

6TA Series



Ordering code

6TA 2 10 08 NC T

① ② ③ ④ ⑤ ⑥

① Model	6TA : 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 3/2 way			20 : Double air control 3/2 way		
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 don't acting type]	
⑥ Thread type	-			T: NPT		

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 ² (0.2)		06:8.9mm ² (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"		In=Out=3/8" Exh=1/4"	
	08: In=Out=1/4" Exh=1/8"			
Orifice size(Cv)[Note4]	08:15.4mm ² (0.91)		10:38.4mm ² (2.26)	
Weight (g)	96	121	200	240
Fluid	Air(to be filtered by 40μm filter element)			
Acting	External air control			
Operating pressure	21~114psi(0.15~0.8MPa)			
Proof pressure	175psi(1.2MPa)			
Temperature	-20~70°C			
Material of body	Aluminum alloy			
Lubrication [Note2]	Not required			
Max.frequency [Note3]	5 cycle/sec			

[Note1] NPT thread is 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.

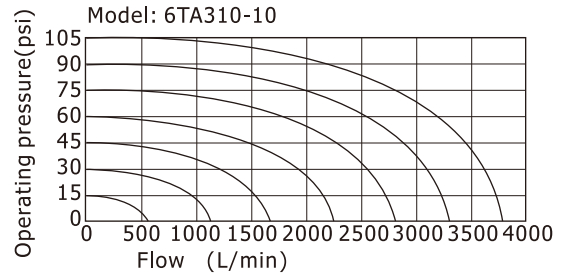
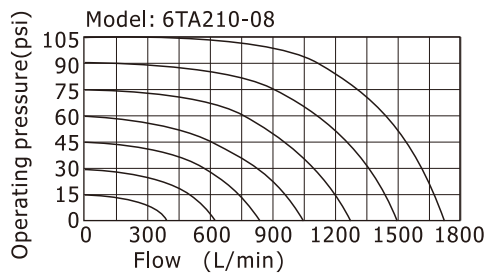
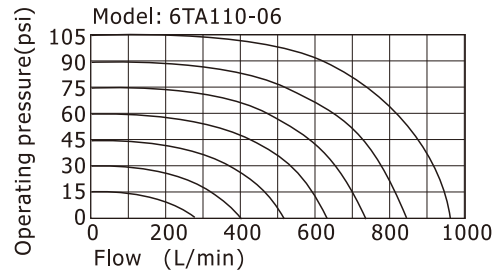
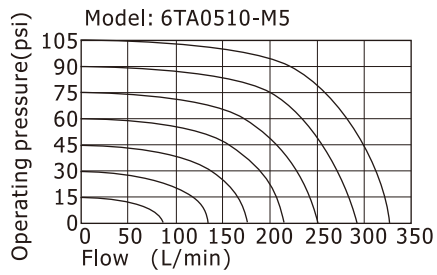
[Note4] Equivalent orifice S and Cv are all calculated from the flow rate data.

Product feature

1. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
2. Can integrate manifold to form valve group to save space.

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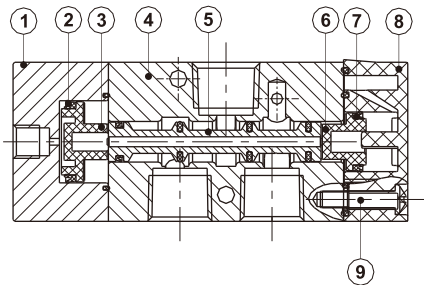
Flow chart



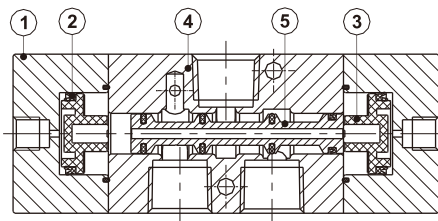
The data in flow rate chart are obtained from AirTAC lab.

Inner structure

6TA110



6TA120NC



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

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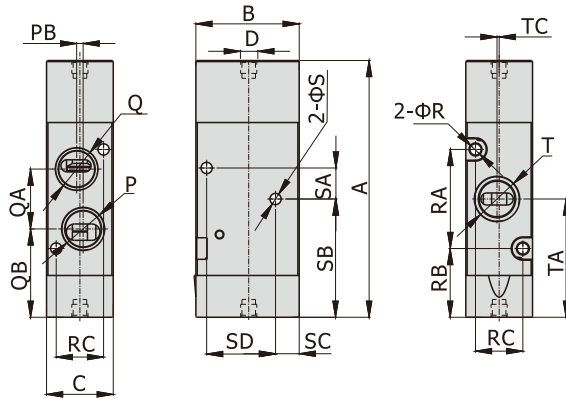
Dimensions

6TA0510

6TA110

6TA210

6TA310



Port size

[Unit: inch]

Model\Item	D	P	Q	T
6TA0510M5	M5X0.8	M5X0.8	M5X0.8	M5X0.8
6TA110M5	M5X0.8	M5X0.8	M5X0.8	M5X0.8
6TA11006	M5X0.8	1/8"	1/8"	1/8"
6TA21006	1/8"	1/8"	1/8"	1/8"
6TA21008	1/8"	1/4"	1/8"	1/4"
6TA31010	1/8"	3/8"	1/4"	3/8"

[Unit: mm]

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

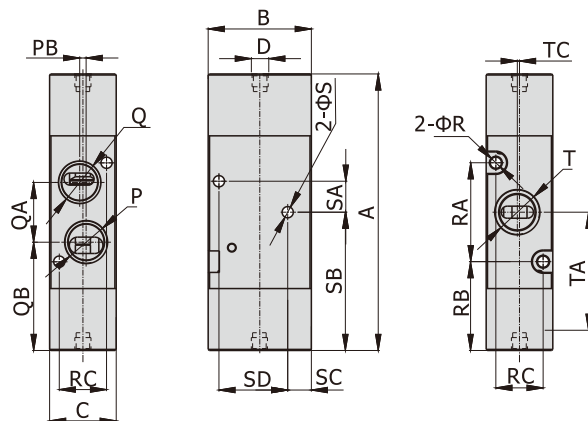
[Note]: 6TA0510 type no through hole "S" on the side.

6TA0520

6TA120

6TA220

6TA320



Port size

[Unit: inch]

Model\Item	D	P	Q	T
6TA0520M5	M5X0.8	M5X0.8	M5X0.8	M5X0.8
6TA120M5	M5X0.8	M5X0.8	M5X0.8	M5X0.8
6TA12006	M5X0.8	1/8"	1/8"	1/8"
6TA22006	1/8"	1/8"	1/8"	1/8"
6TA22008	1/8"	1/4"	1/8"	1/4"
6TA32010	1/8"	3/8"	1/4"	3/8"

[Unit: mm]

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

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