

Air valve (5/2 way, 5/3 way)

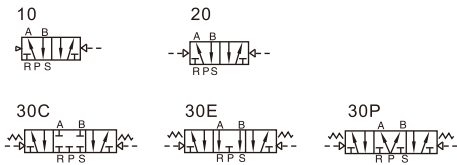
6A Series



Specification

Model	6A0510	6A0520	6A0530	6A110	6A120	6A130
Port size [Note1]	In=Out=Exh=M5			In=Out=Exh=M5(or=1/8")		
Orifice size(Cv) [Note4]	M5:3.4mm ² (0.2)		6A0530CM5: 2.2mm ² (0.13)	06:8.9mm ² (0.52)		6A130C06: 8.0mm ² (0.47)
Weight	20g	25g	30g	50g	60g	65g
Model	6A210	6A220	6A230	6A310	6A320	6A330
Port size [Note1]	In=Out=1/8"(or=1/4") Exh=1/8"			In=Out=3/8" Exh=1/4"		
Orifice size(Cv) [Note4]	08:15.4mm ² (0.91)		6A230C08: 14.2mm ² (0.84)	10:38.4mm ² (2.26)		6A330C10: 30.5mm ² (1.8)
Weight	120g	125g	135g	250g	290g	320g
Fluid	Air(to be filtered by 40 μm filter element)					
Acting	External air control					
Operating pressure	5/3 way	0.2~0.8MPa(29~114psi)				
	5/2 way	0.15~0.8MPa(21~114psi)				
Proof pressure	1.2MPa(175psi)					
Temperature	-20~70°C					
Material of body	Aluminum alloy					
Lubrication [Note3]	Not required					
Max.frequency[Note2]	5 cycle/sec		3 cycle/sec	5 cycle/sec		3 cycle/sec

Symbol



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.

[Note1] G 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.

Ordering code

6A 2 10 08 G

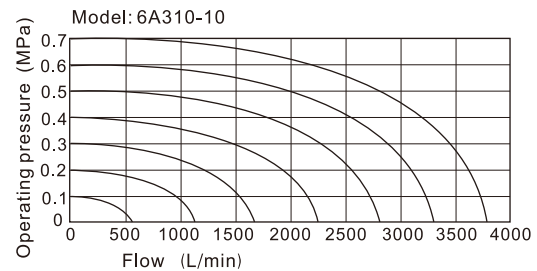
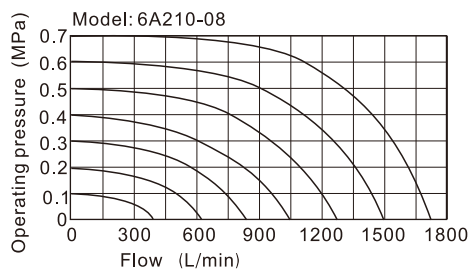
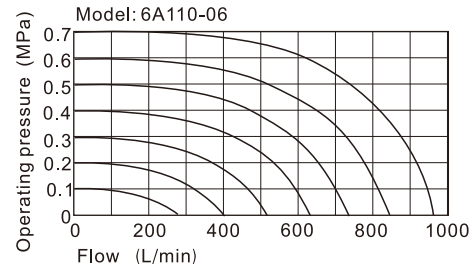
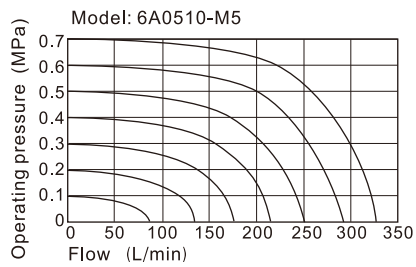


① Model	6A: Air valve (5/2, 5/3 way)					
② Code	05: 0500 Series	1: 100 Series		2: 200 Series		3: 300 Series
③ valve type	10: Single air control 5/2 way			20: Double air control 5/2 way		
	30C: Double air control 5/3 way closed center			30E: Double air control 5/3 way exhaust center		
	30P: Double air control 5/3 way pressure center					
④ Port size	M5: M5	M5: M5	06: 1/8"	06: 1/8"	08: 1/4"	10: 3/8"
⑤ Thread type	G: G Thread					

Air valve (5/2 way, 5/3 way)

6A Series

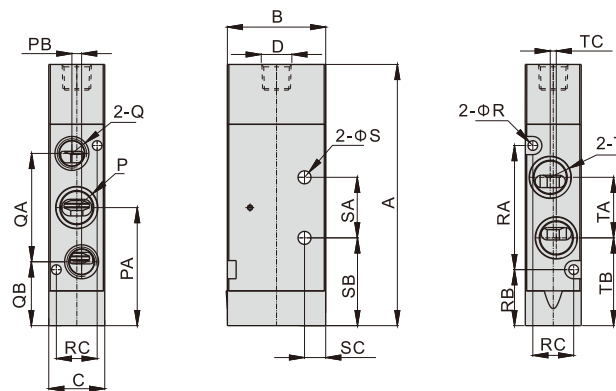
Flow chart



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

Dimensions

- 6A0510
- 6A110
- 6A210
- 6A310

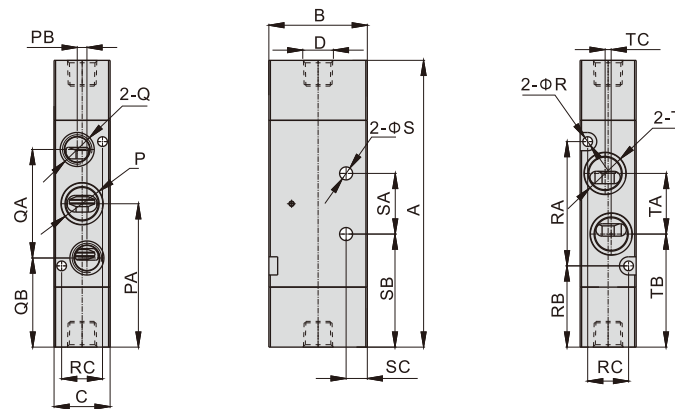


Model/Item	A	B	C	D	P	PA	PB	Q	QA	QB	R	RA	RB	RC	S	SA	SB	SC	T	TA	TB	TC
6A0510M5	50.5	21	10.6	M5x0.8	M5x0.8	22.5	1	M5x0.8	19	13	2.1	22.5	11.5	7.5	Φ2.6	10	17.5	4	M5x0.8	10.5	17.5	-
6A110M5	70.5	24	15.5	M5x0.8	M5x0.8	33	2.6	M5x0.8	28	19	2.6	34	16	11	Φ3.2	14	26	4	M5x0.8	16.5	24.5	-
6A11006	70.5	24	15.5	M5x0.8	1/8"	33	2.6	1/8"	28	19	2.6	34	16	11	Φ3.2	14	26	4	1/8"	16.5	24.5	-
6A21006	86.5	32.5	18.5	1/8"	1/8"	39	3.2	1/8"	36	21	3.2	41	18.5	13.5	Φ4.3	20	29	7	1/8"	20	29	2
6A21008	86.5	32.5	18.5	1/8"	1/4"	39	3.2	1/8"	36	21	3.2	41	18.5	13.5	Φ4.3	20	29	7	1/4"	20	29	2
6A31010	116	46	23.5	1/4"	3/8"	54	0	1/4"	50	29	3.2	64	22	18.5	Φ4.3	25	41.5	8	3/8"	33.5	37	0

Air valve (5/2 way, 5/3 way)

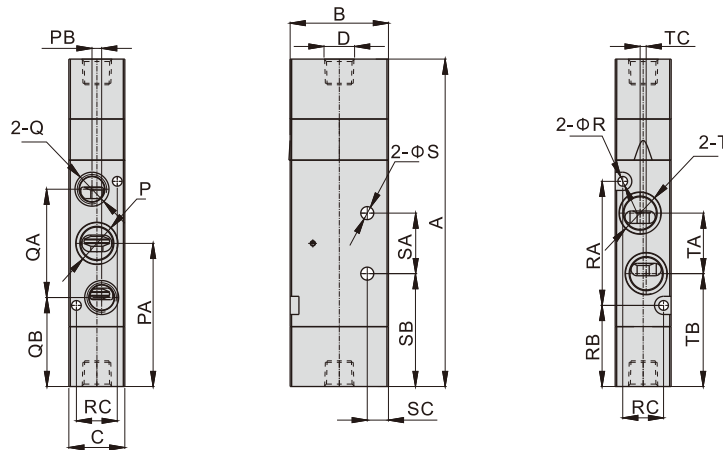
6A Series

6A0520
6A120
6A220
6A320



Model/Item	A	B	C	D	P	PA	PB	Q	QA	QB	R	RA	RB	RC	S	SA	SB	SC	T	TA	TB	TC
6A0520M5	55.5	21	10.6	M5x0.8	M5x0.8	28	1	M5x0.8	19	18	2.1	22.5	16.5	7.5	Φ2.6	10	22.5	4	M5x0.8	10.5	22.5	-
6A120M5	75	24	15.5	M5x0.8	M5x0.8	37.5	2.6	M5x0.8	28	24	2.6	34	20.5	11	Φ3.2	14	30.5	4	M5x0.8	16.5	29.5	-
6A12006	75	24	15.5	M5x0.8	1/8"	37.5	2.6	1/8"	28	24	2.6	34	20.5	11	Φ3.2	14	30.5	4	1/8"	16.5	29.5	-
6A22006	94.5	32.5	18.5	1/8"	1/8"	47.5	3.2	1/8"	36	29.5	3.2	41	27	13.5	Φ4.3	20	37.5	7	1/8"	20	37.5	2
6A22008	94.5	32.5	18.5	1/8"	1/4"	47.5	3.2	1/8"	36	29.5	3.2	41	27	13.5	Φ4.3	20	37.5	7	1/4"	20	37.5	2
6A32010	124	46	23.5	1/4"	3/8"	62	0	1/4"	50	37	3.2	64	30	18.5	Φ4.3	25	41.5	8	3/8"	33.5	45.5	0

6A0530
6A130
6A230
6A330



Model/Item	A	B	C	D	P	PA	PB	Q	QA	QB	R	RA	RB	RC	S	SA	SB	SC	T	TA	TB	TC
6A0530M5	64	21	10.6	M5x0.8	M5x0.8	28	1	M5x0.8	19	18	2.1	22.5	16.5	7.5	Φ2.6	10	22.5	4	M5x0.8	10.5	22.5	-
6A130M5	87	24	15.5	M5x0.8	M5x0.8	37.5	2.6	M5x0.8	28	24	2.6	34	20.5	11	Φ3.2	14	30.5	4	M5x0.8	16.5	29.5	-
6A13006	87	24	15.5	M5x0.8	1/8"	37.5	2.6	1/8"	28	24	2.6	34	20.5	11	Φ3.2	14	30.5	4	1/8"	16.5	29.5	-
6A23006	108	32.5	18.5	1/8"	1/8"	47.5	3.2	1/8"	36	29.5	3.2	41	27	13.5	Φ4.3	20	37.5	7	1/8"	20	37.5	2
6A23008	108	32.5	18.5	1/8"	1/4"	47.5	3.2	1/8"	36	29.5	3.2	41	27	13.5	Φ4.3	20	37.5	7	1/4"	20	37.5	2
6A33010	142	46	23.5	1/4"	3/8"	62	0	1/4"	50	37	3.2	64	30	18.5	Φ4.3	25	41.5	8	3/8"	33.5	45.5	0

Air valve (5/2 way, 5/3 way)

6A Series



Specification

Item\Manifold Model	6V0500M	6V100M	6V200M	6V300M
Fluid	Air(to be filtered by 40 μm filter element)			
Temperature °C	-20~70			
Adaptable valve's series	6A0500 Series	6A100 Series	6A200 Series	6A300 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

6V100M 5F G Ordering code for manifold



① Model	6V0500M: 6V0500 Series manifold	6V100M: 6V100 Series manifold	6V200M: 6V200 Series manifold	6V300M: 6V300 Series manifold
② Number of stations	1F: 1 Station 2F: 2 Station 3F: 3 Station 20F: 20 Station			
③ Thread type	G: G Thread			

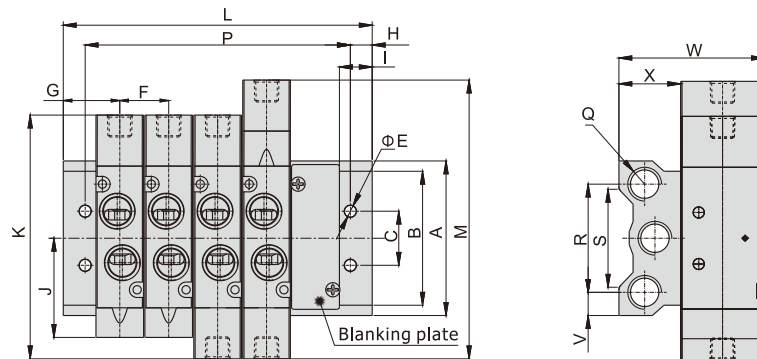
P-6V100M-R2 Ordering code for blank plate



① Model	6V0500M: 6V0500 Series manifold	6V100M: 6V100 Series manifold	6V200M: 6V200 Series manifold	6V300M: 6V300 Series 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	C	E	F	G	H	I	J	K	M	Q	R	S	V	W	X
6V0500M	46	32	16	4.5	11	15	5	9.5	22.5	55.5	64	1/8"	32	26	7	38	17
6V100M	57.5	43	20	4.5	16	17	5	9.5	33	75	87	1/4"	40	36	9	46	22
6V200M	60	52	21	4.5	19	18.5	5	9.5	38.5	94.5	108	1/4"	42	38	9	56.5	24
6V300M	85	75	26	4.5	23.5	24	5	12	54	124	142	3/8"	57	58	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
6V0500M	30	41	52	63	74	85	96	107	118	129	140	151	162	173	184	195	206	217	228	239
6V100M	34	50	66	82	98	114	130	146	162	178	194	210	226	242	258	274	290	306	322	338
6V200M	37	56	75	94	113	132	151	170	189	208	227	246	265	284	303	322	341	360	379	398
6V300M	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
6V0500M	20	31	42	53	64	75	86	97	108	119	130	141	152	163	174	185	196	207	218	229
6V100M	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280	296	312	328
6V200M	27	46	65	84	103	122	141	160	179	198	217	236	255	274	293	312	331	350	369	388
6V300M	38	62	86	110	134	158	182	206	230	254	278	302	326	350	374	398	422	446	470	494