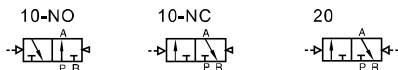


Air valve(3/2 way)

4STA 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	4STA110	4STA120	4STA210	4STA220
Port size [Note1]	In=Out=Exh=M5(or=1/8")		In=Out=Exhaust=1/8"(or=1/4")	
Orifice size (Cv) [Note4]	06:10.2mm ² (0.6)		08:17.0mm ² (1)	
Weight	58.5g	70.5g	111.5g	137g
Model	4STA310		4STA320	
Port size [Note1]	In=Out=Exhaust=1/4"(or=3/8")			
Orifice size (Cv) [Note4]	10:31mm ² (1.8)			
Weight	180g		218g	
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℃			
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] The maximum actuation frequency is in the no-load state.

[Note3] Once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.

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

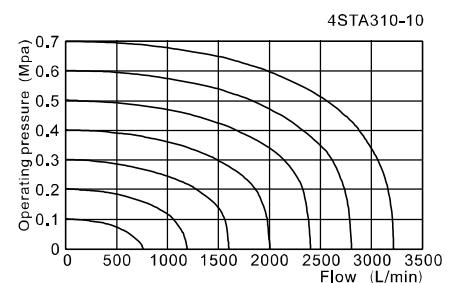
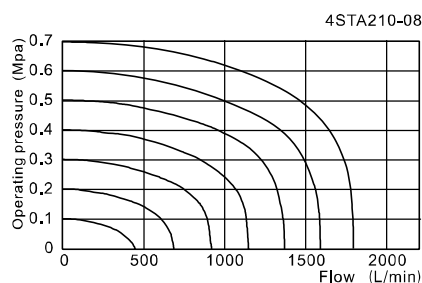
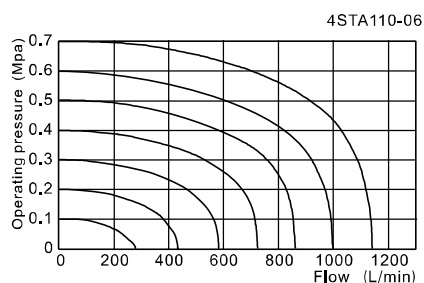
Ordering code

4STA 2 10 08 NC □

① ② ③ ④ ⑤ ⑥

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

Flow chart



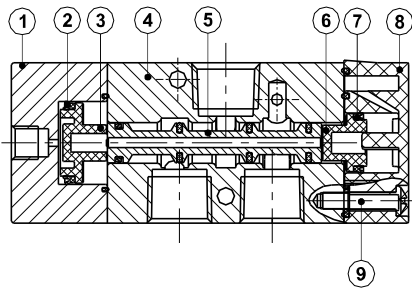
The data in flow rate chart are obtained from AirTAC lab.

Air valve(3/2 way)

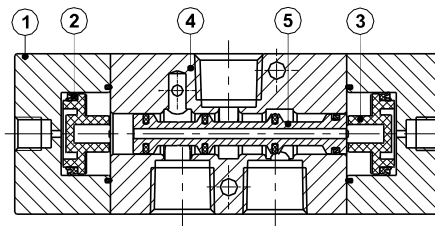
4STA Series

Inner structure

4STA110



4STA120NC



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

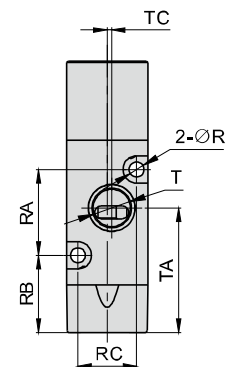
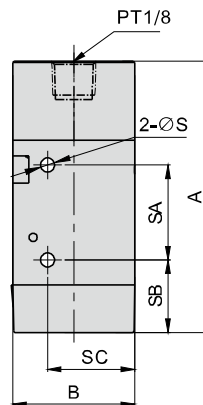
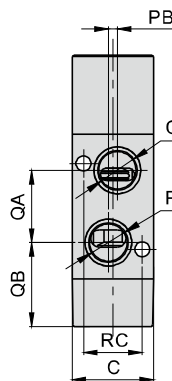
Dimensions

4STA110

4STA210

4STA310

4STA410



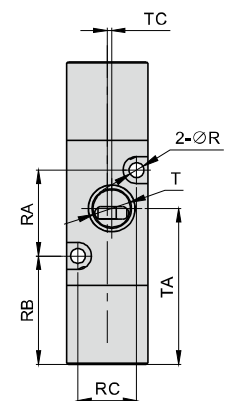
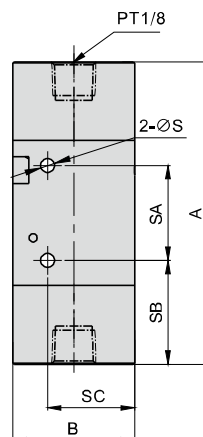
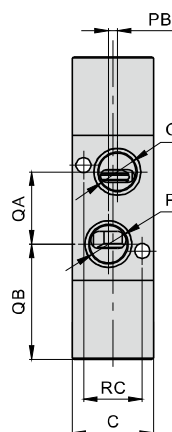
Model\Item	A	B	C	P	PB	Q	QA	QB	R	RA	RB	RC	S	SA	SB	SC	T	TA	TC
4STA110M5	60	27	18	M5×0.8	0	M5×0.8	14	19.5	3.3	19	17	13	3.1	21	16	19.3	M5×0.8	26.5	0
4STA11006	60	27	18	1/8"	1	1/8"	16	18.5	3.3	19	17	13	3.1	21	16	19.3	1/8"	27.5	1
4STA21006	73	35	22	1/8"	0	1/8"	21	21.5	3.3	30	17	17	4.3	25	19.5	26.5	1/8"	32	0
4STA21008	73	35	22	1/4"	1.5	1/4"	22.5	21	3.3	30	17	17	4.3	25	19.5	26.5	1/4"	33	1.5
4STA31008	85	40	27	1/4"	0	1/4"	21.5	27	4.3	35	20.5	20	4.3	30	23	29.5	1/4"	38	0
4STA31010	85	40	27	3/8"	2	3/8"	24	26	4.3	35	20.5	20	4.3	30	23	29.5	3/8"	38	2

4STA120

4STA220

4STA320

4STA420



Model\Item	A	B	C	P	PB	Q	QA	QB	R	RA	RB	RC	S	SA	SB	SC	T	TA	TB
4STA120M5	67	27	18	M5×0.8	0	M5×0.8	14	26.5	3.3	19	24	13	3.1	21	23	19.3	M5×0.8	33.5	0
4STA12006	67	27	18	1/8"	1	1/8"	16	25.5	3.3	19	24	13	3.1	21	23	19.3	1/8"	34.5	1
4STA22006	82	35	22	1/8"	0	1/8"	21	30.5	3.3	30	26	17	4.3	25	28.5	26.5	1/8"	41	0
4STA22008	82	35	22	1/4"	1.5	1/4"	22.5	30	3.3	30	26	17	4.3	25	28.5	26.5	1/4"	42	1.5
4STA32008	94.5	40	27	1/4"	0	1/4"	21.5	36.5	4.3	35	30	20	4.3	30	32.5	29.5	1/4"	47.5	0
4STA32010	94.5	40	27	3/8"	2	3/8"	24	35.5	4.3	35	30	20	4.3	30	32.5	29.5	3/8"	47.5	2

4STA Series manifold



Specification

Item\Manifold Model	4STV100M	4STV200M	4STV300M
Fluid	Air(to be filtered by 40µm filter element)		
Temperature °C	-20~70°C		
Adaptable valve's series	4STA100 Series	4STA200 Series	4STA300 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

4STV100M 5F □

Ordering code for manifold

① ② ③

① Model	4STV100M : 4STV100 Series manifold	4STV200M : 4STV200 Series manifold	4STV300M : 4STV300 Series manifold
② Number of stations	1F : 1Station 2F : 2Station 30F : 30Station		
③ Thread type	Blank: PT G: G Thread T: NPT Thread		

P-4STV100M-R2

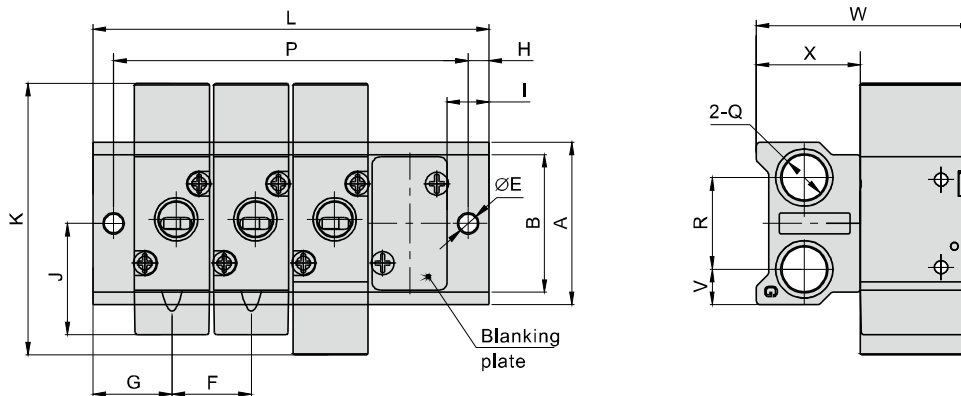
Ordering code for blank plate

① ②

① Model	4STV100M : 4STV100Series manifold	4STV200M : 4STV200Series manifold	4STV300M : 4STV300Series manifold
② Code	R2: Blank plate for manifold		

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

Dimensions



Model\Item	A	B	E	F	G	H	I	J	K	Q	R	V	W	X
4STV100M	39	33	4.5	19	19	5	10	26.5	67	1/4"	22	8.5	53	25
4STV200M	45	41	4.5	23	23	6	12	32	82	1/4"	25	10	61	25
4STV300M	52	48	4.5	28	27	6	13.5	38	94.5	3/8"	28	12	70	29

Model\Item	L																			
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
4STV100M	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323	342	361	380	399
4STV200M	46	69	92	115	138	161	184	207	230	253	276	299	322	345	368	391	414	437	460	483
4STV300M	54	82	110	138	166	194	222	250	278	306	334	362	390	418	446	474	502	530	558	586

Model\Item	P																			
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
4STV100M	28	47	66	85	104	123	142	161	180	199	218	237	256	275	294	313	332	351	370	389
4STV200M	34	57	80	103	126	149	172	195	218	241	264	287	310	333	356	379	402	425	448	471
4STV300M	42	70	98	126	154	182	210	238	266	294	322	350	378	406	434	462	490	518	546	574