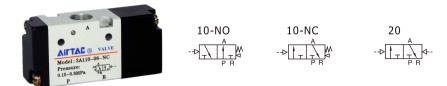
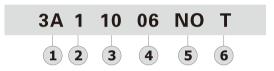


### 3A100 Series



### **Ordering code**



<b>1</b> Model	②Code	<b>③Valve type</b>	<b>4</b> Port size	<b>5</b> Acting type	<b>6Thread type</b>
3A: Air valve(3/2 way)	1: 100 Series	10: Single air control	M5: M5	NC: Normally closed	T: NPT
		20: Double air control	06: 1/8"	NO: Normally opened	

Please refer to 97 for manifold specification and the order way.

### **Specification**

Madal	24110 ME	24120 ME	24110 06	24120.06							
Model	3A110-M5	3A120-M5	3A110-06	3A120-06							
Fluid	Air(	Air(to be filtered by $40 \mu$ m filter element)									
Acting		Exterior control									
Port size [Note1]	М	8"									
Orifice size [Note4]	3A	3A110-06,3A120-06:10.2mm <sup>2</sup> (Cv=0.6)									
Valve type		3 port 2	position								
Lubrication [Note2]		Not re	quired								
Operating pressure		21~114psi(0	.15~0.8MPa)								
Proof pressure		175psi(	1.2MPa)								
Temperature		-20^	, <b>70</b> ℃								
Material of body	Aluminum alloy										
Max. frequency [Note3]	5 cycle/sec										

[Note 1] NPT thread is available.

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

[Note3] The maximum actuation frequency is in the no-load state.

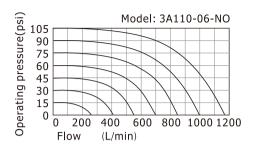
[Note4] Equivalent orifice S and Cv are all calculated from the flow rate data.

- 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.

[Unit: mm]

## 3A100 Series

#### Flow chart

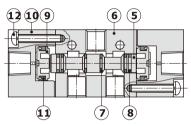


The data in flow rate chart are obtained from AirTAC lab.

#### **Inner structure**

3A110 5 6 7 9 10 12 4 3 2 1 8 11

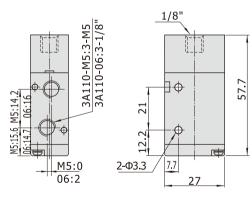
3A120

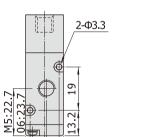


No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston
2	Spring	6	Body	10	Pilot body
3	Bottom cover	7	O-ring	11	Piston O-ring
4	Bottom cover screw	8	Wear ring	12	Piston screw

### **Dimensions**

### 3A110



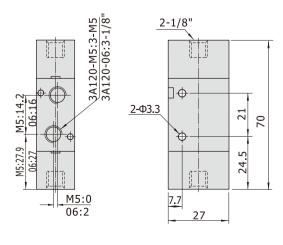


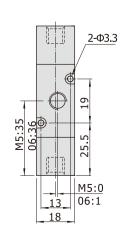
M5:0

06:1

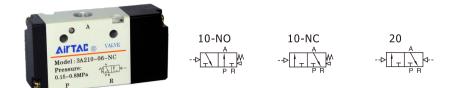
\_13<sub>.</sub>

#### 3A120

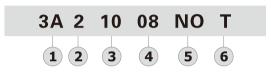




### 3A200 Series



### **Ordering code**



<b>1</b> Model	2Code	<b>③Valve type</b>	<b>4</b> Port size	<b>⑤Acting type</b>	<b>6Thread type</b>
3A: Air valve(3/2 way)	2: 200 Series	10: Single air control	06: 1/8"	NC: Normally closed	T: NPT
		20: Double air control	08: 1/4"	NO: Normally opened	

Please refer to 97 for manifold specification and the order way.

### **Specification**

Model	3A210-06	3A220-06	3A210-08	3A220-08							
Fluid	Air(	to be filtered by	40 μ m filter eleme	ent)							
Acting		Exterior control									
Port size [Note1]	In=Ou	t=1/8"	In=Out=1/4"								
Orifice size [Note4]	3A	3A210-08,3A220-08:17.0mm <sup>2</sup> (Cv=1.0)									
Valve type	3 port 2 position										
Lubrication [Note2]		Not re	quired								
Operating pressure		21~114psi(0	.15~0.8MPa)								
Proof pressure		175psi(	1.2MPa)								
Temperature		-20~	,70℃								
Material of body	Aluminum alloy										
Max. frequency [Note3]											

[Note 1] NPT thread is available.

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

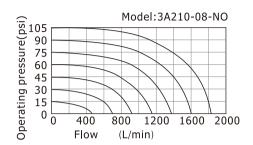
[Note3] The maximum actuation frequency is in the no-load state.

[Note4] Equivalent orifice S and Cv are all calculated from the flow rate data.

- 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.

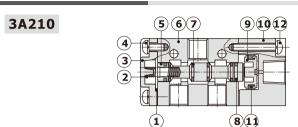
## 3A200 Series

#### Flow chart

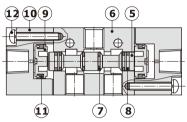


The data in flow rate chart are obtained from AirTAC lab.

#### **Inner structure**



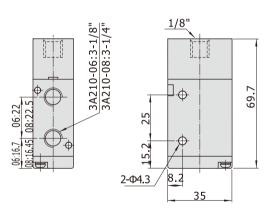
3A220

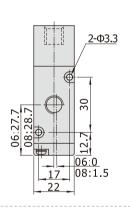


No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston
2	Spring	6	Body	10	Pilot body
3	Bottom cover	7	O-ring	11	Piston O-ring
4	Bottom cover screw	8	Wear ring	12	Piston screw

#### **Dimensions**

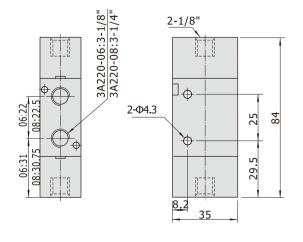
3A210

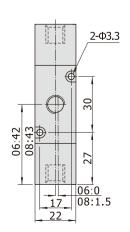




[Unit: mm]

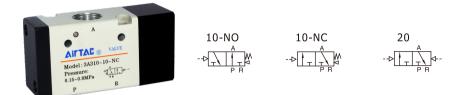
### 3A220



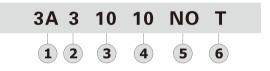


# AITTAE

### 3A300 Series



### **Ordering code**



<b>1</b> Model	2Code	<b>③Valve type</b>	<b>4</b> Port size	<b>⑤Acting type</b>	<b>6Thread type</b>
3A: Air valve(3/2 way)	3: 300 Series	10: Single air control	08: 1/4"	NC: Normally closed	T: NPT
		20: Double air control	10: 3/8"	NO: Normally opened	

Please refer to 97 for manifold specification and the order way.

### **Specification**

Model	3A310-08	3A320-08	3A310-10	3A320-10							
Fluid	Air(	to be filtered by	40 μ m filter eleme	ent)							
Acting		Exterior control									
Port size [Note1]	In=Ou	t=1/4"	In=Ou	t=3/8"							
Orifice size [Note4]	3A:	65)									
Valve type	3 port 2 position										
Lubrication [Note2]		Not re	quired								
Operating pressure		21~114psi(0	15~0.8MPa)								
Proof pressure	175psi(1.2MPa)										
Temperature	-20~70℃										
Material of body	Aluminum alloy										
Max. frequency [Note3]	5 cycle/sec										

[Note 1] NPT thread is available.

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

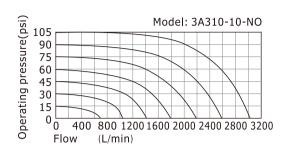
[Note3] The maximum actuation frequency is in the no-load state.

[Note4] Equivalent orifice S and Cv are all calculated from the flow rate data.

- 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.

## 3A300 Series

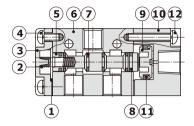
#### Flow chart



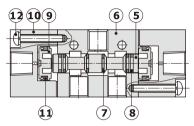
The data in flow rate chart are obtained from AirTAC lab.

#### **Inner structure**

3A310



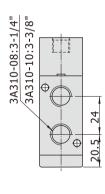
3A320

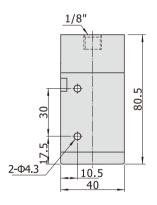


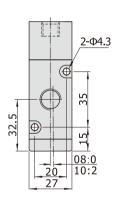
No.	Item	No.	Item	No.	Item
1	Bottom cover gasket	5	Spool	9	Piston
2	Spring	6	Body	10	Pilot body
3	Bottom cover	7	O-ring	11	Piston O-ring
4	Bottom cover screw	8	Wear ring	12	Piston screw

### **Dimensions**

#### 3A310

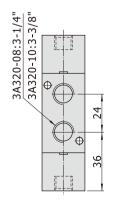


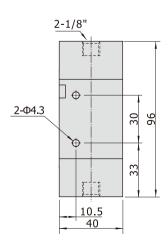


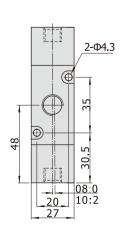


[Unit: mm]

#### 3A320









**3Thread type** 

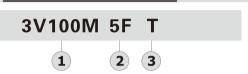
T: NPT

### **Manifold**



### **Ordering code**

#### Ordering code for manifold



**1**Model

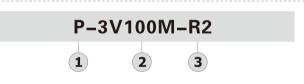
3V100M: 100 Series manifold 3V200M: 200 Series manifold 3V300M: 300 Series manifold 2 Number of stations [Note1]

1F: 1 station 2F: 2 station 3F: 3 station

.....

16F: 16 station

Ordering code for blank plate



①Kits P: Kits ②Model 3V100M: 100 Series manifold

3V200M: 200 Series manifold 3V300M: 300 Series manifold

③Code

R2: Blank plate for manifold

[Note] 1.Ordering code contains the two parts of the manifold's and the blank plate's.

- 2. Manifold kits contains manifold, seal and screw.
- 3. Blank plate kits contains blank plate, and screw.

### **Specification**

Item\Manifold Model	100M	300M							
Fluid	Air(to be filtered by 40 μ m filter element)								
Temperature		-20~70℃							
Adoptable valve's series	3A100 Series	3A200 Series	3A300 Series						

- 1. It is available to integrate the direction control valves of the same series to form valve group to save space and cost;
- 2. It is easy to examine when there are faults owning to the unified air intake and exhaust and unified wiring;
- 3. Flexible combination and strong expansion capability can make any combination or expansion of the numbers of direction control valves that are connected.

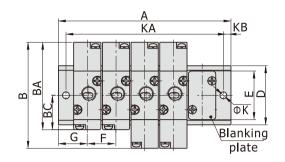


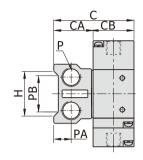


# **Manifold**

### **Dimensions**

### With 3A air valve





[Unit: mm]

<b>Model\Item</b>	В	ВА	ВС	С	CA	СВ	D	Е	F	G	Н	K	KB	Р	PA	РВ
3V100M	70	57.7	22.7	53	26	27	39	32	19	19	30	4.5	5	1/4"	11.5	22
3V200M	84	69.7	27.7	61	26	35	45	40	23	23	35	4.5	6	1/4"	11.5	25
3V300M	96	80.5	32.5	70	30	40	52	47	28	27	42	4.5	6	3/8"	13.5	28

Madal\ Ttam		A														
Model\Item	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
3V100M	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323
3V200M	46	69	92	115	138	161	184	207	230	253	276	299	322	345	368	391
3V300M	54	82	110	138	166	194	222	250	278	306	334	362	390	418	446	474

Model\Item	KA															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
3V100M	28	47	66	85	104	123	142	161	180	199	218	237	256	275	294	313
3V200M	34	57	80	103	126	149	172	195	218	241	264	287	310	333	356	379
3V300M	42	70	98	126	154	182	210	238	266	294	322	350	378	406	434	462