

# Fluid control valve(2/2way)

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



### 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
2SA150-15	1/2"	15.0	5.50	100.0	575	Max: 0.7 Min: 0.05	Max: 100 Min: 10	1.5	220
2SA200-20	3/4"	20.0	9.50	170.0	735				
2SA250-25	1"	25.0	12.50	220.0	1035				

[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.

### Symbol



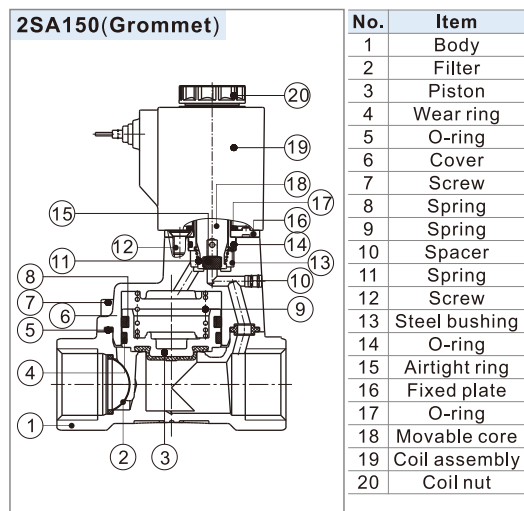
### Product feature

1. Indirect acting (Internal pilot) and normally closed type 2/2 way fluid valve. Its can change direction quickly and has large flow.
2. It is compact, small and light weight. Easy to install and dismantle;
3. The valve body is made of SUS304. The coil has a Heat resistance classification of Class F. The standard seal material is FPM-F. Please contact us if other seal material are required.
4. The protection class of the coil is IP65 and there is a choice for grommet or terminal electrical entry.

### Specification of coil

Valve type	Coil type	Power type	Frequency (Hz)	Voltage range	Electrical entry	Power Consumption (VA/W)	Insulation	Temp. rise(°C)
2SA150 2SA200 2SA250	CDA110 CLA110	AC	50	±15%	Terminal (CDA) Grommet (CLA)	10.0VA	Class F	35
			60			8.0VA		30
		DC	-	±10%	6.5W	30		

### Inner structure



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

### 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

2SA 150 15 A □ □					
① Model	② Orifice size	③ Port size	④ Voltage	⑤ Electrical entry	⑥ Thread type
2SA: 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 [Note]	Blank: PT G: G T: NPT
	200: Φ20mm	20: 3/4"			
	250: Φ25mm	25: 1"			

[Note] The wire length is 0.5m.

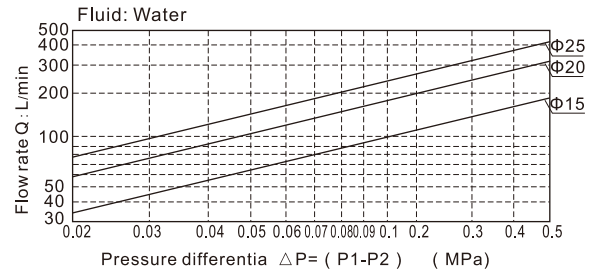
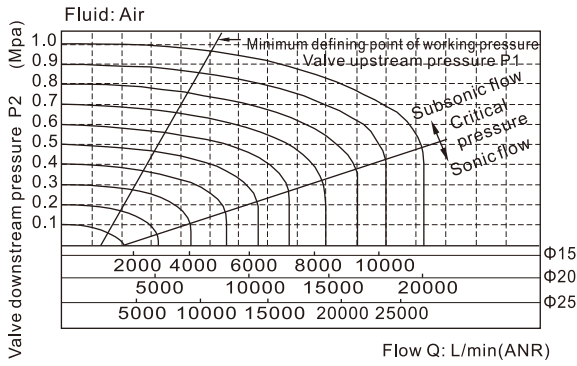
#### Ordering code of accessories

Ordering code of accessories is the same as 2WA series valve's, Please refer to P11 for details of ordering code.

# Fluid control valve(2/2way)

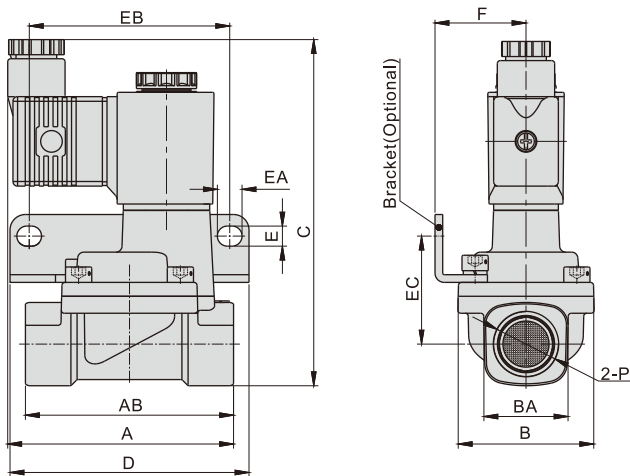
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### Flow chart

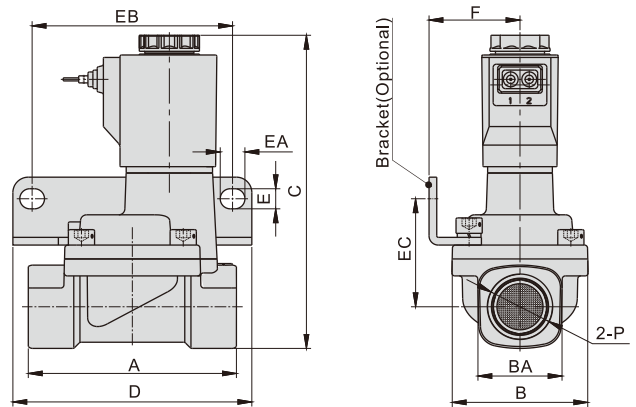


### Dimensions

#### Terminal



#### Grommet



Model\Item	A	AB	B	BA	C	D	E	EA	EB	EC	F	P
2SA150-15	73.5	67.5	44	27.5	112	77.5	6.5	8	65	35	29.5	1/2"
2SA200-20	75.5	79.5	51	33.5	119	87.5	6.5	8	75	38	33	3/4"
2SA250-25	77.5	90	57	40.5	126	93	6.5	8	80	42	35	1"

Model\Item	A	B	BA	C	D	E	EA	EB	EC	F	P
2SA150-15	67.5	44	27.5	102	77.5	6.5	8	65	35	29.5	1/2"
2SA200-20	79.5	51	33.5	109	87.5	6.5	8	75	38	33	3/4"
2SA250-25	90	57	40.5	116	93	6.5	8	80	42	35	1"