

Fluid control valve(2/2 way)

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2L Series (Direct-acting and normally closed)



Specification

Type\Item		Port size ①	Orifice size (Φ mm)	Cv	Valid area or section(mm²)	Weight ② (g)	Max.operating pressure differentia		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				
2L030	—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				
2L050	—10	3/8"	5.0	0.83	15.0	600	1.0	150		
	—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, 2L030 series grommet valve's weight is 10g less than terminal's. 2L050series grommet valve's weight is 20g less than terminal's.

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 .

Valve's specification

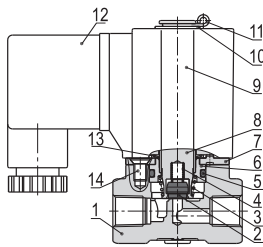
Acting	Direct acting				
Initial stats	Normally closed				
Adaptable fluid ①	Steam, High temperature Water, Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature(°C)		Oil	Water	Steam	Ambient
	Max.	150	150	183	100
	Min.	-10②	1	-	-20

① Note: Please refer to P121 for detail of other's fluid.

② Note: 50CST or less.

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		

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
		DC	60	± 10%		8.0VA		30
2L□050	CDA170 CLA170	AC	50	± 15%	Grommet (CLA)	6.5W		30
			60	± 10%		25.0VA		60
		DC	50	± 15%		22.0VA		55
			60	± 10%		10.5W		40

Ordering code

2L H 030 08 A □ □									
Model			Thread type						
2L: 2/2 way direct-acting and normally closed			Blank: PT						
			T: NPT						
			G: G						
Pressure condition			Electrical entry						
H: High pressure			Blank: Terminal						
Blank: Standard			I: Grommet						
Size series			Voltage						
030: 030 Series			A: AC220V						
050: 050 Series			B: DC24V						
Port size			C: AC110V						
030 Series			E: AC24V						
			F: DC12V						
050 Series									

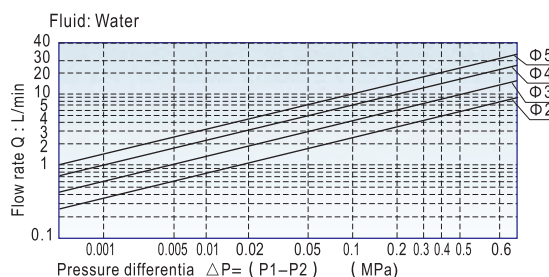
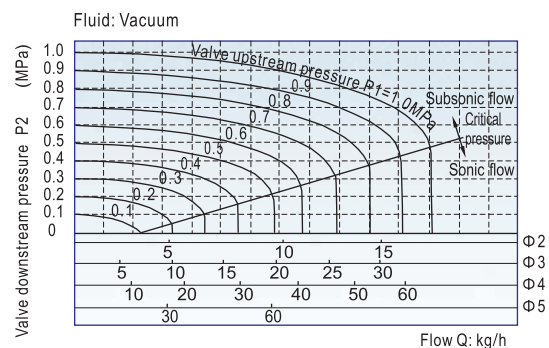
Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P96 for details of ordering code.

Fluid control valve(2/2 way)

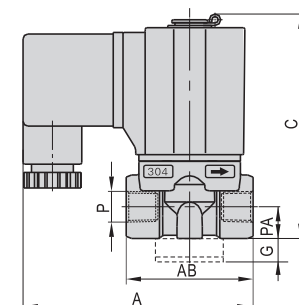
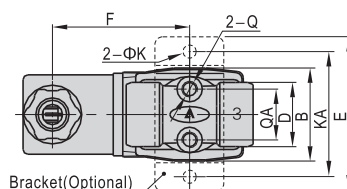
2L Series (Direct-acting and normally closed)

Flow chart

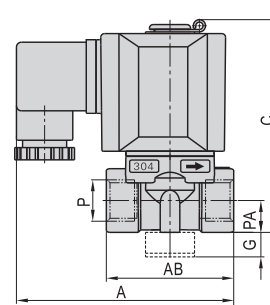
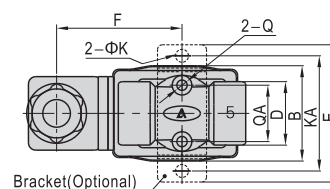


Dimensions

2L□030(Terminal)

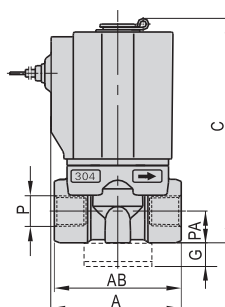
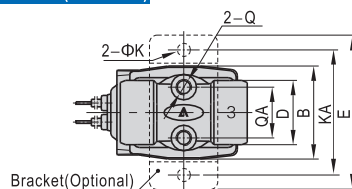


2L□050(Terminal)

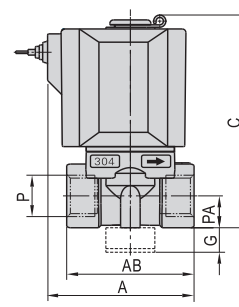
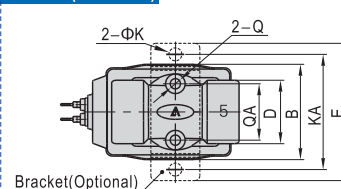


Type\Item	A	AB	B	C	D	E	F	G	K	KA	P	PA	Q	QA
2L□030-06	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/8"	10	M5	16
2L□030-08	72.5	40	29.5	71	20	49	43.5	10	5.3	40	1/4"	10	M5	16
2L□050-10	89.5	52	39	87	26	56	51	10	5.3	48	3/8"	13	M5	23
2L□050-15	89.5	52	39	87	26	56	51	10	5.3	48	1/2"	13	M5	23

2L□030(Grommet)



2L□050(Grommet)



Type\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



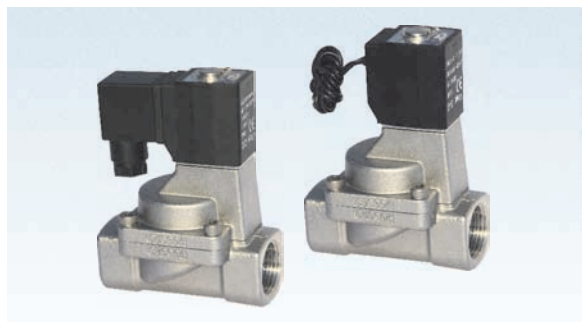
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2L

Fluid control valve(2/2 way)

2L Series (Internally piloted and normally closed)

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2L



Specification

Type\Item	Port size ①	Orifice size (Φmm)	Cv	Valid area or section(mm²)	Weight ②(g)	Max.operating pressure differentia		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				

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

② 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	± 15 %	Terminal (CDA)	10.0VA	Class H	35
		DC	60			8.0VA		30
			—	± 10 %		6.5W		30
2L320 2L400 2L500	CDA170 CLA170	AC	50	± 15 %	Grommet (CLA)	25.0VA		60
		DC	60			22.0VA		55
			—	± 10 %		10.5W		40

Ordering code

2L 150 15 A ☐ ☐

Model

2L: 2/2 way internally piloted and normally closeded

Orifice size

150: Φ 15mm
200: Φ 20mm
250: Φ 25mm
320: Φ 32mm
400: Φ 40mm
500: Φ 50mm

Thread type

Blank: PT
T: NPT
G: G

Electrical entry

Blank: Terminal
I: Grommet

Voltage

A: AC220V
B: DC24V
C: AC110V
E: AC24V
F: DC12V

Port size

Orifice series	Port size
150: Φ 15mm	15: 1/2"
200: Φ 20mm	20: 3/4"
250: Φ 25mm	25: 1"
320: Φ 32mm	32: 1 1/4"
400: Φ 40mm	40: 1 1/2"
500: Φ 50mm	50: 2"

Ordering code of accessories

Ordering code of accessories is the same as 2S series valve's, Please refer to P98 for details of ordering code.

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

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.

Valve's specification

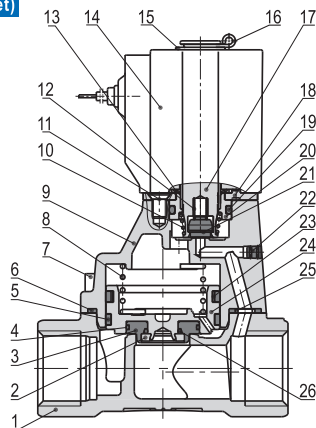
Acting	Internally piloted				
Initial stats	Normally closed				
Adaptable fluid ①	Steam, High temperature Water, Oil				
Viscosity limit	Under 20CST				
Ambient and fluid temperature(°C)		Oil	Water	Steam	Ambient
	Max.	150	150	183	100
	Min.	-10②	1	-	-20

① Note: Please refer to P121 for detail of other's fluid;

② Note: 50CST or less.

Inner structure

2L150(Grommet)

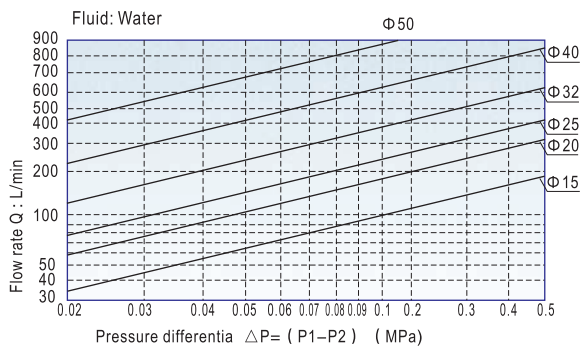
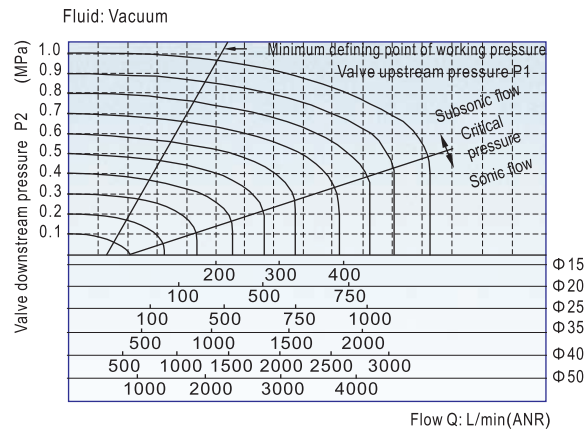


No.	Item	No.	Item	No.	Item
1	Body	10	Spring	19	O-ring
2	Fixed ring	11	Screw	20	Fixed plate
3	Airtight bush	12	Spring	21	Airtight ring
4	O-ring	13	Bead flange	22	Spring
5	Wear ring	14	Coil assembly	23	Plug
6	Gasket	15	Washer	24	Piston
7	Screw	16	E Clip	25	Bushing
8	Spring	17	Movable core	26	O-ring
9	Cover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

Fluid control valve(2/2 way)

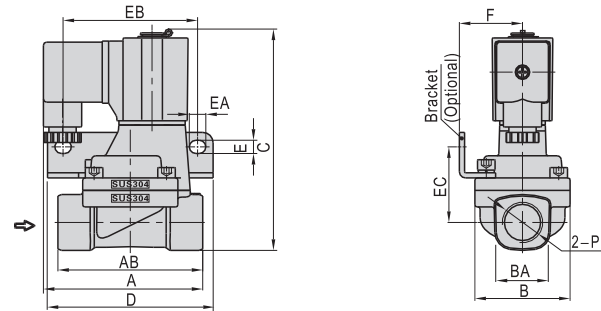
2L Series (Internally piloted and normally closed)

Flow chart

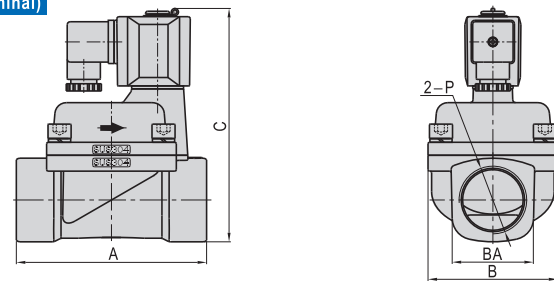


Dimensions

2L150~250(Terminal)

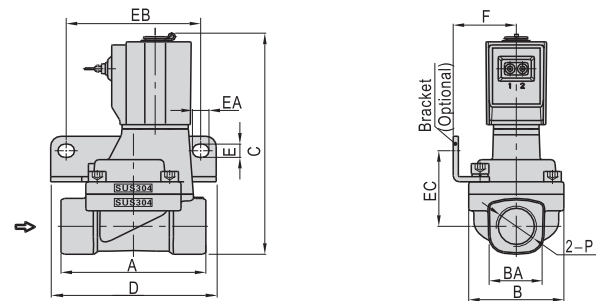


2L320~500(Terminal)

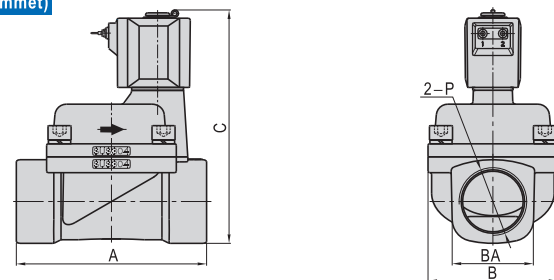


Type\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2L150-15	77	70	46	27.5	107	80	6.4	8	65	36.5	30.5	1/2"
2L200-20	78.5	82	53	33.5	115.5	90	6.4	8	75	40	34	3/4"
2L250-25	81	92	59	40.5	124	95	6.4	8	80	44.5	36	1"
2L320-32	125	-	80	52	154.5	-	-	-	-	-	-	1 1/4"
2L400-40	132	-	90	58	162	-	-	-	-	-	-	1 1/2"
2L500-50	150	-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

2L150~250(Grommet)



2L320~500(Grommet)



Type\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"



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2L