

#### **Specifications**

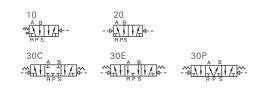
Model	4A110-M5 4A120-M5	4A130C-M5 4A130E-M5 4A130P-M5	4A110-06 4A120-06	4A130C-06 4A130E-06 4A130P-06		
Fluid	A	ir(to be filtered by	40 µm filter eleme	nt		
Acting		Exterior	control			
Port size ①	In=Ou	ut=M5	In=Ou	it=1/8"		
Orifice size	5.5mm <sup>2</sup> (Cv=0.31)	5.0mm <sup>2</sup> (Cv=0.28)	12.0mm2(Cv=0.67)	9.0mm <sup>2</sup> (Cv=0.50)		
Valve type	5 port 2 porsition	5 port 3 porsition	5 port 2 porsition	5 port 3 porsition		
Operating pressure		0.15~0.8MPa	a(21~114psi)			
Proof pressure		1.2MPa	(175psi)			
Temperature °C		-20	~70			
Material of body		Aluminu	um alloy			
Lubrication 2		Not required				
Max. Frequency ③	5 cycle/sec	3 cycle/sec	5 cycle/sec	3 cycle/sec		
Weight (g)	4A110-M5:85 4A120-M5:140	165	4A110-06:85 4A120-06:140	165		

① PT thread, G thread and NPT 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.

#### Symbol



#### **Product feature**

1. Structure in sliding column mode: good tightness and sensitive reaction.

- 2. Three position air valves have three kinds of central funcition for your choice.
- 3. Double air control valves have memory function.
- 4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- 5. No need to add oil for lubrication.
- 6. Integrate with the manifold to save installation space.

06

Port s

M5 | N

06 1

#### **Ordering code**



ן 		
Co	de	V
1	100 Series	1
		2

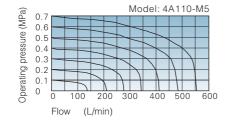
10

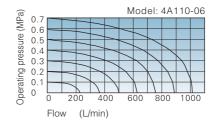
Valve	type Single air control 5/2 way
10	Single air control 5/2 way
10	
20	Double air control 5/2 way
30C	Double air control 5/3 way closed center
30E	Double air control 5/3 way exhaust center
30P	Double air control 5/3 way pressure center

ize	Thread ty	ре
<i>N</i> 5	Port size	Thread type
1/8"		Blank: PT
	1/8"	G: G
		T: NPT
	M5	No this code

Please refer to 64 for manifold specification and the order way.

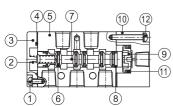
#### **Flow chart**



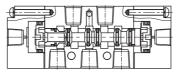


## Inner structure

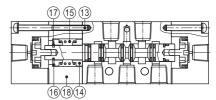




4A120





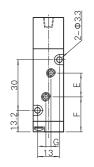


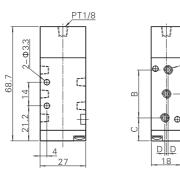
No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Screw	5	Body	9	Piston	13	Screw	17	EClip
2	Spring	6	O-ring	10	Pilot body	14	Spring holder	18	Side cover
3	Bottom cover	7	Spool	11	O-ring	15	Return Spring		
4	Bottom cover gasket	8	Wear ring	12	Screw	16	Spring holder		

\5-A

28.2

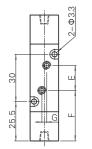
Dimensions 4A110

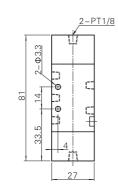


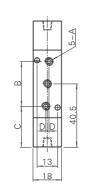


Model\Item	А	В	С	D	Е	F	G
4A110-M5	M5×0.8	27	14.7	0	14	21.2	0
4A110-06	PT1/8	28	14.2	1	16	20.2	3

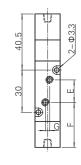
4A120

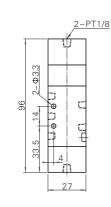


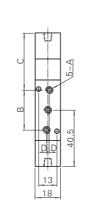




4A130







Model\Item	А	В	С	D	Е	F	G
4A120-M5	M5×0.8	27	27	0	14	33.5	0
4A120-06	PT1/8	28	26.5	1	16	32.5	3

Model\Item	А	В	С	D	Е	F	G
4A130-M5	M5×0.8	27	42	0	14	33.5	0
4A130-06	PT1/8	28	41.5	1	16	32.5	3





#### **Specifications**

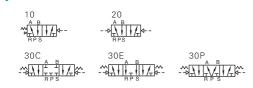
Model	4A210-06 4A220-06	4A230C-06 4A230E-06 4A230P-06	4A210-08 4A220-08	4A230C-08 4A230E-08 4A230P-08	
Fluid	Ai	r(to be filtered by	40 µm filter eleme	nt)	
Acting		Exterior	control		
Port size ①	In=Out=Ex	haust=1/8"	In=Out=1/4"	Exhaust=1/8"	
Orifice size	14.0mm2(Cv=0.78)	12.0mm <sup>2</sup> (Cv=0.67)	16.0mm2(Cv=0.89)	12.0mm <sup>2</sup> (Cv=0.67)	
Valve type	5 port 2 porsition 5 port 3 porsition {		5 port 2 porsition 5 port 3 porsition		
Operating pressure		0.15~0.8MPa	a(21~114psi)		
Proof pressure		1.2MPa	(175psi)		
Temperature °C		-20	~70		
Material of body		Aluminu	um alloy		
Lubrication 2	Not required				
Max. Frequency ③	5 cycle/sec	3 cycle/sec	5 cycle/sec	3 cycle/sec	
Weight (g)	4A210-06:185 4A220-06:285	365	4A210-08:185 4A220-08:285	365	

① PT thread, G thread and NPT 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 of no-load state.

#### Symbol



#### **Product feature**

1. Structure in sliding column mode: good tightness and sensitive reaction.

- 2. Three position air valves have three kinds of central funcition for your choice.
- 3. Double air control valves have memory function.
- 4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- 5. No need to add oil for lubrication.
- 6. Integrate with the manifold to save installation space.

#### **Ordering code**



2	2	
Co	de	Va
2	200 Series	1
		2

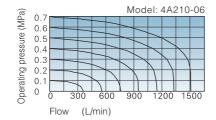
10

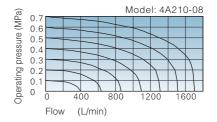
Valve type								
10	Single air control 5/2 way							
20	Double air control 5/2 way							
30C	Double air control 5/3 way closed center							
30E	Double air control 5/3 way exhaust center							
30P	Double air control 5/3 way pressure center							

08								
	Port	size	Th	read	type			
	06	1/8"	BI	ank	PT			
	08	1/4"	G		G			
			Т		NPT			

Please refer to 64 for manifold specification and the order way.

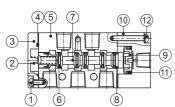
#### **Flow chart**



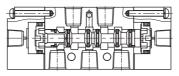


## **Inner structure**

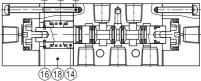




4A220

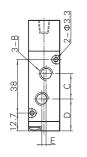


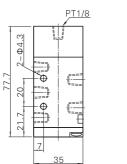


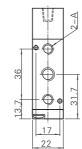


No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Screw	5	Body	9	Piston	13	Screw	17	EClip
2	Spring	6	O-ring	10	Pilot body	14	Spring holder	18	Side cover
3	Bottom cover	7	Spool	11	O-ring	15	Return Spring		
4	Bottom cover gasket	8	Wear ring	12	Screw	16	Spring holder		

### **Dimensions** 4A210

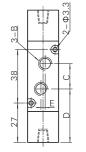


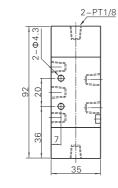


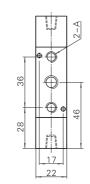


Model\ltem	А	В	С	D	Е
4A210-06	PT1/8	PT1/8	18	22.7	0
4A210-08	PT1/8	PT1/4	21	21.2	3

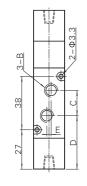
### 4A220

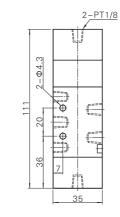


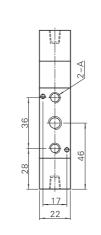




4A230C







Model\Item	А	В	С	D	Е
4A220-06	PT1/8	PT1/8	18	37	0
4A220-08	PT1/8	PT1/4	21	35.5	3

Model\Item	А	В	С	D	Е
4A230-06	PT1/8	PT1/8	18	37	0
4A230-08	PT1/8	PT1/4	21	35.5	3



### **Specifications**

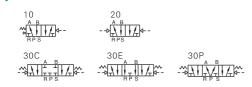
Model	4A310-08 4A320-08	4A330C-08 4A330E-08 4A330P-08	4A310-10 4A320-10	4A330C-10 4A330E-10 4A330P-10			
Fluid	Ai	Air(to be filtered by 40 µm filter element)					
Acting		Exterior	control				
Port size ①	In=Out=Ex	haust=1/8"	In=Out=1/4"	Exhaust=1/8"			
Orifice size	25.0mm2(Cv=1.40)	18.0mm <sup>2</sup> (Cv=1.00)	30.0mm2(Cv=1.68)	18.0mm <sup>2</sup> (Cv=1.00)			
Valve type	5 port 2 porsition	5 port 3 porsition	5 port 2 porsition	5 port 3 porsition			
Operating pressure		0.15~0.8MPa(21~114psi)					
Proof pressure		1.2MPa	(175psi)				
Temperature °C		-20	~70				
Material of body		Aluminu	um alloy				
Lubrication 2		Not re	quired				
Max. Frequency 3	4 cycle/sec	3 cycle/sec	4 cycle/sec	3 cycle/sec			
Weight (g)	4A310-08:275 4A320-08:365	505	4A310-10:275 4A320-10:365	505			

① PT thread, G thread and NPT 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 of no-load state.

#### **Symbol**



#### **Product feature**

1. Structure in sliding column mode: good tightness and sensitive reaction.

- 2. Three position air valves have three kinds of central funcition for your choice.
- 3. Double air control valves have memory function.
- 4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- 5. No need to add oil for lubrication.
- 6. Integrate with the manifold to save installation space.

#### **Ordering code**



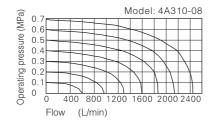
3	3	1	0
Co	de	Valve	type
3	300 Series	10	Sing
		20	Dou
		30C	Dou

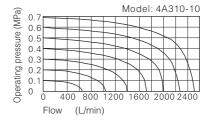
Valve	type
10	Single air control 5/2 way
20	Double air control 5/2 way
30C	Double air control 5/3 way closed center
30E	Double air control 5/3 way exhaust center
30P	Double air control 5/3 way pressure center

10		0		]
	Port	size	Thread	type
	08	1/4"	Blank	PT
	10	3/8"	G	G
			Т	NPT

Please refer to 64 for manifold specification and the order way.

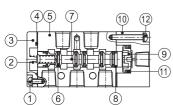
#### **Flow chart**



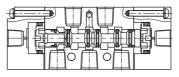


## Inner structure

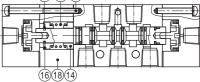




4A320







No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Screw	5	Body	9	Piston	13	Screw	17	E Clip
2	Spring	6	O-ring	10	Pilot body	14	Spring holder	18	Side cover
3	Bottom cover	7	Spool	11	O-ring	15	Return Spring		
4	Bottom cover gasket	8	Wear ring	12	Screw	16	Spring holder		

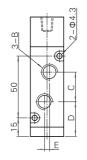
2-A

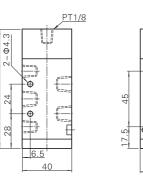
CI

20

27

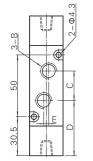
Dimensions 4A310

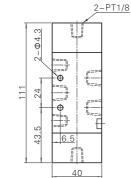




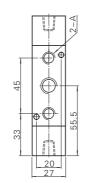
Model\Item	А	В	С	D	E
4A310-08	PT1/4	PT1/4	22	29	0
4A310-10	PT1/4	PT3/8	24	28	4

4A320

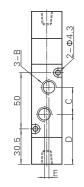


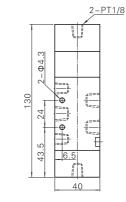


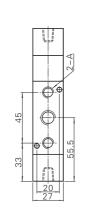
95.5



4A330C







Model\Item	А	В	С	D	Е
4A320-08	PT1/4	PT1/4	22	44.5	0
4A320-10	PT1/4	PT3/8	24	43.5	4

Model\Item	А	В	С	D	Е
4A330-08	PT1/4	PT1/4	22	44.5	0
4A330-10	PT1/4	PT3/8	24	43.5	4



### **Specifications**

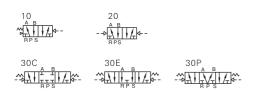
Model	4A410-15	4A420-15	4A430C-15	4A430E-15	4A430P-15			
Fluid		Air(to be filte	ered by 40 µm filter element)					
Acting			Exterior control					
Port size ①		ln=	Out=Exhaust=1/2"					
Orifice size	5.5mm <sup>2</sup> (Cv=2.79) 30.0mm <sup>2</sup> (Cv=1.68)				68)			
Valve type	5 port 2	porsition	5 port 3 porsition					
Operating pressure	0.15~0.8MPa(21~114psi)							
Proof pressure			1.2MPa(175psi)					
Temperature ℃			-20~70					
Material of body	Aluminum alloy							
Lubrication 2	Not required							
Max. Frequency ③			3 cycle/sec					
Weight (g)	555	685	735					

① PT thread, G thread and NPT 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 of no-load state.

#### Symbol

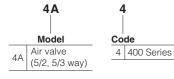


#### **Product feature**

- 1. Structure in sliding column mode: good tightness and sensitive reaction.
- 2. Three position air valves have three kinds of central funcition for your choice.
- 3. Double air control valves have memory function.
- 4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.

- 5. No need to add oil for lubrication.
- 6. Integrate with the manifold to save installation space.

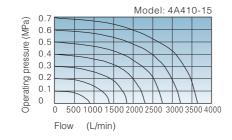
#### **Ordering code**



1	0	15	5		]
Valve	type	Port	size	Thread	type
10	Single air control 5/2 way	15	1/2"	Blank	PT
20	Double air control 5/2 way			G	G
30C	Double air control 5/3 way closed center			Т	NPT
30E	Double air control 5/3 way exhaust center				
30P	Double air control 5/3 way pressure center				

Please refer to 64 for manifold specification and the order way.

#### **Flow chart**

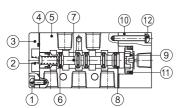


# NEU-MASTER®

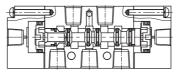
## **4A400 Series** Air valve(5/2 way, 5/3 way)

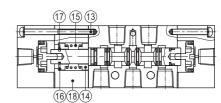
## Inner structure





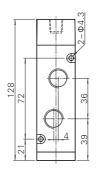
### 4A420

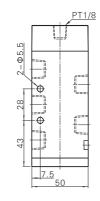


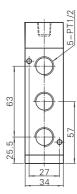


No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Screw	5	Body	9	Piston	13	Screw	17	EClip
2	Spring	6	O-ring	10	Pilot body	14	Spring holder	18	Side cover
3	Bottom cover	7	Spool	11	O-ring	15	Return Spring		
4	Bottom cover gasket	8	Wear ring	12	Screw	16	Spring holder		

### Dimensions 4A310

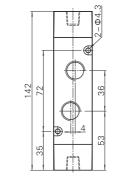






4A430C

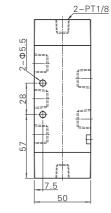
4A420

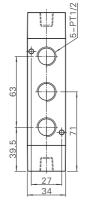


63

2

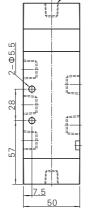
35











<u>2-PT1/8</u>

