

# Air valve( 3/2 way)

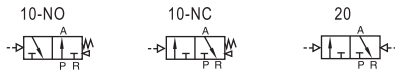


## 3A100 Series



3A100

### Symbol

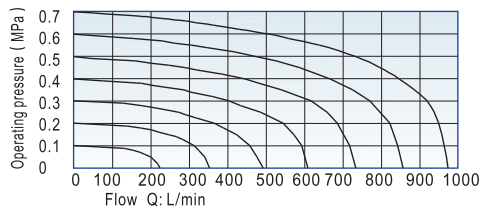


### Product feature

1. Structure in sliding column mode: good tightness and sensitive reaction.
2. Double air control valves have memory function.
3. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
4. No need to add oil for lubrication.
5. Multi-mounting helps to install and apply.
6. Integrate with the manifold to save installation space.

### Flow chart

Model: 3A110-06-NO



### Inner structure

**3A110**

**3A120**

No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston
2	Spring	6	Body	10	Pilot body
3	Bottom cover	7	O-ring	11	Piston O-ring
4	Bottom cover screw	8	Wear ring	12	Piston screw

### Specification

Model	3A110-M5	3A120-M5	3A110-06	3A120-06
Fluid	Air(to be filtered by 40 μ m filter element)			
Acting	Exterior control			
Port size ①	M5		1/8"	
Orifice size	5.5mm <sup>2</sup> (Cv=0.31)		12.0mm <sup>2</sup> (Cv=0.67)	
Valve type	3 port 2 position			
Lubrication ②	Not required			
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.5MPa(215psi)			
Temperature °C	-20~70			
Material of body	Aluminum alloy			
Max. frequency ③	5 cycle/sec			

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

② Once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency is in the no-load state.

### Ordering code

3A 1 10 06 NO P

**Model**  
3A: Air Valve(3/2 way)

**Code**  
1: 100 Series

**Valve type**  
10: Single air control  
20: Double air control

**Port size**  
M5: M5  
06: 1/8"

**Thread type**

Port size	Thread type
1/8"	P: PT
	T: NPT
	G: G
M5	No this code

**Acting type**

Valve type	Acting type
10	NC: Normally close NO: Normally open
20	NO code

Please refer to 69 for manifold specification and the order way.

### Dimension

**3A110**

**3A120**

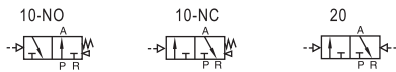


# Air valve(3/2 way)

## 3A200 Series



### Symbol

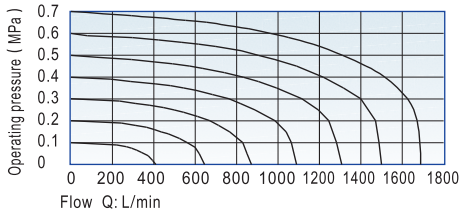


### Product feature

1. Structure in sliding column mode: good tightness and sensitive reaction.
2. Double air control valves have memory function.
3. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
4. No need to add oil for lubrication.
5. Multi-mounting helps to install and apply.
6. Integrate with the manifold to save installation space.

### Flow chart

Model: 3A210-08-NO



### Inner structure

3A210

3A220

No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston
2	Spring	6	Body	10	Pilot body
3	Bottom cover	7	O-ring	11	Piston O-ring
4	Bottom cover screw	8	Wear ring	12	Piston screw

### Specification

Model	3A210-05	3A220-06	3A210-08	3A220-08
Fluid	Air(to be filtered by 40 μ m filter element)			
Acting	Exterior control			
Port size ①	In=Out=1/8"		In=Out=1/4"	
Orifice size	14.0mm <sup>2</sup> (Cv=0.78)		16.0mm <sup>2</sup> (Cv=0.89)	
Valve type	3 port 2 position			
Lubrication ②	Not required			
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.5MPa(215psi)			
Temperature °C	-20~70			
Material of body	Aluminum alloy			
Max. frequency ③	5 cycle/sec			

- ① PT thread, NPT thread and G thread are available.
- ② Once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.
- ③ The maximum actuation frequency is in the no-load state.

### Ordering code

3A 2 10 08 NO P

**Model**  
3A: Air Valve(3/2 way)

**Code**  
2: 200 Series

**Valve type**  
10: Single air control  
20: Double air control

**Port size**  
06: 1/8"  
08: 1/4"

**Thread type**  
P: PT  
T: NPT  
G: G

**Acting type**

Valve type	Acting type
10	NC: Normally close NO: Normally open
20	NO code

Please refer to 69 for manifold specification and the order way.

### Dimension

**3A210**

**3A220**



# Air valve(3/2 way)



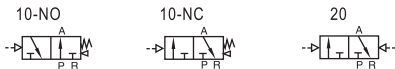
## 3A300 Series



### Specification

Model	3A310-08	3A320-08	3A310-10	3A320-10
Fluid	Air(to be filtered by 40 μm filter element)			
Acting	Exterior control			
Port size ①	In=Out=1/4"		In=Out=3/8"	
Orifice size	25.0mm <sup>2</sup> (Cv=1.35)		30.0mm <sup>2</sup> (Cv=1.67)	
Valve type	3 port 2 position			
Lubrication ②	Not required			
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.5MPa(215psi)			
Temperature °C	-20~70			
Material of body	Aluminum alloy			
Max. frequency ③	5 cycle/sec			

### Symbol

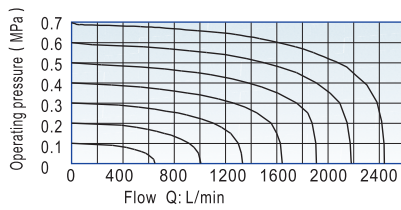


### Product feature

1. Structure in sliding column mode: good tightness and sensitive reaction.
2. Double air control valves have memory function.
3. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
4. No need to add oil for lubrication.
5. Multi-mounting helps to install and apply.
6. Integrate with the manifold to save installation space.

### Flow chart

Model: 3A310-10-NO



### Inner structure

3A310

3A310

No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston
2	Spring	6	Body	10	Pilot body
3	Bottom cover	7	O-ring	11	Piston O-ring
4	Bottom cover screw	8	Wear ring	12	Piston screw

### Ordering code

3 A 3 10 10 NO P

**Model**

3A: Air Valve(3/2 way)

**Thread type**

P: PT  
T: NPT  
G: G

**Code**

3: 300 Series

**Acting type**

Valve type	Acting type
10	NC: Normally close NO: Normally open
20	NO code

**Valve type**

10: Single air control  
20: Double air control

**Port size**

08: 1/4"  
10: 3/8"

Please refer to 69 for manifold specification and the order way.

### Dimension

**3A310**

**3A320**