

# Fluid control valve(2/2way)

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



### Symbol

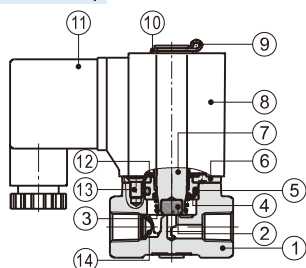


### Product feature

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 □ □



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	Blank: PT G: G T: NPT
		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 P148 for details of ordering code.

### Specification

Model\Item	Port size [Note1]	Orifice size (Φmm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Max. operating pressure differentia		Proof pressure	
						MPa	psi	MPa	psi
2WX030	-06	1/8"	1.5	0.10	1.8	3.0	450	5.0	750
	-08	1/4"							
2WH030	-06	1/8"	2.0	0.18	3.0	2.0	300		
	-08	1/4"							
2W030	-06	1/8"	3.0	0.33	6.0	1.0	150		
	-08	1/4"							
2WL030	-06	1/8"	4.0	0.55	10.0	0.5	75		
	-08	1/4"							
2WT030	-06	1/8"	6.0	1.10	12.0	0.1	15		
	-08	1/4"							
2WX050	-10	3/8"	3.0	0.34	6.1	3.0	450		
	-15	1/2"							
2WH050	-10	3/8"	4.0	0.55	10.0	2.0	300		
	-15	1/2"							
2W050	-10	3/8"	5.0	0.83	15.0	1.0	150		
	-15	1/2"							
2WL050	-10	3/8"	7.0	1.40	25.0	0.5	75		
	-15	1/2"							
2WT050	-10	3/8"	10.0	2.20	40.0	0.1	15		
	-15	1/2"							

[Note1] PT thread, G thread and NPT thread are 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	
2W□050	CDA170 CLA170	AC	50	± 15%		Grommet (CLA)		6.5W	60
			60					22.0VA	
			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 )	Max.	Water 80	Air 90	Oil 80	Ambient 70
	Min.	1	-20 [Note1]	-10 [Note2]	-20

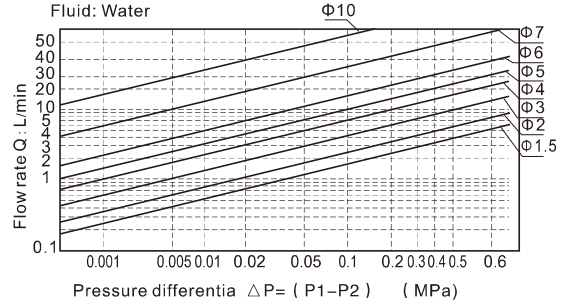
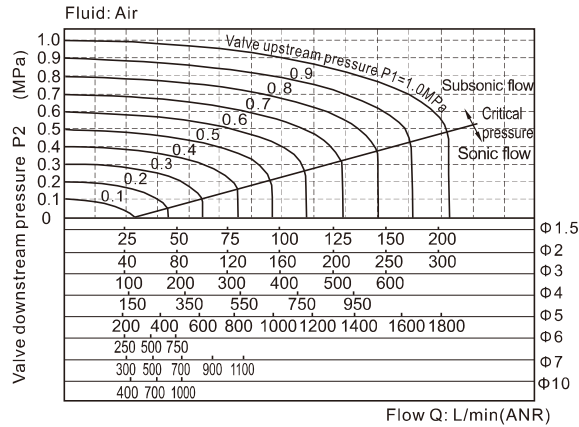
[Note1] Dew point: -20(°C) or less;

[Note2] 50CST or less.

# Fluid control valve(2/2way)

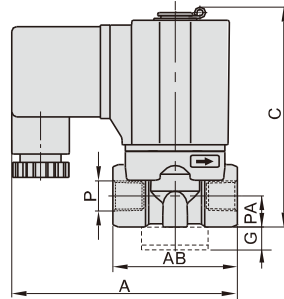
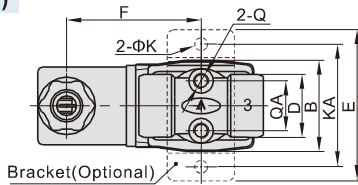
## 2W Series (Direct-acting and normally closed)

### Flow chart

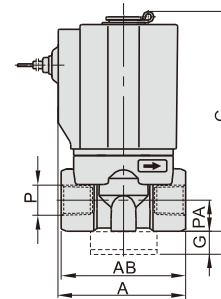
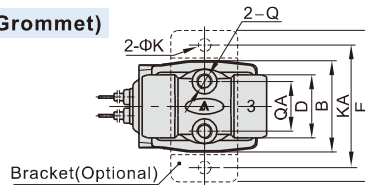


### Dimensions

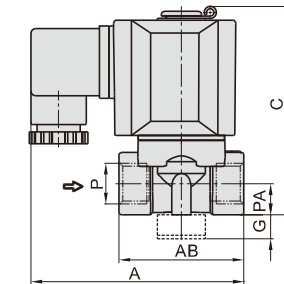
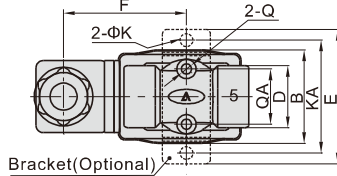
#### 2W□030 (Terminal)



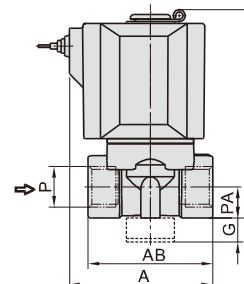
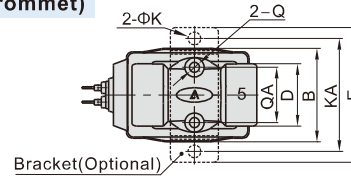
#### 2W□030 (Grommet)



#### 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 (Φmm)	Cv	Valid area or section (mm <sup>2</sup> )	Weight [Note2](g)	Operating pressure differentia		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] PT thread, G thread and NPT thread are 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	AC	50	± 15%	Terminal (CDA)	10.0VA	Class B	35
2W200	CLA116		60		Grommet (CLA)	8.0VA		30
2W250		DC	-	± 10%		6.5W		30

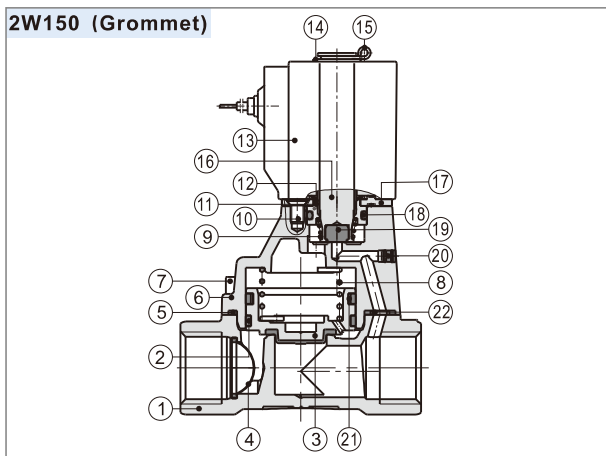
### Valve's specification

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



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 □ □

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	Blank: PT G: G T: NPT
	200: Φ20mm	20: 3/4"			
	250: Φ25mm	25: 1"			

#### Ordering code of accessories

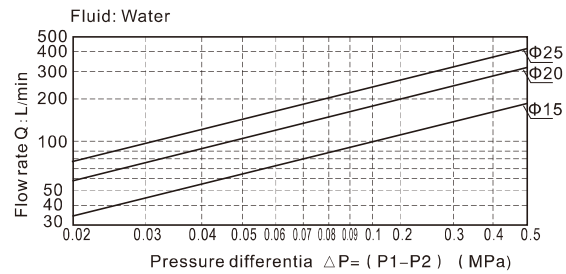
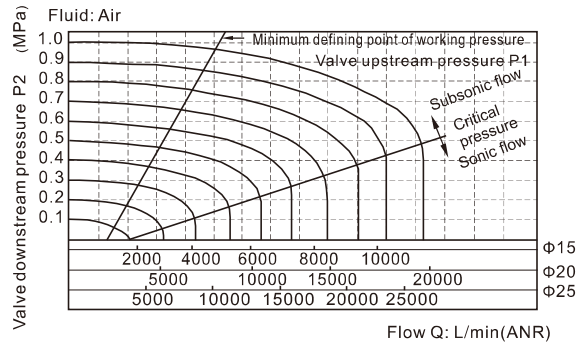
Ordering code of accessories is the same as 2S series valve's, Please refer to P150 for details of ordering code.

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

# Fluid control valve(2/2way)

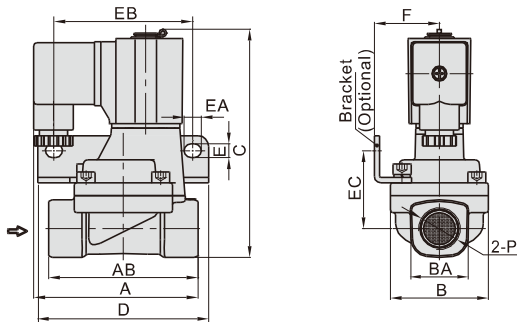
## 2W Series ( Internally piloted and normally closed)

### Flow chart



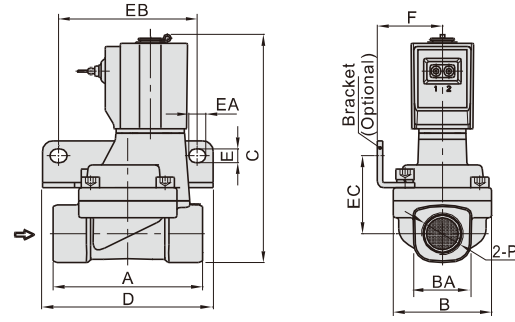
### Dimensions

#### 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"