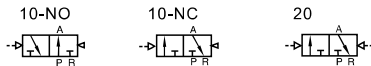


# Air valve( 3/2 way)

## 6TA Series



### Symbol



### Product feature

1. The body is extruded by aluminum alloy, and the inner hole is specially processed to increase the flow rate.
2. Can integrate manifold to form valve group to save space.

### Specification

Model	6TA0510	6TA0520	6TA110	6TA120
Port size [Note1]	In=Out=Exh=M5		In=Out=Exh=M5(or=1/8")	
Orifice size(Cv)[Note4]	M5:3.4mm <sup>2</sup> (0.2)		06 : 8.9mm <sup>2</sup> (0.52)	
Weight (g)	18,5	28,5	46,5	56,5
Model	6TA210	6TA220	6TA310	6TA320
Port size [Note1]	06:In=Out=Exh=1/8" 08:In=Out=1/4" Exh=1/8"		In=Out=3/8" Exh=1/4"	
Orifice size(Cv)[Note4]	08:15.4mm <sup>2</sup> (0.91)		10:38.4mm <sup>2</sup> (2.26)	
Weight (g)	96	121	200	240
Fluid	Air(to be filtered by 40µm filter element)			
Acting	External air control			
Operating pressure	0.15~0.8MPa(21~114psi)			
Proof pressure	1.2MPa(175psi)			
Temperature	-20~70°C			
Material of body	Aluminum alloy			
Lubrication [Note2]	Not required			
Max.frequency [Note3]	5 cycle/sec			

[Note1] PT thread, G thread and NPT thread are available.

[Note2] 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.

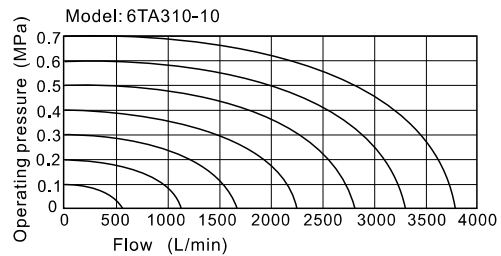
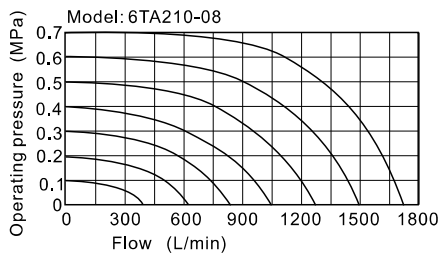
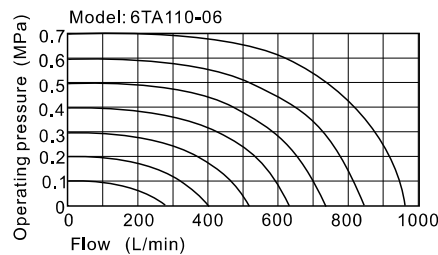
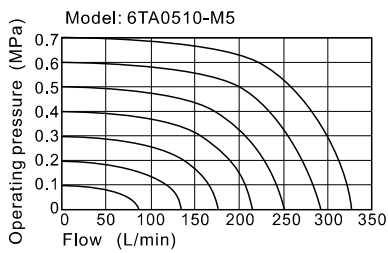
### Ordering code

6TA 2 10 08 NC □



① Model	6TV : Air valve (3/2 way)			
② Code	05: 0500 Series	1: 100 Series	2: 200 Series	3: 300 Series
③ Valve type	10: Single air control 20 : Double air control			
④ Port size	M5: M5	M5: M5	06: 1/8"	06: 1/8" 08: 1/4" 10: 3/8"
⑤ Acting type	NC: Normally closed NO: Normally opened [Note : Double air control no this code]			
⑥ Thread type	- Blank: PT Thread/ G: G Thread / T: NPT Thread			

### Flow chart



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

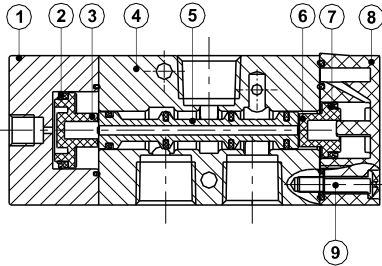


# Air valve( 3/2 way)

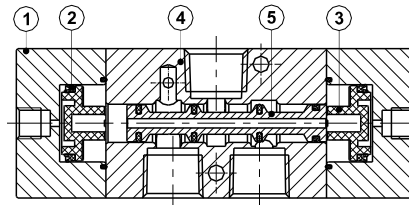
## 6TA Series

### Inner structure

6TA110



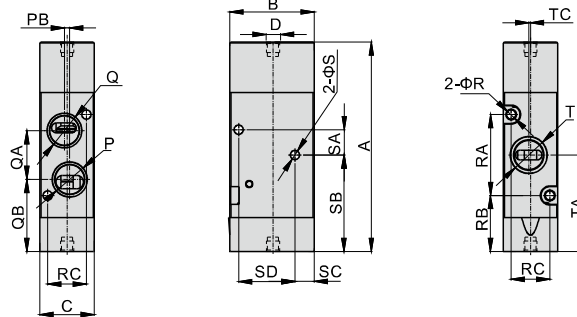
6TA120NC



No.	Item
1	Pilot valve
2	Gasket
3	Big piston
4	Body
5	Spool
6	Small piston
7	Gasket
8	Bottom cover
9	Bolt

### Dimensions

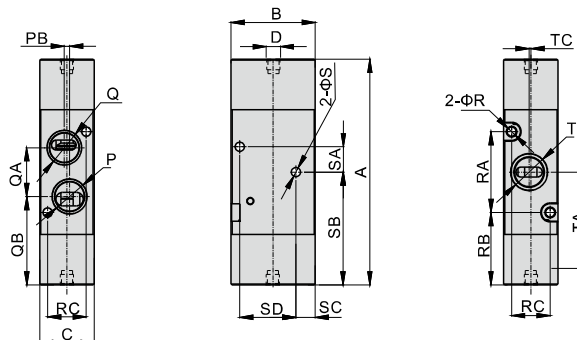
6TA0510  
6TA110  
6TA210  
6TA310



Model/Item	A	B	C	D	P	PB	Q	QA	QB	R	RA	RB	RC	S	SA	SB	SC	SD	T	TA	TC
6TA0510M5	41.5	21	10.6	M5X0.8	M5X0.8	1	M5X0.8	9.5	13.5	2.1	14	11.3	7.5	-	-	-	-	-	M5X0.8	18.3	0.5
6TA110M5	59.5	24	15.5	M5X0.8	M5X0.8	-	M5X0.8	14	20.5	2.6	23	16	11	Φ2.6	7.2	34.5	4	17.5	M5X0.8	27.5	-
6TA11006	59.5	24	15.5	M5X0.8	1/8"	1.5	1/8"	14	20.5	2.6	23	16	11	Φ2.6	7.2	34.5	4	17.5	1/8"	27.5	0.5
6TA21006	77.5	32.5	18.5	1/8"	1/8"	-	1/8"	18	25.5	3.2	33	18	13.5	Φ3.2	12	46.5	7	21	1/8"	34.5	-
6TA21008	77.5	32.5	18.5	1/8"	1/4"	-	1/8"	18	25.5	3.2	33	18	13.5	Φ3.2	12	46.5	7	21	1/4"	34.5	1
6TA31010	95	46	23.5	1/8"	3/8"	-	1/4"	28	29.5	3.2	43	22	18.4	Φ4.3	15	58.5	8	31	3/8"	43.5	-

[Note]: 6TA0510 type no through hole "S" on the side.

6TA0520  
6TA120  
6TA220  
6TA320



Model/Item	A	B	C	D	P	PB	Q	QA	QB	R	RA	RB	RC	S	SA	SB	SC	SD	T	TA	TC
6TA0520M5	47	21	10.6	M5X0.8	M5X0.8	1	M5X0.8	9.5	18.7	2.1	14	16.5	7.5	-	-	-	-	-	M5X0.8	23.5	0.5
6TA120M5	64.5	24	15.5	M5X0.8	M5X0.8	-	M5X0.8	14	25.2	2.6	23	20.7	11	Φ2.6	7.2	39.5	4	17.5	M5X0.8	32.2	-
6TA12006	64.5	24	15.5	M5X0.8	1/8"	1.5	1/8"	14	25.2	2.6	23	20.7	11	Φ2.6	7.2	39.5	4	17.5	1/8"	32.2	0.5
6TA22006	85.5	32.5	18.5	1/8"	1/8"	-	1/8"	18	33.9	3.2	33	26.3	13.5	Φ3.2	12	54.8	7	21	1/8"	42.8	-
6TA22008	85.5	32.5	18.5	1/8"	1/4"	-	1/8"	18	33.9	3.2	33	26.3	13.5	Φ3.2	12	54.8	7	21	1/4"	42.8	1
6TA32010	103	46	23.5	1/8"	3/8"	-	1/4"	28	37.5	3.2	43	30	18.4	Φ4.3	15	66.5	8	31	3/8"	51.5	-

[Note]: 6TA0520 type no through hole "S" on the side.

# Air valve(Accessories)



## Manifold for 6TA Series



### Specification

Item\Manifold Model	6TA0500M	6TA100M	6TA200M	6TA300M
Fluid	Air(to be filtered by 40µm filter element)			
Temperature °C	-20~70			
Adaptable valve's series	6TA0500 Series	6TA100 Series	6TA200 Series	6TA300 Series

### Product feature

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 owing 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.

### Ordering code

#### 6TV100M 5F □ Ordering code for manifold



① Model	6TV0500M: 6TV0500 Series manifold	6TV100M: 6TV100 Series manifold	6TV200M: 6TV200 Series manifold	6TV300M: 6TV300 Series manifold
② Number of stations	1F: 1 Station 2F: 2 Station 3F: 3 Station ..... 20F: 20 Station			
③ Thread type	Blank: PT / G: G Thread / T: NPT Thread			

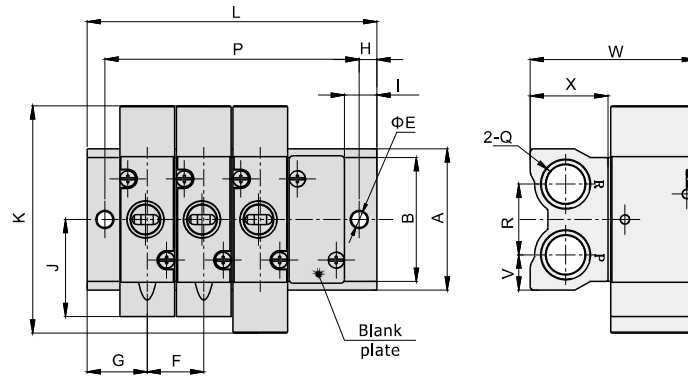
#### P-6TV100M - R2 Ordering code for blank plate



① Model	6TV0500M: 6TV0500 Series manifold	6TV100M: 6TV100 Series manifold	6TV200M: 6TV200 Series manifold	6TV300M: 6TV300 Series manifold
② Code	R2: Blank plate for manifold			

### Dimensions

[Note] 1. Manifold kits contains manifold, seal and screw; 2. Blank plate kits contains blank plate and screw.



Model\Item	A	B	E	F	G	H	I	J	K	Q	R	V	W	X
6TV0500M	33	26	4.5	11	15	5	9.5	18.5	47	1/8"	16.5	8.5	38.5	17
6TV100M	40	35	4.5	16	17	5	9	27.5	64.5	1/4"	20	10	47	22
6TV200M	48	44	4.5	19	18.5	5	9	34.5	85.5	1/4"	24	12	57	23.5
6TV300M	60	54	4.5	24	24	5	12.5	43.5	103	3/8"	32	14	74	27

Model\Item	L																			
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
6TV0500M	30	41	52	63	74	85	96	107	118	129	140	151	162	173	184	195	206	217	228	239
6TV100M	34	50	66	82	98	114	130	146	162	178	194	210	226	242	258	274	290	306	322	338
6TV200M	37	56	75	94	113	132	151	170	189	208	227	246	265	284	303	322	341	360	379	398
6TV300M	48	72	96	120	144	168	192	216	240	264	288	312	336	360	384	408	432	456	480	504

Model\Item	P																			
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
6TV0500M	20	31	42	53	64	75	86	97	108	119	120	141	152	163	174	185	196	207	218	229
6TV100M	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296	312	328
6TV200M	27	46	65	84	103	122	141	160	179	198	217	236	255	274	293	312	331	350	369	388
6TV300M	38	62	86	110	134	158	182	206	230	254	278	302	326	350	374	398	422	446	470	494

