	4.0	0.55	10.0	305	0.5	75		
	-08 1/4"				295				
2WT030	-06 1/8"	6.0	1.10	12.0	305	0.1	15		
	-08 1/4"				295				
2WX050	-10 3/8"	3.0	0.34	6.1	620	3.0	450		
	-15 1/2"				600				
2WH050	-10 3/8"	4.0	0.55	10.0	620	2.0	300		
	-15 1/2"				600				
2W050	-10 3/8"	5.0	0.83	15.0	620	1.0	150		
	-15 1/2"				600				
2WL050	-10 3/8"	7.0	1.40	25.0	620	0.5	75		
	-15 1/2"				600				
2WT050	-10 3/8"	10.0	2.20	40.0	620	0.1	15		
	-15 1/2"				600				

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2W030 series grommet valve's weight is 10g less than terminal's. 2W050 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)
2W□030	CDA116 CLA116	AC	50	± 15%	Terminal (CDA)	10.0VA	Class B	35
			60			8.0VA		30
		DC	—	± 10%		6.5W		30
2W□050	CDA170 CLA170	AC	50	± 15%	Grommet (CLA)	25.0VA		60
			60			22.0VA		55
		DC	—	± 10%		10.5W		40

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

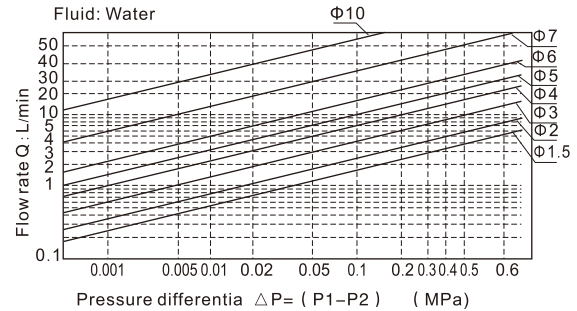
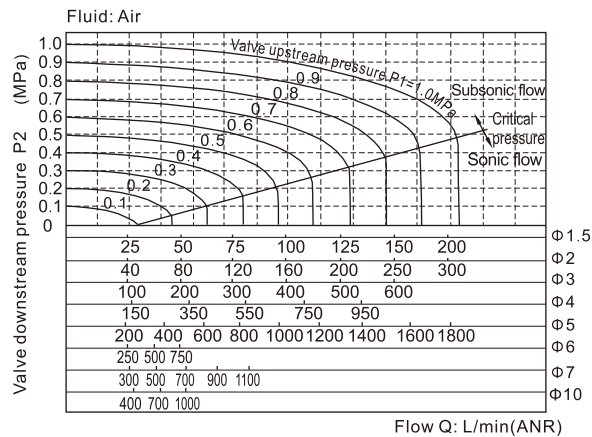
[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

Fluid control valve(2/2way)

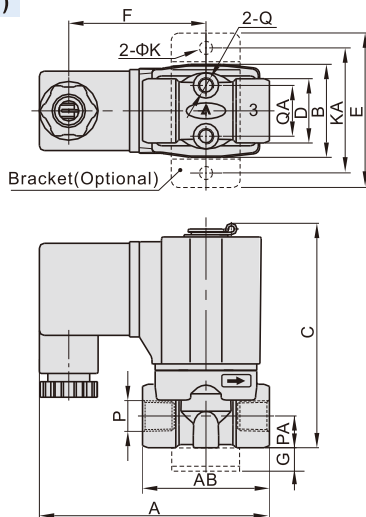
2W Series (Direct-acting and normally closed)

Flow chart

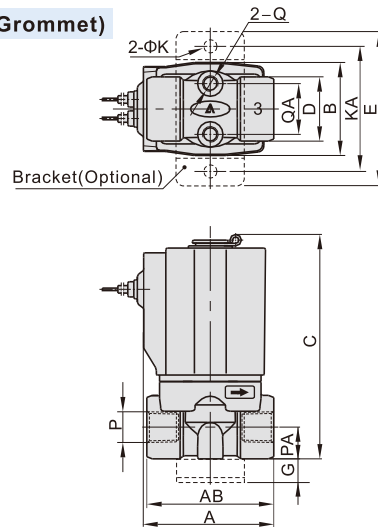


Dimensions

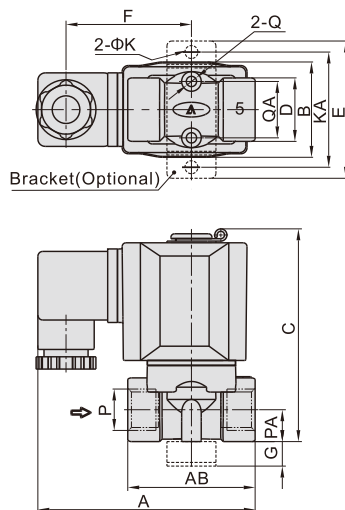
2W□030 (Terminal)



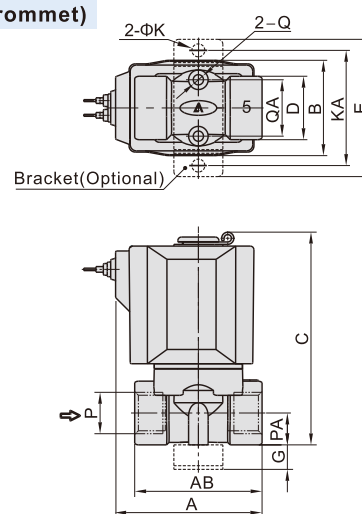
2W□030 (Grommet)



2W□050 (Terminal)



2W□050 (Grommet)

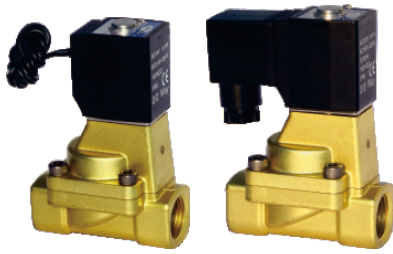


Model\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2W□030-06	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2W□030-08	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2W□050-10	89.5	52	39	87	26	56	51	10	5.3	48	3/8"	13	M5	23
2W□050-15	89.5	52	39	87	26	56	51	10	5.3	48	1/2"	13	M5	23

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

Fluid control valve(2/2way)

2W Series (Internally piloted and normally closed)



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 brass. 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.

Specification

Model\Item	Port size [Note1]	Orifice size (Φ mm)	Cv	Valid area or section (mm ²)	Weight [Note2](g)	Operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2W150-15	1/2"	15.0	5.50	100.0	720	Max: 1.0 Min: 0.05	Max: 150 Min: 10	1.5	220
2W200-20	3/4"	20.0	9.50	170.0	950				
2W250-25	1"	25.0	12.5	220.0	1200				

[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)
2W150	CDA116 CLA116	AC	50	± 15%	Terminal (CDA) Grommet (CLA)	10.0VA	Class B	35
2W200			60			8.0VA		30
2W250		DC	—	± 10%		6.5W		30

Valve's specification

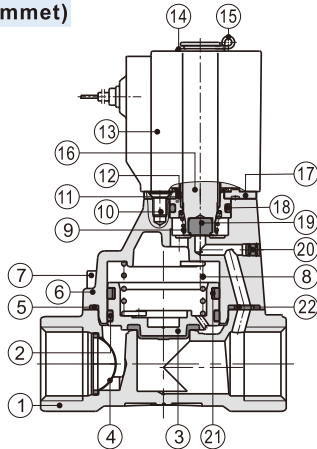
Acting	Internally piloted				
Initial state	Normally closed				
Adaptable fluid	Air, Water, Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature (°C)		Water	Air	Oil	Ambient
	Max.	80	90	80	70
	Min.	1	-20 [Note1]	-10 [Note2]	-20

[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

Inner structure

2W150 (Grommet)



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

Ordering code

Ordering code of valves

2W 150 15 A □ G

① ② ③ ④ ⑤ ⑥

① Model	② Orifice size	③ Port size	④ Voltage	⑤ Electrical entry	⑥ Thread type
2W: 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: Grommet	G: G Thread
	200: Φ20mm	20: 3/4"			
	250: Φ25mm	25: 1"			

Ordering code of accessories

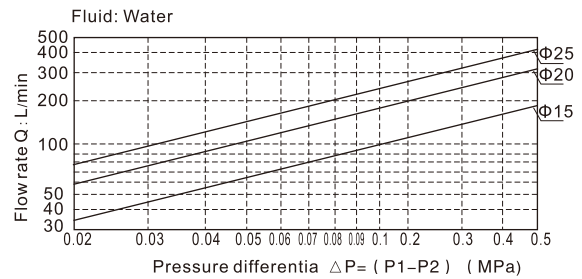
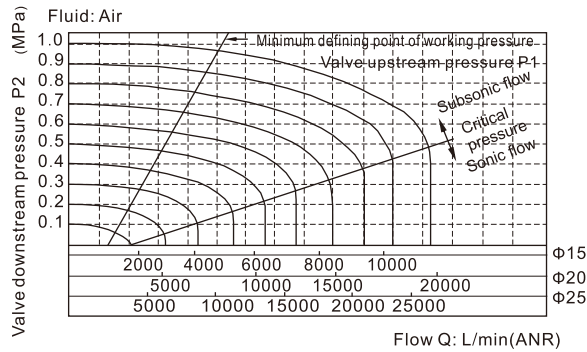
Ordering code of accessories is the same as 2S series valve's, Please refer to P157 for details of ordering code.

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

Fluid control valve(2/2way)

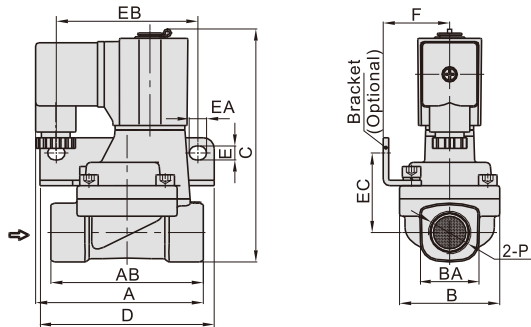
2W Series (Internally piloted and normally closed)

Flow chart



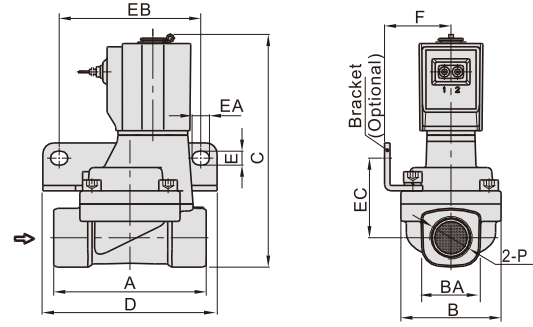
Dimensions

Terminal



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2W150-15	77	70	46	27.5	107	80	6.4	8	65	36.5	30.5	1/2"
2W200-20	78.5	82	53	33.5	115.5	90	6.4	8	75	40	34	3/4"
2W250-25	81	92	59	40.5	124	95	6.4	8	80	44.5	36	1"

Grommet



Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2W150-15	70	46	27.5	107	80	6.4	8	65	36.5	30.5	1/2"
2W200-20	82	53	33.5	115.5	90	6.4	8	75	40	34	3/4"
2W250-25	92	59	40.5	124	95	6.4	8	80	44.5	36	1"

Fluid control valve(2/2 way)

2KW Series (Direct-acting and normally opened)



Symbol

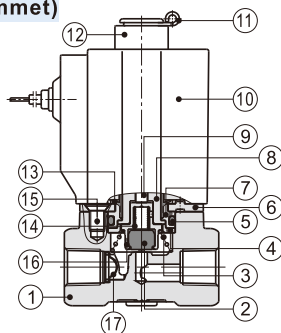


Product feature

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 brass. 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

2KW030(Grommet)



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

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
2KW030	-06	1/8"	1.5	0.10	1.8	315	2.0	300	3.0	450
	-08	1/4"				305				
2KWH030	-06	1/8"	2.0	0.18	3.0	315	1.5	220		
	-08	1/4"				305				
2KW030	-06	1/8"	3.0	0.33	6.0	315	0.7	100		
	-08	1/4"				305				
2KWL030	-06	1/8"	4.0	0.55	10.0	315	0.4	60		
	-08	1/4"				305				
2KW050	-10	3/8"	3.0	0.34	6.1	635	2.0	300		
	-15	1/2"				615				
2KWH050	-10	3/8"	4.0	0.55	10.0	635	1.5	220		
	-15	1/2"				615				
2KW050	-10	3/8"	5.0	0.83	15.0	635	0.7	100		
	-15	1/2"				615				
2KWL050	-10	3/8"	7.0	1.40	25.0	635	0.4	60		
	-15	1/2"				615				

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2KW030 series grommet valve's weight is 10g less than terminal's. 2KW050 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)
2KW□030	CDA116 CLA116	AC	50	± 15%	Terminal (CDA)	15.0VA	Class B	50
			60			11.0VA		40
		DC	—	± 10%		6.5W		30
2KW□050	CDA170 CLA170	AC	50	± 15%	Grommet (CLA)	35.0VA		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
		Max.	80	90
		Min.	1	-20 [Note1]
				-10 [Note2]
				-20

[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

Ordering code

Ordering code of valves

2KW H 030 08 A □ G

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
2KW: 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	G: G Thread
		050: 050 Series	10: 3/8" 15: 1/2"			

Ordering code of accessories

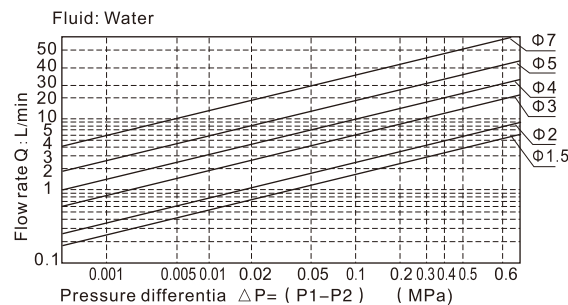
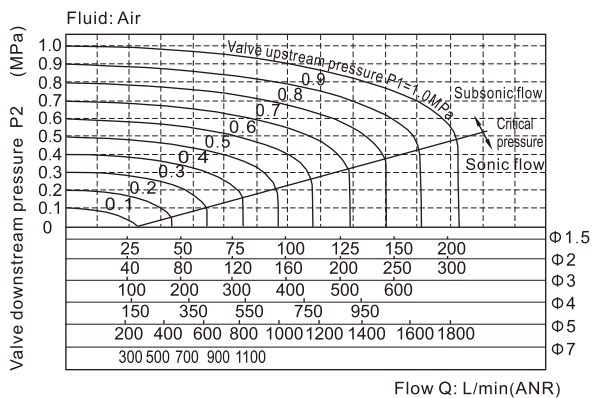
Ordering code of accessories is the same as 2S series valve's, Please refer to P155 for details of ordering code.



Fluid control valve(2/2 way)

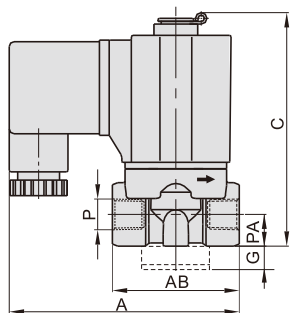
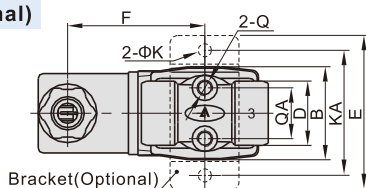
2KW Series (Direct-acting and normally opened)

Flow chart

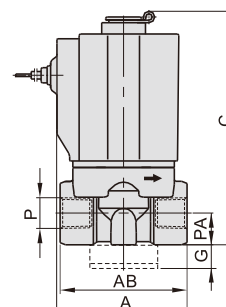
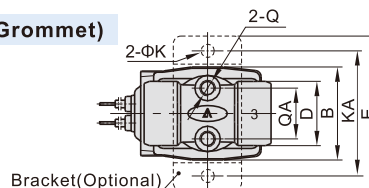


Dimensions

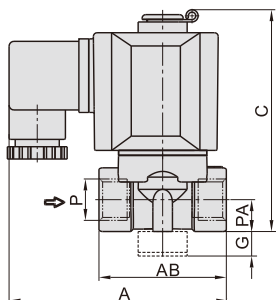
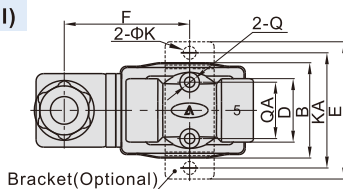
2KW□030 (Terminal)



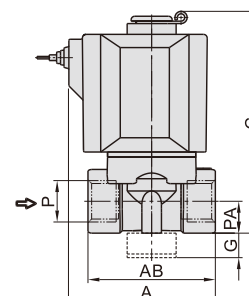
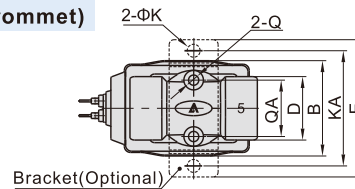
2KW□030 (Grommet)



2KW□050 (Terminal)



2KW□050 (Grommet)



Model\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2KW□030-06	72.5	40	29.5	76	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2KW□030-08	72.5	40	29.5	76	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2KW□050-10	89.5	52	39	92	26	56	51	10	5.3	48	3/8"	13	M5	23
2KW□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
2KW□030-06	41	40	29.5	76	20	49	10	5.3	40	1/8"	10	M5	16
2KW□030-08	41	40	29.5	76	20	49	10	5.3	40	1/4"	10	M5	16
2KW□050-10	60	52	39	92	26	56	10	5.3	48	3/8"	13	M5	23
2KW□050-15	60	52	39	92	26	56	10	5.3	48	1/2"	13	M5	23

Fluid control valve(2/2 way)

2KW Series (Internally piloted and normally opened)



Symbol

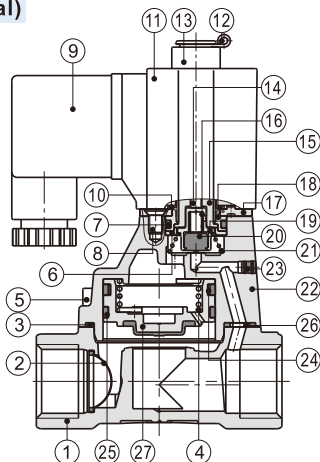


Product feature

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 brass . 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

2KW150 (Terminal)



No.	Item	No.	Item	No.	Item
1	Body	10	Washer	19	Airtight bushing
2	Filter	11	Coil assembly	20	Airtight ring
3	O-ring	12	E Clip	21	Spring
4	Spring	13	Position ring	22	Cover
5	Screw	14	Man drill	23	Plug
6	Clip	15	Movable core	24	Bonnet spring
7	O-ring	16	Spring	25	Wear ring
8	Screw	17	Fixed plate	26	Bushing
9	Connector	18	Fixed cap	27	Piston

Ordering code

Ordering code of valves

2KW 150 15 A □ G

① ② ③ ④ ⑤ ⑥

① Model	② Orifice size	③ Port size	④ Voltage	⑤ Electrical entry	⑥ Thread type
2KW: 2/2 way internally piloted and normally opened	150: Φ15mm	15: 1/2"	A: AC220V B: DC24V	Blank: Terminal I: Grommet	G: G Thread
	200: Φ20mm	20: 3/4"	C: AC110V E: AC24V		
	250: Φ25mm	25: 1"	F: DC12V		

Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P157 for details of ordering code.

Specification

Model\Item	Port size [Note1]	Orifice size (Φ mm)	Cv	Valid area or section (mm²)	Weight [Note2](g)	Operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2KW150-15	1/2"	15.0	5.50	100.0	730	Max: 0.7 Min: 0.05	Max: 100 Min: 10	1.5	220
2KW200-20	3/4"	20.0	9.50	170.0	960				
2KW250-25	1"	25.0	12.5	220.0	1210				

[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)
2KW150	CDA116	AC	50	± 15%	Terminal (CDA)	15.0VA	Class B	50
2KW200	CLA116	DC	60		Grommet (CLA)	11.0VA		40
2KW250			—	± 10%		6.5W		30

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

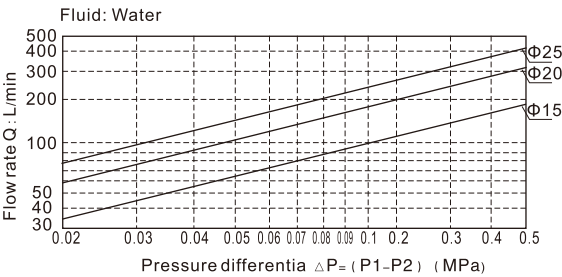
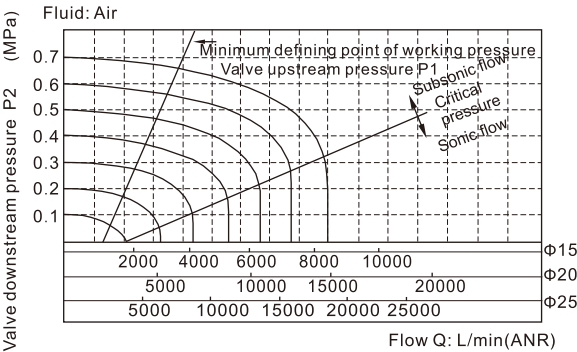
[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

Fluid control valve(2/2 way)

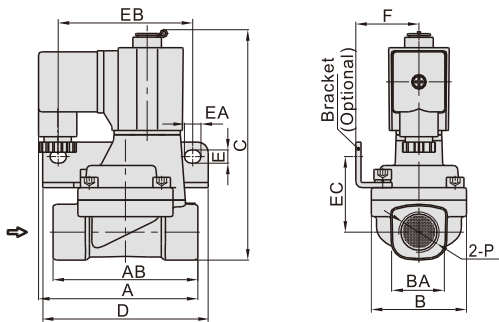
2KW Series (Internally piloted and normally opened)

Flow chart



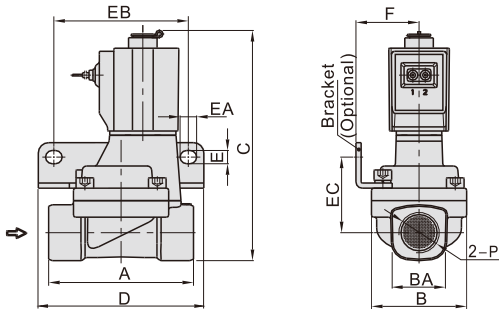
Dimensions

Terminal



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2KW150-15	77	70	46	27.5	112.5	80	6.4	8	65	36.5	30.5	1/2"
2KW200-20	78.5	82	53	33.5	121	90	6.4	8	75	40	34	3/4"
2KW250-25	81	92	59	40.5	129.5	95	6.4	8	80	44.5	36	1"

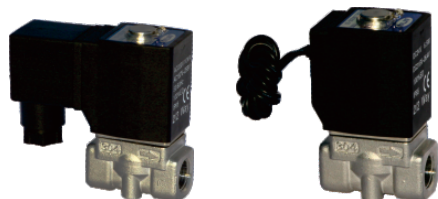
Grommet



Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2KW150-15	70	46	27.5	112.5	80	6.4	8	65	36.5	30.5	1/2"
2KW200-20	82	53	33.5	121	90	6.4	8	75	40	34	3/4"
2KW250-25	92	59	40.5	129.5	95	6.4	8	80	44.5	36	1"

Fluid control valve(2/2 way)

2L Series (Direct-acting and normally closed)



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 standard high pressure (H) 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 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.
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 (Φ mm)	Cv	Valid area or section (mm ²)	Weight [Note2](g)	Max.operating pressure differential		Proof pressure	
							MPa	psi	MPa	psi
2LH030	-06	1/8"	2.0	0.18	3.0	300	2.0	300	3.0	450
	-08	1/4"				290				
2LO30	-06	1/8"	3.0	0.33	6.0	300	1.0	150		
	-08	1/4"				290				
2LH050	-10	3/8"	4.0	0.55	10.0	600	2.0	300		
	-15	1/2"				590				
2LO50	-10	3/8"	5.0	0.83	15.0	600	1.0	150		
	-15	1/2"				590				

[Note1] G thread is available.

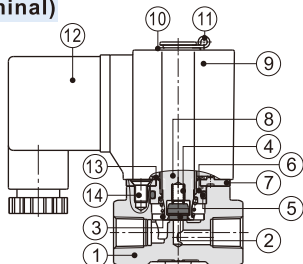
[Note2] The weight in the table is the terminal valve's weight, 2LO30 series grommet valve's weight is 10g less than terminal's. 2LO50series grommet valve's weight is 20g less than terminal's.

Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2L□030	CDA116 CLA116	AC	50	± 15%	Terminal (CDA)	10.0VA	Class H	35
			60			8.0VA		30
		DC	—	± 10%		6.5W		30
2L□050	CDA170 CLA170	AC	50	± 15%	Grommet (CLA)	25.0VA		60
			60			22.0VA		55
		DC	—	± 10%		10.5W		40

Inner structure

2L030 (Terminal)



No.	Item	No.	Item	No.	Item
1	Body	6	Fixed cap	11	E Clip
2	Airtight ring	7	Fixed plate	12	Connector
3	Spring	8	Movable core	13	Bead flange
4	Spring	9	Coil assembly	14	Screw
5	O-ring	10	Washer		

Valve's specification

Acting		Direct acting			
Initial state		Normally closed			
Adaptable fluid		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 [Note1]	1	—	-20

[Note1] 50CST or less.

Ordering code

Ordering code of valves

2L H 030 08 A □ G

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
2L: 2/2 way direct-acting and normally closed	H: High pressure Blank: Standard	030: 030 Series	06: 1/8" 08: 1/4"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet	G: G Thread
		050: 050 Series	10: 3/8" 15: 1/2"			

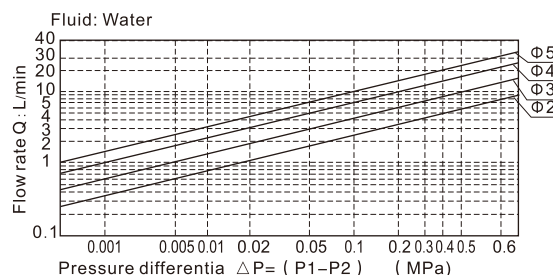
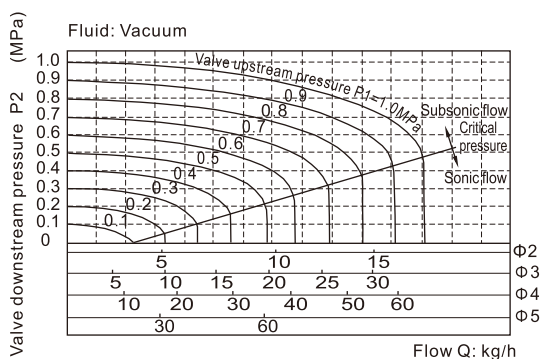
Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P155 for details of ordering code.

Fluid control valve(2/2 way)

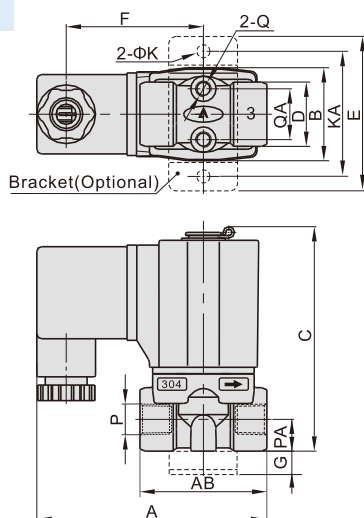
2L Series (Direct-acting and normally closed)

Flow chart

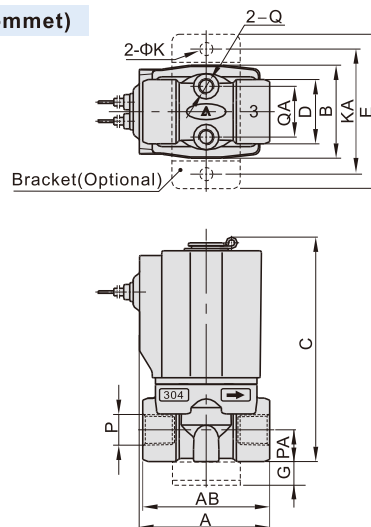


Dimensions

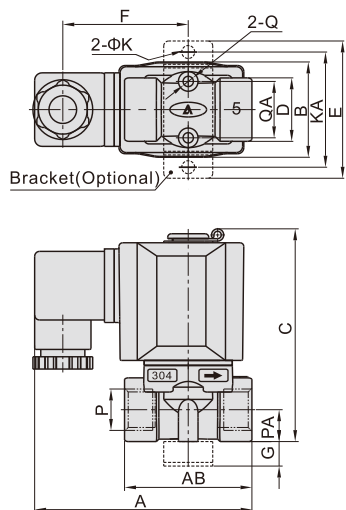
2L□030(Terminal)



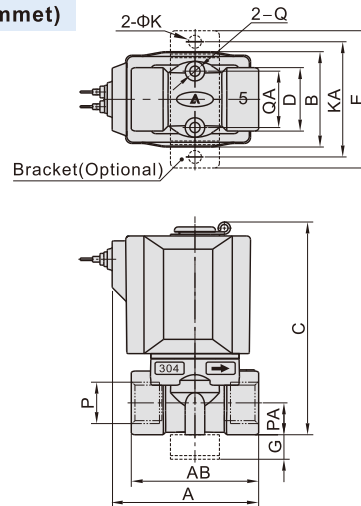
2L□030(Grommet)



2L□050(Terminal)



2L□050(Grommet)

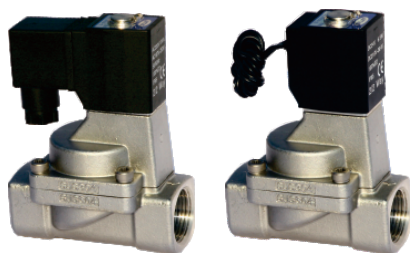


Model\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2L□030-06	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2L□030-08	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2L□050-10	89.5	52	39	87	26	56	51	10	5.3	48	3/8"	13	M5	23
2L□050-15	89.5	52	39	87	26	56	51	10	5.3	48	1/2"	13	M5	23

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

Fluid control valve(2/2 way)

2L Series (Internally piloted and normally closed)



Symbol

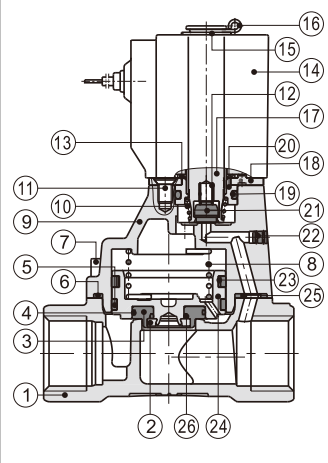


Product feature

1. Indirect acting (Internal pilot) and normally closed 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.

Inner structure

2L150 (Grommet)



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

Ordering code

Ordering code of valves

2L 150 15 A □ G

① ② ③ ④ ⑤ ⑥

① Model	② Orifice size	③ Port size	④ Voltage	⑤ Electrical entry	⑥ Thread type
2L: 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: Grommet	G: G Thread
	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"			

Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, please refer to P157 for details of ordering code.

[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 ²)	Weight [Note2](g)	Operating pressure differential		Proof pressure	
						MPa	psi	MPa	psi
2L150-15	1/2"	15.0	5.50	100.0	675	Max: 1.0 Min: 0.05	Max: 150 Min: 10	1.5	220
2L200-20	3/4"	20.0	9.50	170.0	875				
2L250-25	1"	25.0	12.50	220.0	1120				
2L320-32	1 1/4"	35.0	23.00	420.0	2700				
2L400-40	1 1/2"	40.0	31.00	560.0	3250				
2L500-50	2"	50.0	49.00	880.0	4300				

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2L150~250series grommet valve's weight is 10g less than terminal's. 2L320~500series 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)
2L150 2L200 2L250	CDA116 CLA116	AC	50 60	± 15 %	Terminal (CDA)	10.0VA	Class H	35
		DC	—	± 10 %		8.0VA		30
					Grommet (CLA)	6.5W		30
2L320 2L400 2L500	CDA170 CLA170	AC	50 60	± 15 %		25.0VA		60
		DC	—	± 10 %		22.0VA		55
						10.5W		40

Valve's specification

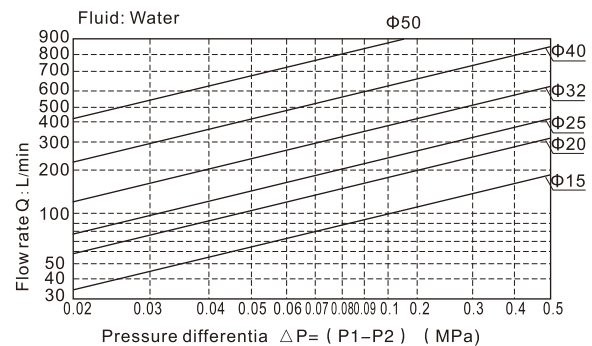
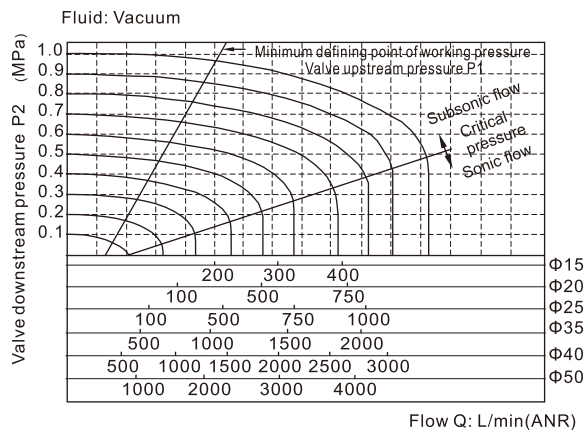
Acting	Internally piloted				
Initial state	Normally closed				
Adaptable fluid	Steam, High temperature Water, Oil				
Viscosity limit	Under 20cSt				
Ambient and fluid temperature (°C)		Oil	Water	Steam	Ambient
	Max.	150	150	183	100
	Min.	-10 [Note1]	1	—	-20

[Note1] 50cSt or less.

Fluid control valve(2/2 way)

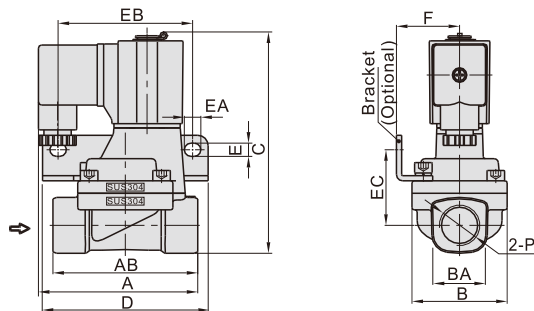
2L Series (Internally piloted and normally closed)

Flow chart

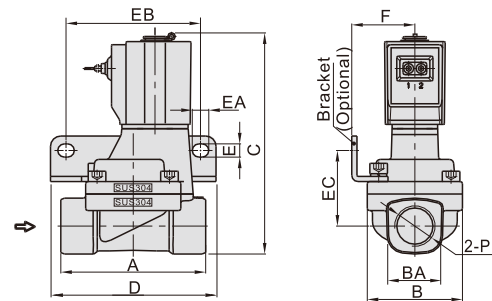


Dimensions

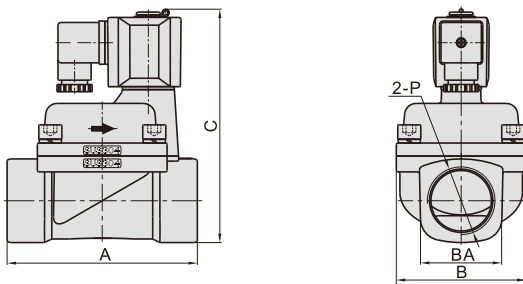
2L150~250(Terminal)



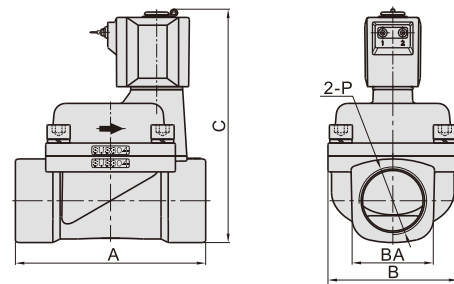
2L150~250(Grommet)



2L320~500(Terminal)



2L320~500(Grommet)

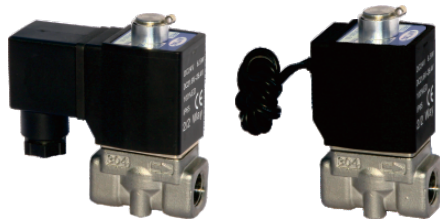


Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2L150-15	77	70	46	27.5	107	80	6.4	8	65	36.5	30.5	1/2"
2L200-20	78.5	82	53	33.5	115.5	90	6.4	8	75	40	34	3/4"
2L250-25	81	92	59	40.5	124	95	6.4	8	80	44.5	36	1"
2L320-32	125	-	80	52	154.5	-	-	-	-	-	-	1 1/4"
2L400-40	132	-	90	58	162	-	-	-	-	-	-	1 1/2"
2L500-50	150	-	100	70	177	-	-	-	-	-	-	2"

Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2L150-15	70	46	27.5	107	80	6.4	8	65	36.5	30.5	1/2"
2L200-20	82	53	33.5	115.5	90	6.4	8	75	40	34	3/4"
2L250-25	92	59	40.5	124	95	6.4	8	80	44.5	36	1"
2L320-32	125	80	52	154.5	-	-	-	-	-	-	1 1/4"
2L400-40	132	90	58	162	-	-	-	-	-	-	1 1/2"
2L500-50	150	100	70	177	-	-	-	-	-	-	2"

Fluid control valve(2/2 way)

2KL 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 standard high pressure (H) 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 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.
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 (mm ²)	Weight [Note2](g)	Max.operating pressure differentia		Proof pressure	
							MPa	psi	MPa	psi
2KLH030	-06	1/8"	2.0	0.18	3.0	305	1.5	220	3.0	450
	-08	1/4"				295				
2KL030	-06	1/8"	3.0	0.33	6.0	305	0.7	100		
	-08	1/4"				295				
2KLH050	-10	3/8"	4.0	0.55	10.0	610	1.5	220		
	-15	1/2"				600				
2KL050	-10	3/8"	5.0	0.83	15.0	610	0.7	100		
	-15	1/2"				600				

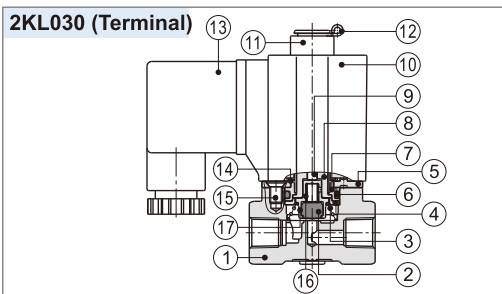
[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2KL030 series grommet valve's weight is 10g less than terminal's. 2KL050series 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(℃)
2KL□030	CDA116 CLA116	AC	50	± 15 %	Terminal (CDA)	15.0VA	Class H	50
			60			11.0VA		40
		DC	—	± 10 %		6.5W		30
2KL□050	CDA170 CLA170	AC	50	± 15 %	Grommet (CLA)	35.0VA		65
			60			30.0VA		60
		DC	—	± 10 %		10.5W		40

Inner structure



Valve's specification

Acting		Direct acting			
Initial state		Normally opened			
Adaptable fluid		Steam, High temperature Water, Oil			
Viscosity limit		Under 20CST			
Ambient and fluid temperature (°C)			Oil	Water	Steam
		Max.	150	150	183
		Min.	-10 [Note1]	1	—
					Ambient
					100
					-20

[Note1] 50CST or less.

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

Ordering code

Ordering code of valves

2KL H 030 08 A □ G

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
2KL: 2/2 way direct-acting and normally opened	H: High pressure Blank: Standard	030: 030 Series	06: 1/8" 08: 1/4"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet	G: G Thread
		050: 050 Series	10: 3/8" 15: 1/2"			

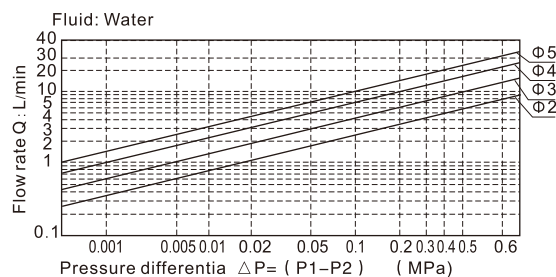
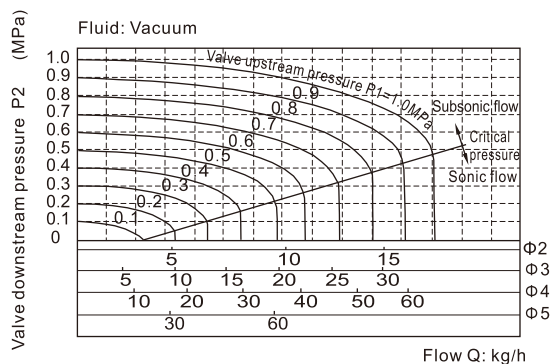
Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P155 for details of ordering code.

Fluid control valve(2/2 way)

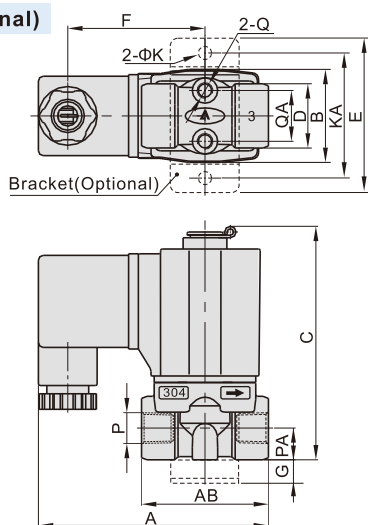
2KL Series (Direct-acting and normally opened)

Flow chart

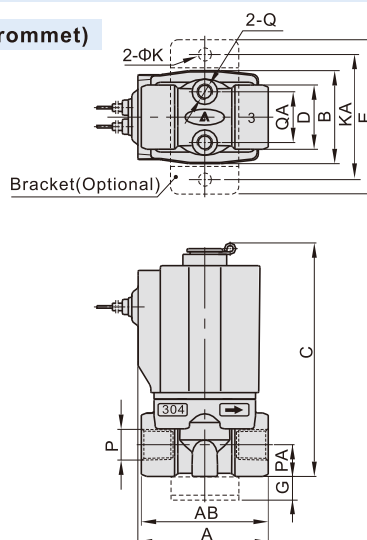


Dimensions

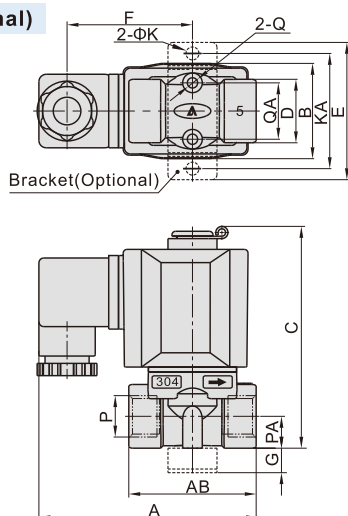
2KL□030(Terminal)



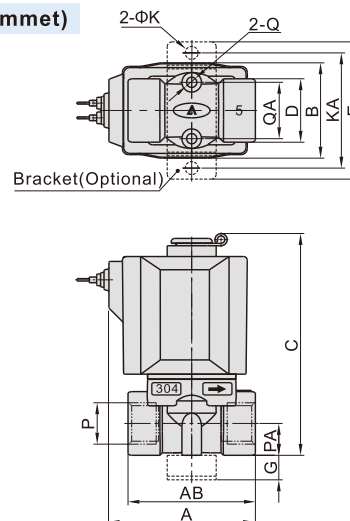
2KL□030(Grommet)



2KL□050(Terminal)



2KL□050(Grommet)

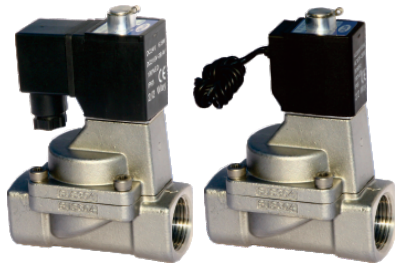


Model\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2KL□030-06	72.5	40	29.5	76	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2KL□030-08	72.5	40	29.5	76	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2KL□050-10	89.5	52	39	92	26	56	51	10	5.3	48	3/8"	13	M5	23
2KL□050-15	89.5	52	39	92	26	56	51	10	5.3	48	1/2"	13	M5	23

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

Fluid control valve(2/2 way)

2KL Series (Internally piloted and normally opened)



Symbol

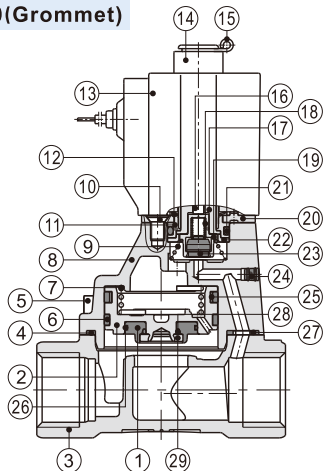


Product feature

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.

Inner structure

2KL150(Grommet)



No.	Item	No.	Item
1	Gasket	16	Man drill
2	Piston	17	Electromagnet
3	Body	18	Spring
4	Gasket	19	Airtight bush
5	Screw	20	Fixed plate
6	Wear ring	21	O-ring
7	Spring	22	Fixed ring
8	Cover	23	Airtight ring
9	Spring	24	Plug
10	Screw	25	Spring
11	Fixed cap	26	O-ring
12	Bead flange	27	Bush
13	Coil assembly	28	O-ring
14	Position ring	29	Fixed ring
15	E Clip		

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
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				

[Note1] G thread is available.

[Note2] The weight in the table is the terminal valve's weight, 2KL150~250 series grommet valve's weight is 10g less than terminal's. 2KL320~500 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)
2KL150	CDA116 CLA116	AC	50	± 15 %	Terminal (CDA)	15.0VA	Class H	50
2KL200			60			11.0VA		40
2KL250		DC	—	± 10 %		6.5W		30
2KL320	CDA170 CLA170	AC	50	± 15 %	Grommet (CLA)	35.0VA		65
2KL400			60			30.0VA		60
2KL500		DC	—	± 10 %		10.5W		40

Valve's specification

Acting	Internally piloted				
Initial state	Normally opened				
Adaptable fluid	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 [Note1]	1	—	-20

[Note1] 50CST or less.

Ordering code

Ordering code of valves

2KL 150 15 A □ G					
	1	2	3	4	5
① Model	② Orifice size	③ Port size	④ Voltage	⑤ Electrical entry	⑥ Thread type
2KL: 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	G: G Thread
	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"			

Ordering code of accessories

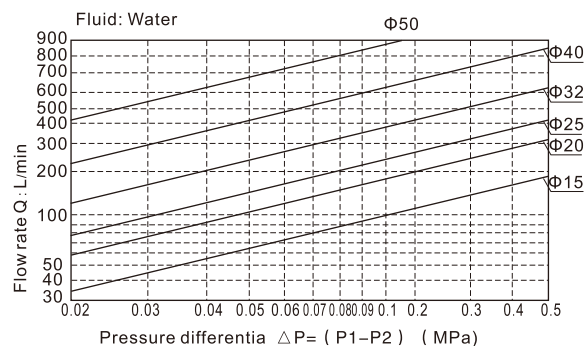
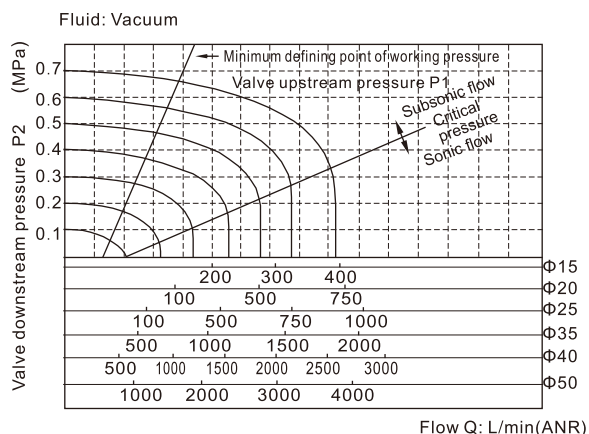
Ordering code of accessories is the same as 2S series valve's, Please refer to P157 for details of ordering code.

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

Fluid control valve(2/2 way)

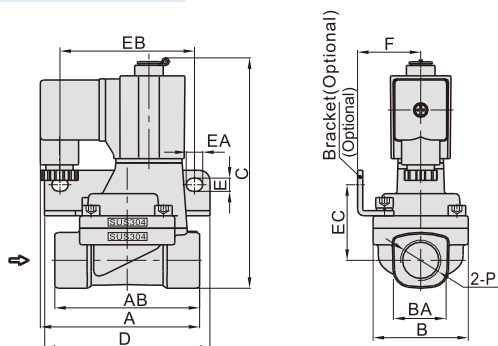
2KL Series (Internally piloted and normally opened)

Flow chart

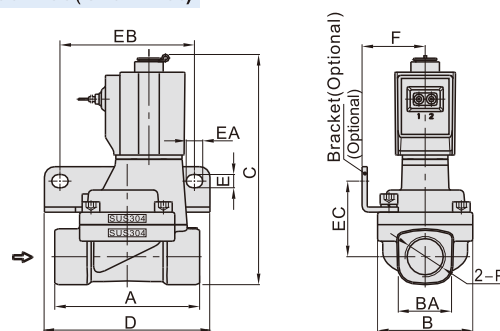


Dimensions

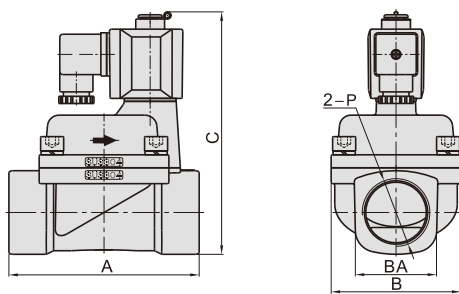
2KL150~250(Terminal)



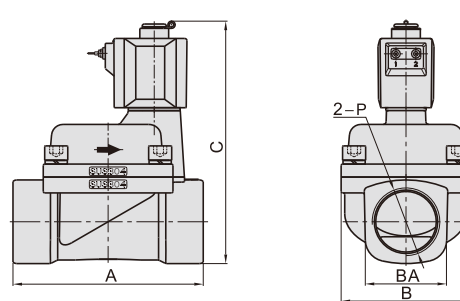
2KL150~250(Grommet)



2KL320~500(Terminal)



2KL320~500(Grommet)



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2KL150-15	77	70	46	27.5	112.5	80	6.4	8	65	36.5	30.5	1/2"
2KL200-20	78.5	82	53	33.5	121	90	6.4	8	75	40	34	3/4"
2KL250-25	81	92	59	40.5	129.5	95	6.4	8	80	44.5	36	1"
2KL320-32	125	-	80	52	160	-	-	-	-	-	-	1 1/4"
2KL400-40	132	-	90	58	167	-	-	-	-	-	-	1 1/2"
2KL500-50	150	-	100	70	182	-	-	-	-	-	-	2"

Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2KL150-15	70	46	27.5	112.5	80	6.4	8	65	36.5	30.5	1/2"
2KL200-20	82	53	33.5	121	90	6.4	8	75	40	34	3/4"
2KL250-25	92	59	40.5	129.5	95	6.4	8	80	44.5	36	1"
2KL320-32	125	80	52	160	-	-	-	-	-	-	1 1/4"
2KL400-40	132	90	58	167	-	-	-	-	-	-	1 1/2"
2KL500-50	150	100	70	182	-	-	-	-	-	-	2"

Fluid control valve(2/2way)

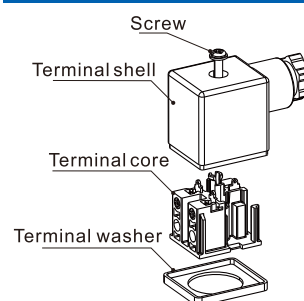
Coil and accessories



Hookup

Coil's type			Hookup	Connector's type
116 Series	CDA116 (Terminal)	AC		PI2925
		DC		-
	CLA116 (Grommet)	AC		-
		DC		-
170 Series	CDA170 (Terminal)	AC		PL3030
		DC		-
	CLA170 (Grommet)	AC		-
		DC		-

How to use connector



Specification

Model\Item	Power type	Voltage (V)	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)		Insulation	Temp.rise(℃)	
						For NC	For NO		NC	NO
116 Series	AC	220	50	± 15%	DIN Terminal Grommet	10.0VA	15.0VA	Class B Class H	35	50
			60			8.0VA	11.0VA		30	40
		110	50			10.0VA	15.0VA		35	50
			60			8.0VA	11.0VA		30	40
		24	50			10.0VA	15.0VA		35	50
			60			8.0VA	11.0VA		30	40
	DC	24	—	± 10%		6.5W			30	30
		12							60	65
170 Series	AC	220	50	± 15%	DIN Terminal Grommet	25.0VA	35.0VA	Class H	55	60
			60			22.0VA	30.0VA		60	65
		110	50			25.0VA	35.0VA		55	60
			60			22.0VA	30.0VA		60	65
		24	50			25.0VA	35.0VA		55	60
			60			22.0VA	30.0VA		40	40
	DC	24	—	± 10%		10.5W				
		12								

How to select coil

Valve type\Coil type		116 Series		170 Series	
		Class B	Class H	Class B	Class H
2W□030\2KW□030	2S□030\2KS□030	●	×	×	×
2L□030	2KL□030	×	●	×	×
2W□050\2KW□050	2S□050\2KS□050	×	×	●	×
2L□050	2KL□050	×	×	×	●
2W150~250\2KW150~250	2S150~250\2KS150~250	●	×	×	×
2L150~250	2KL150~250	×	●	×	×
2S320~500	2KS320~500	×	×	●	×
2L320~500	2KL320~500	×	×	×	●

How to select accessories

Valve type\Accessories type			F-2S030LB	F-2S050LB	F-2S150LB	F-2S200LB	F-2S250LB
2W□030\2KW□030	2S□030\2KS□030	2L□030\2KL□030	●	×	×	×	×
2W□050\2KW□050	2S□050\2KS□050	2L□050\2KL□050	×	●	×	×	×
2W150\2KW150	2S150\2KS150	2L150\2KL150	×	×	●	×	×
2W200\2KW200	2S200\2KS200	2L200\2KL200	×	×	×	●	×
2W250\2KW250	2S250\2KS250	2L250\2KL250	×	×	×	×	●
2S320~500\2KS320~500	2L320~500\2KL320~500		×	×	×	×	×

Ordering code of coil

CD A116 A □

① ② ③ ④

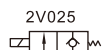
① Coil type	② Coil's bore	③ Voltage	④ Temperature resistance class of coil
CD: Terminal CL: Grommet	A116: Coil Specification(Bore sizeΦ11.6mm) A170: Coil Specification(Bore sizeΦ17.0mm)	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: B Class H: H Class

Fluid control valve(2/2way)

2V Series



Symbol



Product feature

2V025 series

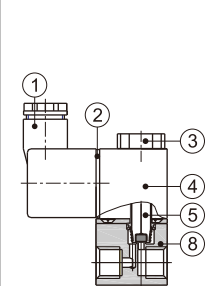
1. Direct acting and normally closed type 2/2 way solenoid valve. Its high sensitivity allows it to change direction quickly.
2. The structure is small and compact.
3. The valve body is made of brass which is heat resistance and the coil conforms to Class B classification. The seals are made of fluorine rubber (VITON) which is suitable for several types of working medium.

2V130 and 250 series

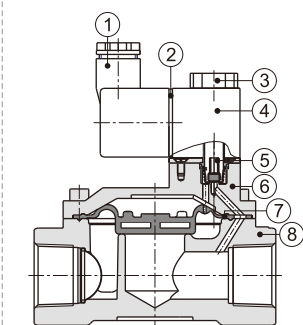
1. This 2/2 way diaphragm piloted solenoid valve has low energy consumption and large air flow.
2. The starting pressure is low and the operational differential pressure is < 0.05MPa.
3. The valve body is made of brass which is heat resistance and the coil conforms to Class B classification. The seals are made of NBR.

Inner structure

2V025 Terminal



2V250 Terminal



No.	Item	No.	Item	No.	Item
1	Connector	4	Coil	7	Diaphragm
2	Connector gasket	5	Armature assembly	8	Body
3	Nut	6	Body cover		

Ordering code

2V 025 08 A □ G

1 2 3 4 5 6

① Model	② Orifice size	③ Port size	④ Voltage	⑤ Electrical entry	⑥ Thread type
2V: 2 port 2 position solenoid valve	025: Φ2.5mm	06: 1/8" 08: 1/4"	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet	G: G Thread
	130: Φ13mm	10: 3/8" 15: 1/2"			
	250: Φ25mm	20: 3/4" 25: 1"			

Specification

Model	2V025-06	2V025-08	2V130-10	2V130-15	2V250-20	2V250-25
Fluid	Air. Water. Oil					
Acting	Direct acting		Internally piloted acting			
Initial state	Normally closed					
Orifice size [Note]	2.5	2.5	13.0	13.0	25.0	25.0
Cv	0.23	0.25	6.20	6.20	13.00	13.00
Port size	1/8"	1/4"	3/8"	1/2"	3/4"	1"
Viscosity limit	Under 20CST					
Pressure range	0~1.0MPa(0~145psi)		0.05~1.0MPa(7~145psi)			
Proof pressure	1.5MPa(215psi)					
Material body	Brass with zinc plated		Brass			
Seal material	VITON		NBR			
Activating time	0.05 sec and below					

[Note1] G thread is available.

Specification of coil

Valve type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise (°C)
2V025	AC	50	± 15%	Terminal Grommet	7.0VA	Class B	35
2V130		60					
2V250	DC	—	± 10%		7.0W		45

Usable fluid

Seal material\Fluid	Water	Dry air	Acetone*	ISOVG32 oil	Glycol*	Nitrogen	Heavy oil
NBR	○	◎	△	◎	○	◎	○

Seal material\Fluid	JIS# oil	JIS#3 oil	Vegetable Oil	Inorganic Oil	Start Oil	Silicagel Oil	CO ₂	Argon
NBR	◎	○	◎	◎	○	◎	◎	◎

Note 1: ◎ = Excellent (nearly without affect). ○ = Good (workable though some affect).

△ = Poor (large affect).

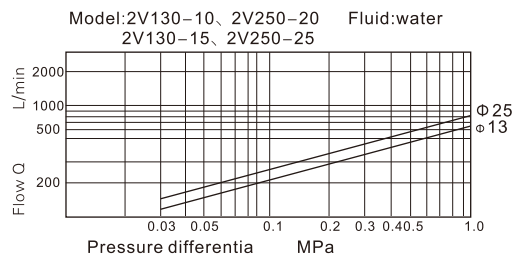
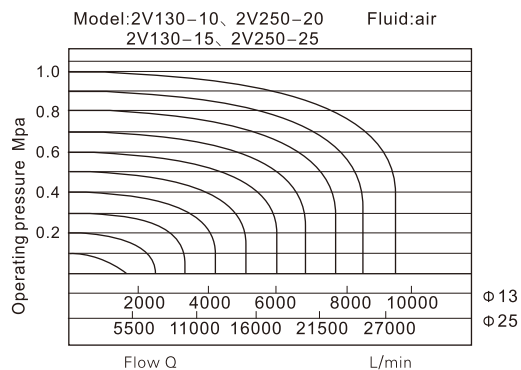
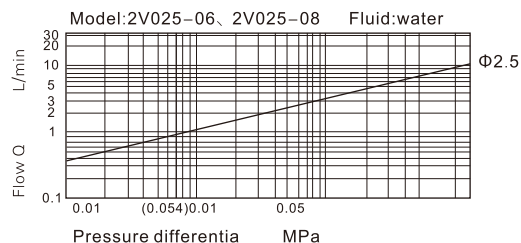
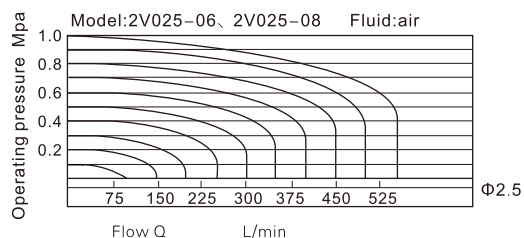
Note 2: "*" means inflammable and explosive dangerous fluid. Please use the relative explosion proof coil.

Note 3: Please consult the technical department before using fluid that has not been shown in the above table.

Fluid control valve(2/2way)

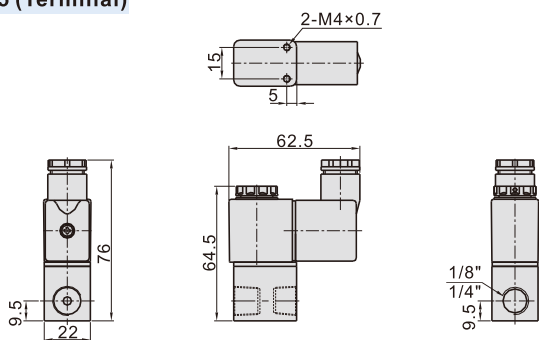
2V Series

Flow chart

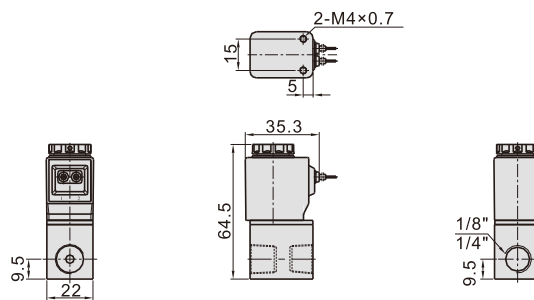


Dimensions

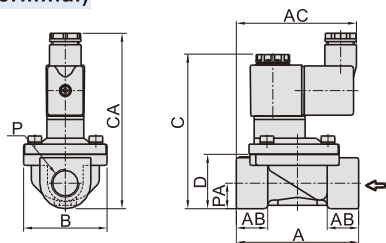
2V025 (Terminal)



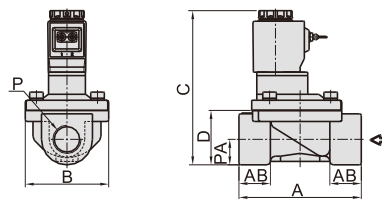
2V025 (Grommet)



2V130\250(Terminal)



2V130\250 (Grommet)



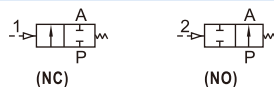
Model/Item	A	AB	AC	B	C	CA	D	P	PA
2V130-10	72	18.5	71	49	91	103	32	3/8"	15
2V130-15	72	18.5	71	49	91	103	32	1/2"	15
2V250-20	102	23	74	77.5	107.5	120	45	3/4"	21
2V250-25	102	23	74	77.5	107.5	120	45	1"	21

Angle seat valve(2/2 way)

2J Series



Symbol



Product feature

1. Air piloted and can be used non electric, inflammable and explosive environment. The start-up pressure is low; and the high pressure could be controlled by the low pressure.
2. The accessories such as the noumenon and slide bar are made of stainless steel, which are of excellent rustproof quality. The seals are made of Teflon and can be applied extensively in areas with high temperature and strong corrosive liquids.
3. The structure of valve is angles at 45° degrees with streamline inner chamber design. The reduced tunnel resistance allows liquid to run more smoothly thus achieving high flow. Filtration core are added at inlet port to prevent the entrance of impurities and extend life span of the seals.
4. Actuator is fitted with visual position indicator. This allows for visual checking and adjustment of flowrate.
5. Control point is made of metal insert. Mounting plate can be used to for NAMUR value.
6. The actuator part can be rotated at 360° degrees and is easily installed.

Ordering code

2J S K 150 15 Q50 G

1 2 3 4 5 6 7

① Model	② Valve body material	③ Acting type	④ Orifice size	⑤ Port size	⑥ Size of actuator	⑦ Thread type
2J: Angle seat valve(2/2 way)	S: SUS316L W: SUS304	Blank: No water-hammer(NC) Control pressure The working medium flows to the down side of valve inlet (Flow from the bottom part to Work upper part of piston)	150: Φ15mm	10: 3/8" 15: 1/2"	Q40: Φ40mm Q50: Φ50mm Q63: Φ63mm Q80: Φ80mm	G: G Thread
		Y: Water-hammer(NC) Control pressure The working medium flows to the upper side of valve inlet (Flow from the upper part to bottom part of piston)	200: Φ20mm	20: 3/4"		
		K: Normal opened Control pressure The working medium flows to the down side of valve inlet (Flow from the bottom part to upper part of piston)	250: Φ25mm	25: 1"		
			320: Φ32mm	32: 1 1/4"		

Specification

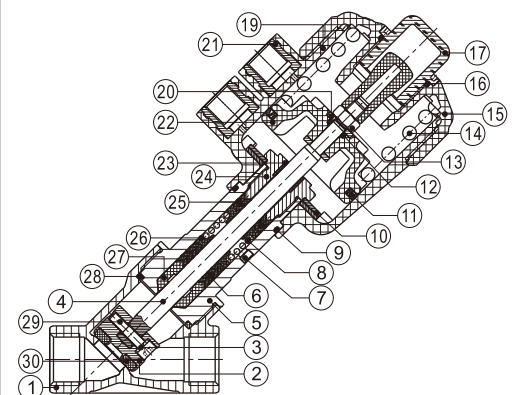
Model\Item		Port	Actuator size(mm)	Orifice size(mm)	Kv	Min.pilot pressure(bar)	Max.differentia pressure(bar)	Weight (kg)
2JS150 2JW150	-10	G3/8	40	15	4.4	4.8	13	0.8
	-15	G1/2						0.7
	-10	G3/8	50		4.8	4.3	16	0.8
	-15	G1/2						0.7
2JS200 2JW200	-20	G3/4	40	20	7.9	4.8	6.5	0.9
			50		8	4.3	11	0.95
			63		10	4.2	16	1.6
2JS250 2JW250	-25	G1	63	25	19	4.2	11	1.9
			80		20	5.0	16	2.5
2JS320 2JW320	-32	G1 1/4	63	32	27	4.2	6	2.5
			80		28	5.0	15	3.0
2JSK150 2JWK150	-10	G3/8	40	15	4.4	For details, please refer to normally-opened-type fluid pressure – control pressure curve	16	0.8
	-15	G1/2						
	-10	G3/8	50		4.8		16	0.8
	-15	G1/2						
2JSK200 2JWK200	-20	G3/4	40	20	7.9		16	0.9
			50		8		16	0.9
2JSK250 2JWK250	-25	G1	50	25	14.5		16	1.2
			63		19		16	1.6
2JSK320 2JWK320	-32	G1 1/4	63	32	27		16	2.2
			80		28		16	2.4
2JSY150 2JWY150	-10	G3/8	40	15	4.4		For details, please refer to normally-closed-water-hammer-type fluid pressure – control pressure curve	16
	-15	G1/2						
	-10	G3/8	50		4.8	16		0.8
	-15	G1/2						
2JSY200 2JWY200	-20	G3/4	40	20	7.9	16		0.9
			50		8	16		0.9
2JSY250 2JWY250	-25	G1	50	25	14.5	16		1.3
			63		19	16		1.7
2JSY320 2JWY320	-32	G1 1/4	63	32	27			16

Angle seat valve(2/2 way)

2J Series

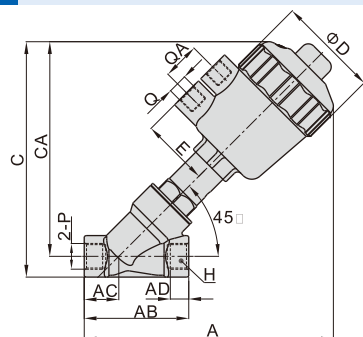
Inner structure

2JS150-Q50



No.	Item	Material	No.	Item	Material
1	Body	Stainless steel	16	O-ring	NBR
2	Piston	Stainless steel	17	Transparent cap	Plastic
3	Spring washer	Spring steel	18	Indicative	Plastic
4	Piston rod	Stainless steel	19	Cylinder body	PA6
5	Pitman	Stainless steel	20	Washer	SPCC
6	V-seals	PTFE	21	Built-in nut	Brass nickel-plate
7	Filter core	Bronze	22	Piston	PA6
8	Spring	Spring steel	23	DU dry bearing	Wear resistant material
9	O-ring	NBR	24	Connect nut	Brass
10	Bellville spring	Spring steel	25	O-ring	Viton
11	O-ring	NBR	26	Spring holder	PTFE
12	O-ring	NBR	27	Guide sleeve	PTFE
13	Hexagon nut	Steel	28	Seal washer	PTFE
14	Spring	Spring steel	29	Screw	Stainless steel
15	Top cover	PA6	30	Seal washer	PTFE

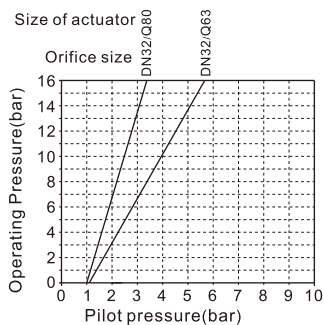
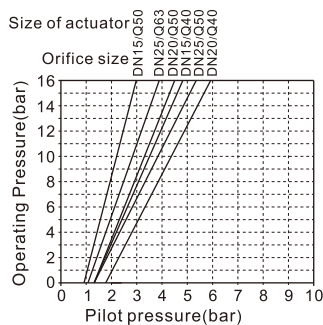
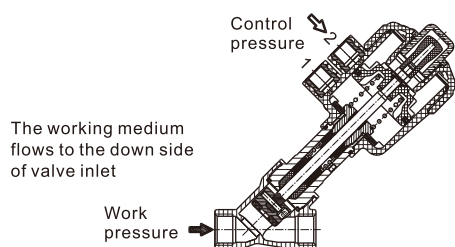
Dimensions



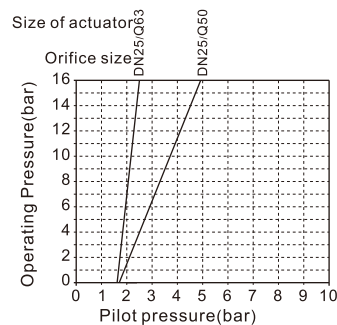
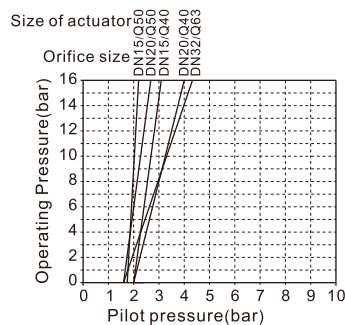
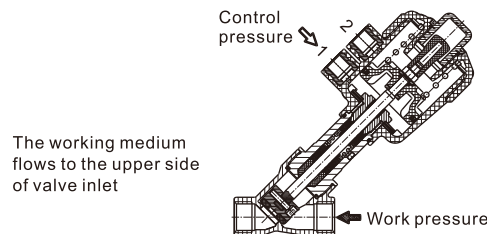
Orifice size(DN)	Size of actuator	A	AB	AC	AD	C	CA	ΦD	E	H	Port size(P)	Q	QA
15	Φ40	153	68	22.5	12	144	130	56	33	27	G3/8	G1/8	24
	Φ50	162				153	140	66	44		G1/2	G1/4	
20	Φ40	161	78	27	14	150	134	56	33	33	G3/4	G1/8	
	Φ50	170				160	143	66	44			G1/4	
	Φ63	200				189	172	82	51			G1/4	
	Φ50	176				168	147	66	44			G1/4	
25	Φ63	205	90	28	14	197	176	82	51	40	G1	G1/4	
	Φ80	221				213	193	102	60			G1/4	
	Φ63	220				210	185	82	51			G1/4	
32	Φ63	220	110	35	18	210	185	82	51	50	G1 1/4	G1/4	
	Φ80	237				227	202	102	60			G1/4	

Fluid pressure — control pressure curve

Normal opened



Water-hammer(NC)



Angle seat valve(2/2 way)

2J Series

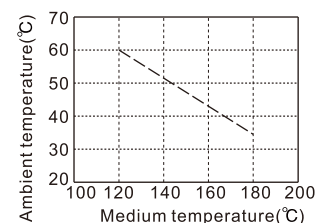
Ambient and medium temperature

Control medium	Air, neutral air(to be filtered by 40 μ m filter element)
Max. control pressure	Size of actuatorΦ40/50/63 □ 10bar Size of actuatorΦ80 □ 7bar
Medium [Note1]	air, liquid, vacuum, steam
Viscosity limit	600mm ² /s below
Temperatur [Note2]	-20~+180 □
Ambient temp [Note3]	-10~+60 □

[Note1]: The water-hammer-type can be used for air, or steam only, and can not be used for liquid.

Note 2]: Dew point: -20℃ or less.

[Note3]: Relationship of working medium temperature and ambient temperature is shown in following figure.



Operation and maintenance

1. Before using, please verify that if the working status of product is identical with data in catalogue, and it should not exceed the limits.
2. Before the pressure releasing and cooling of system, no maintenance, examination and installation of product should be conducted.
3. For the normally-closed-type, when its valve is disassembled, due to the pre-pressure of the relatively large spring power in controller, the "1" hole should be opened for ventilation in advance so to make sure the piston could be completely moved to the position, then rotate the screw thread between the valve and the connection bar, direct rotation is forbidden, otherwise the disassembling would not be conducted in result of the scuffing of screw thread.
4. If maintenance of actuator part is needed, special tools should be used for disassembling and installation, while disassembling, the loading spring could cause damage. If the customer can not conduct the maintenance, please return the valve to manufacturer for maintenance.

