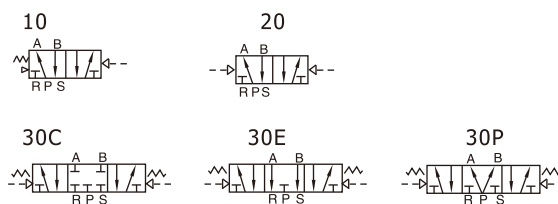


Air valve(5/2 way, 5/3 way)



4A100 Series



Ordering code

4A 1 10 06 T

① ② ③ ④ ⑤

① Model

4A: Air valve
(5/2, 5/3 way)

② Code

1: 100 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
06: 1/8"

⑤ Thread type

No this code(M5)
T: NPT

Please refer to P111 for manifold specification and the order way.

Specification

Model	4A110-M5 4A120-M5	4A130C-M5 4A130E-M5 4A130P-M5	4A110-06 4A120-06	4A130C-06 4A130E-06 4A130P-06
Fluid	Air(to be filtered by 40 μm filter element)			
Acting	Exterior control			
Port size [Note1]	In=Out=M5		In=Out=1/8"	
Orifice size [Note4]	4A110-06,4A120-06:10.2mm ² (Cv=0.6) 4A130C-06:8.6mm ² (Cv=0.51)			
Valve type	5 port 2 position	5 port 3 position	5 port 2 position	5 port 3 position
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	3cycle/sec	5 cycle/sec	3 cycle/sec
Weight (g)	4A110-M5:85 4A120-M5:140	165	4A110-06:85 4A120-06:140	165

[Note1] NPT thread is available.

[Note2] Once lubricated air is used, continue with same medium to optimize 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.



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

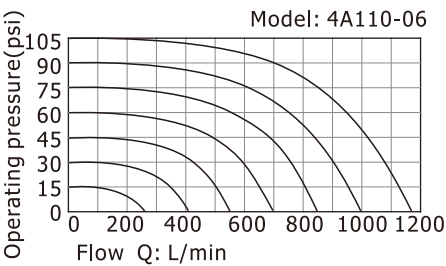


4A100 Series

Product feature

- 1. Structure in sliding column mode: good tightness and sensitive reaction.
- 2. Three position air valves have three kinds of central function for your choice.
- 3. Double air control valves have memory function.
- 4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- 5. No need to add oil for lubrication.
- 6. Integrate with the manifold to save installation space.

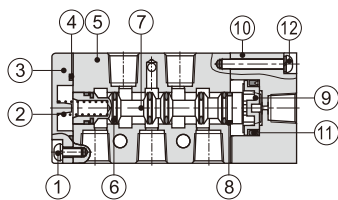
Flow chart



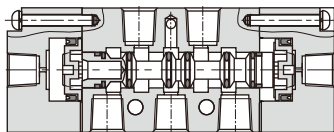
The data in flow rate chart are obtained from AirTAC lab.

Inner structure

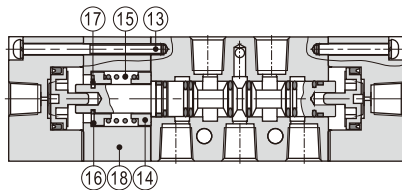
4A110



4A120



4A130C



No.	Item	No.	Item	No.	Item
1	Screw	7	Spool	13	Screw
2	Spring	8	Wear ring	14	Spring holder
3	Bottom cover	9	Piston	15	Return Spring
4	Bottom cover gasket	10	Pilot body	16	Spring holder
5	Body	11	O-ring	17	E Clip
6	O-ring	12	Screw	18	Side cover

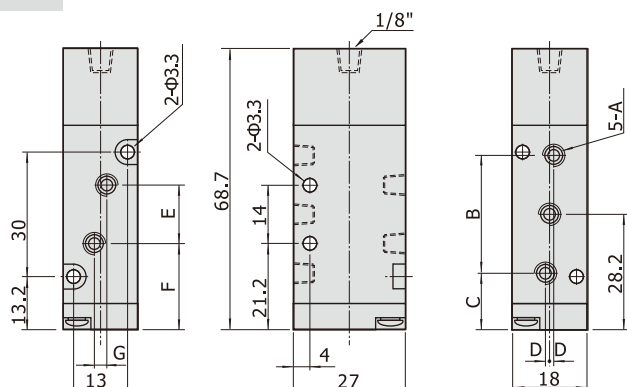
Air valve(5/2 way, 5/3 way)

4A100 Series

Dimensions

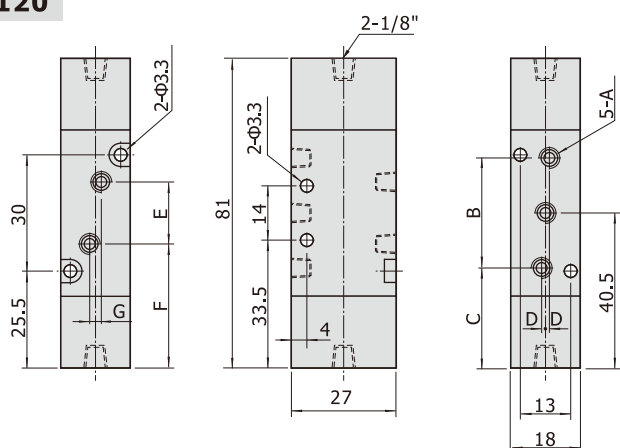
4A110

[Unit: mm]



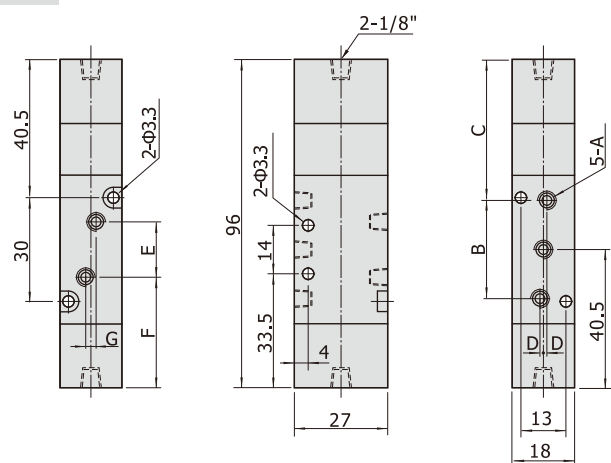
Model\Item	A	B	C	D	E	F	G
4A110-M5	M5x0.8	27	14.7	0	14	21.2	0
4A110-06	1/8"	28	14.2	1	16	20.2	3

4A120



Model\Item	A	B	C	D	E	F	G
4A120-M5	M5x0.8	27	27	0	14	33.5	0
4A120-06	1/8"	28	26.5	1	16	32.5	3

4A130

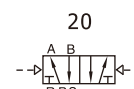
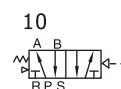


Model\Item	A	B	C	D	E	F	G
4A130-M5	M5x0.8	27	42	0	14	33.5	0
4A130-06	1/8"	28	41.5	1	16	32.5	3

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



4A200 Series



Ordering code

4A 2 10 08 T

1 2 3 4 5

① Model

4A: Air valve
(5/2, 5/3 way)

② Code

2: 200 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

06: 1/8"
08: 1/4"

⑤ Thread type

T: NPT

Please refer to P111 for manifold specification and the order way.

Specification

Model	4A210-06 4A220-06	4A230C-06 4A230E-06 4A230P-06	4A210-08 4A220-08	4A230C-08 4A230E-08 4A230P-08
Fluid	Air(to be filtered by 40 μm filter element)			
Acting	Exterior control			
Port size [Note1]	In=Out=Exhaust=1/8"		In=Out=1/4" Exhaust=1/8"	
Orifice size [Note4]	4A210-08,4A220-08:17.0mm ² (Cv=1.0) 4A230C-08:13.6mm ² (Cv=0.8)			
Valve type	5 port 2 position	5 port 3 position	5 port 2 position	5 port 3 position
Operating pressure	21~114psi(0.15~0.8MPa)			
Proof pressure	175psi(1.2MPa)			
Temperature	-20~70℃			
Material of body	Aluminum alloy			
Lubrication [Note2]	Not required			
Max. frequency [Note3]	5 cycle/sec	3 cycle/sec	5 cycle/sec	3 cycle/sec
Weight (g)	4A210-06:185 4A220-06:285	365	4A210-08:185 4A220-08:285	365

[Note1] NPT thread is available.

[Note2] Once lubricated air is used, continue with same medium to optimize 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.



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

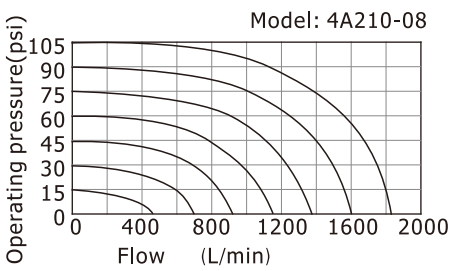


4A200 Series

Product feature

- 1. Structure in sliding column mode: good tightness and sensitive reaction.
- 2. Three position air valves have three kinds of central function for your choice.
- 3. Double air control valves have memory function.
- 4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- 5. No need to add oil for lubrication.
- 6. Integrate with the manifold to save installation space.

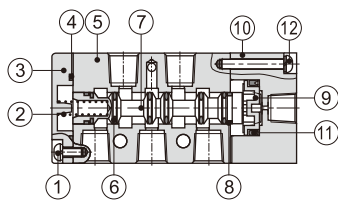
Flow chart



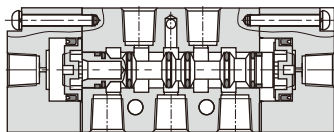
The data in flow rate chart are obtained from AirTAC lab.

Inner structure

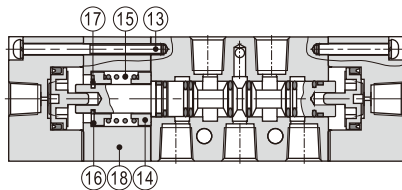
4A210



4A220



4A230C



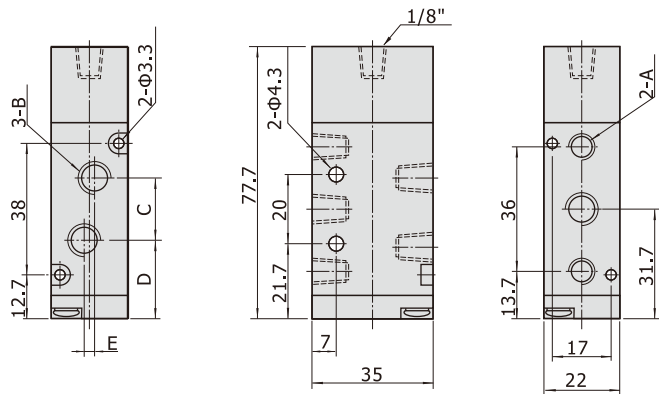
No.	Item	No.	Item	No.	Item
1	Screw	7	Spool	13	Screw
2	Spring	8	Wear ring	14	Spring holder
3	Bottom cover	9	Piston	15	Return Spring
4	Bottom cover gasket	10	Pilot body	16	Spring holder
5	Body	11	O-ring	17	E Clip
6	O-ring	12	Screw	18	Side cover

4A200 Series

Dimensions

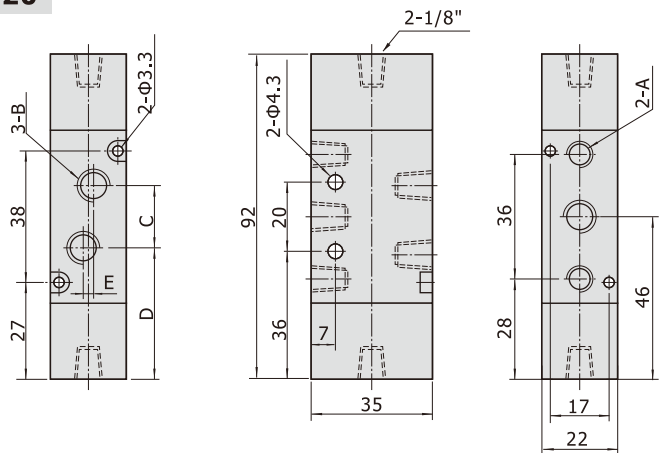
4A210

[Unit: mm]



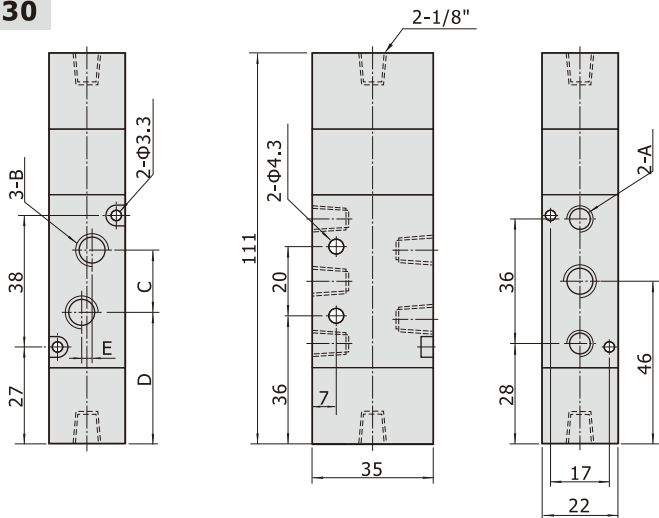
Model\Item	A	B	C	D	E
4A210-06	1/8"	1/8"	18	22.7	0
4A210-08	1/8"	1/4"	21	21.2	3

4A220



Model\Item	A	B	C	D	E
4A220-06	1/8"	1/8"	18	37	0
4A220-08	1/8"	1/4"	21	35.5	3

4A230

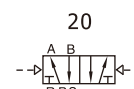
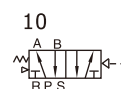


Model\Item	A	B	C	D	E
4A230-06	1/8"	1/8"	18	37	0
4A230-08	1/8"	1/4"	21	35.5	3

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



4A300 Series



Ordering code

4A 3 10 10 T

1 2 3 4 5

① Model

4A: Air valve
(5/2, 5/3 way)

② Code

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

08: 1/4"
10: 3/8"

⑤ Thread type

T: NPT

Please refer to P111 for manifold specification and the order way.

Specification

[Note1] NPT thread is available.

[Note2] Once lubricated air is used, continue with same medium to optimize 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.



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

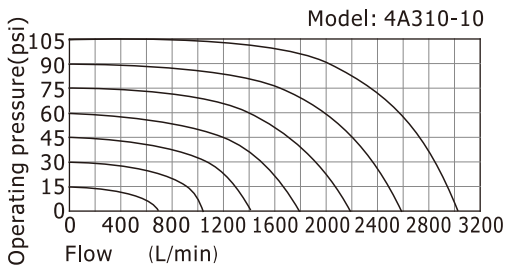


4A300 Series

Product feature

- 1. Structure in sliding column mode: good tightness and sensitive reaction.
- 2. Three position air valves have three kinds of central function for your choice.
- 3. Double air control valves have memory function.
- 4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- 5. No need to add oil for lubrication.
- 6. Integrate with the manifold to save installation space.

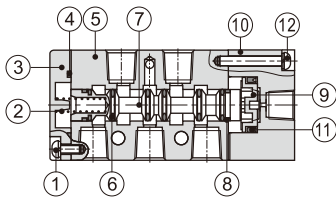
Flow chart



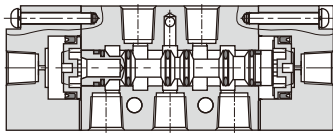
The data in flow rate chart are obtained from AirTAC lab.

Inner structure

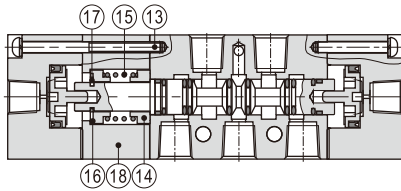
4A310



4A320



4A330C



No.	Item	No.	Item	No.	Item
1	Screw	7	Spool	13	Screw
2	Spring	8	Wear ring	14	Spring holder
3	Bottom cover	9	Piston	15	Return Spring
4	Bottom cover gasket	10	Pilot body	16	Spring holder
5	Body	11	O-ring	17	E Clip
6	O-ring	12	Screw	18	Side cover

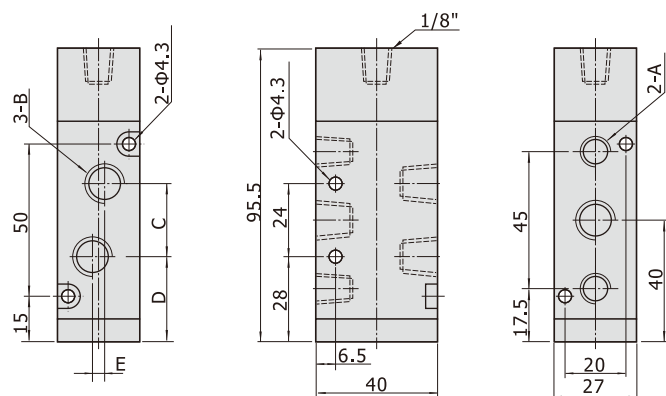
Air valve(5/2 way, 5/3 way)

4A300 Series

Dimensions

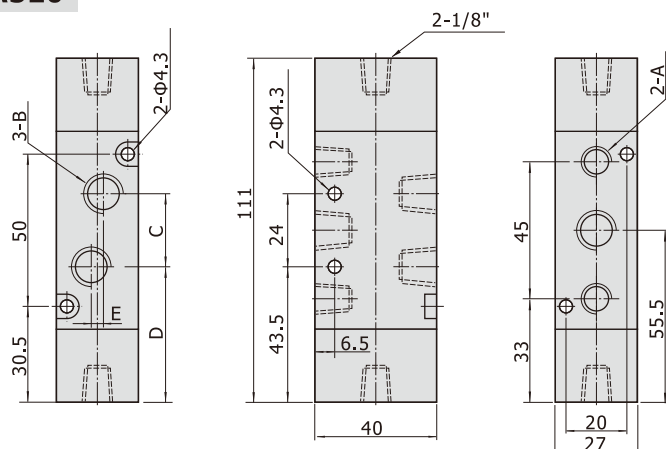
4A310

[Unit: mm]



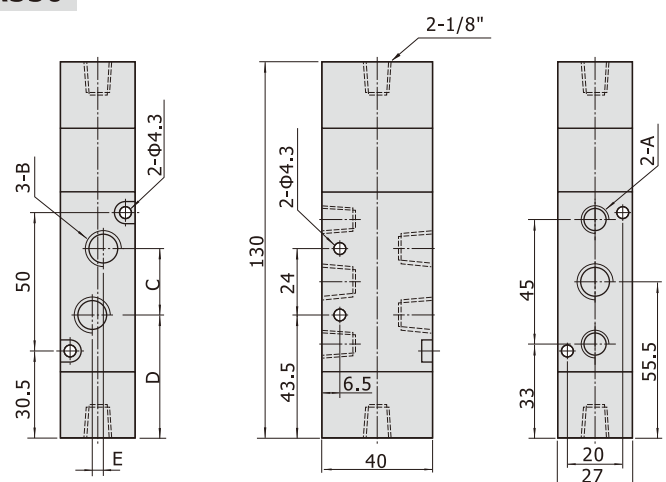
Model\Item	A	B	C	D	E
4A310-08	1/4"	1/4"	22	29	0
4A310-10	1/4"	3/8"	24	28	4

4A320



Model\Item	A	B	C	D	E
4A320-08	1/4"	1/4"	22	44.5	0
4A320-10	1/4"	3/8"	24	43.5	4

4A330

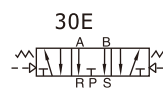
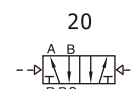
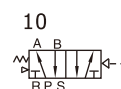
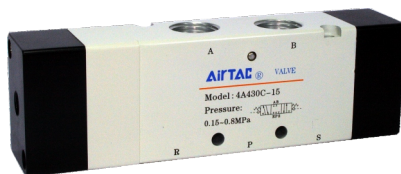


Model\Item	A	B	C	D	E
4A330-08	1/4"	1/4"	22	44.5	0
4A330-10	1/4"	3/8"	24	43.5	4

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



4A400 Series



Ordering code

4A 4 10 15 T

1 2 3 4 5

① Model

4A: Air valve
(5/2, 5/3 way)

② Code

4: 400 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

15: 1/2"

⑤ Thread type

T: NPT

Please refer to P111 for manifold specification and the order way.

Specification

[Note1] NPT thread is available.

[Note2] Once lubricated air is used, continue with same medium to optimize 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.



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

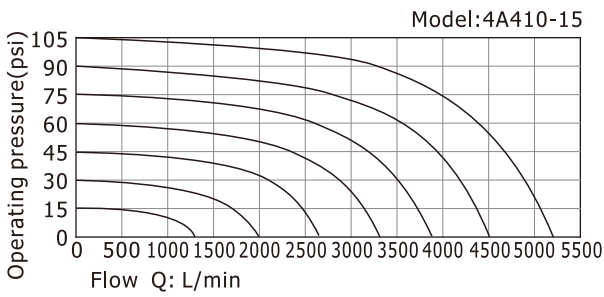


4A400 Series

Product feature

- 1. Structure in sliding column mode: good tightness and sensitive reaction.
- 2. Three position air valves have three kinds of central function for your choice.
- 3. Double air control valves have memory function.
- 4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- 5. No need to add oil for lubrication.
- 6. Integrate with the manifold to save installation space.

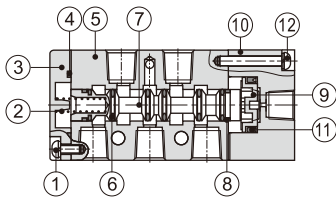
Flow chart



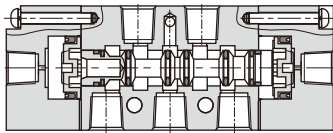
The data in flow rate chart are obtained from AirTAC lab.

Inner structure

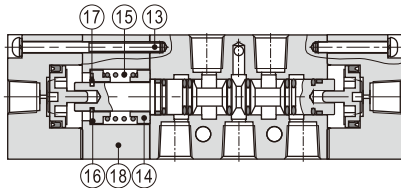
4A410



4A420



4A430C



No.	Item	No.	Item	No.	Item
1	Screw	7	Spool	13	Screw
2	Spring	8	Wear ring	14	Spring holder
3	Bottom cover	9	Piston	15	Return Spring
4	Bottom cover gasket	10	Pilot body	16	Spring holder
5	Body	11	O-ring	17	E Clip
6	O-ring	12	Screw	18	Side cover

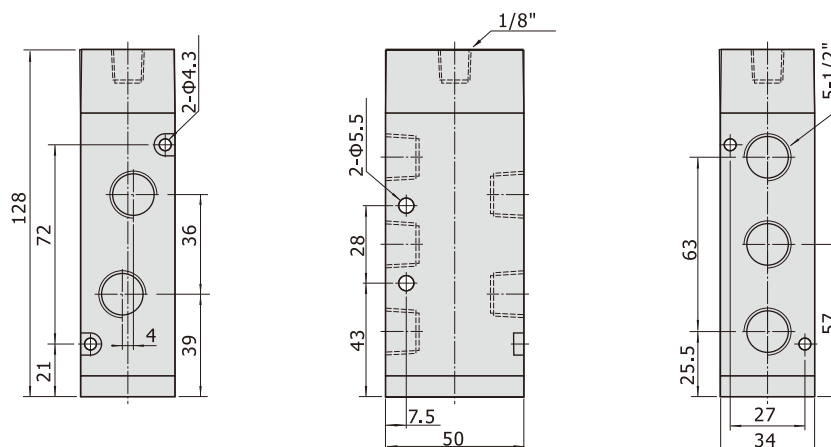
Air valve(5/2 way, 5/3 way)

4A400 Series

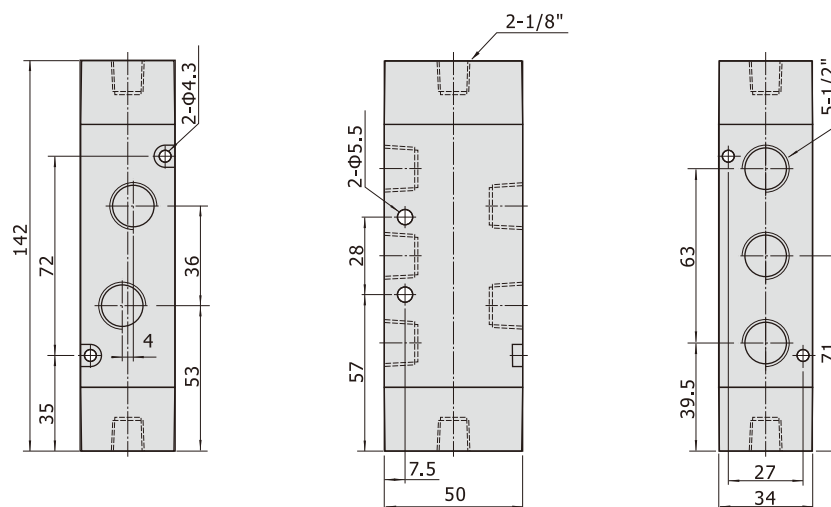
Dimensions

4A410

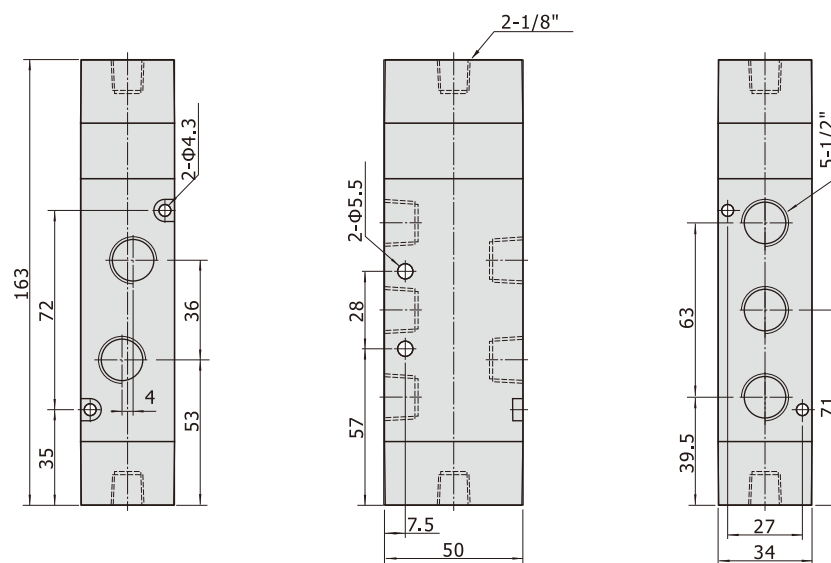
[Unit: mm]



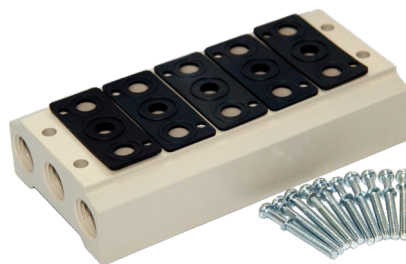
4A420



4A430



Manifold



Ordering code

Ordering code for manifold

100M 5F T

①

②

③

① Model

100M: 100 Series manifold
200M: 200 Series manifold
300M: 300 Series manifold
400M: 400 Series manifold

② Number of stations [Note1]

1F: 1 station
2F: 2 station
3F: 3 station
.....
16F: 16 station

③ Thread type

T: NPT

Ordering code for blank plate

P-100M-R2

①

②

③

① Kits

P: Kits

② Model

100M: 100 Series manifold
200M: 200 Series manifold
300M: 300 Series manifold
400M: 400 Series manifold

③ Code

R2: Blank plate for manifold

[Note1] 100M, 200M series have a maximum of 16 stations ;
300M series have a maximum of 12 stations;
400M series have a maximum of 8 stations.

[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	200M	300M	400M
Fluid	Air(to be filtered by 40 μ m filter element)			
Temperature	-20~70℃			
Adaptable valve's series	4A100 Series	4A200 Series	4A300 Series	4A400 Series

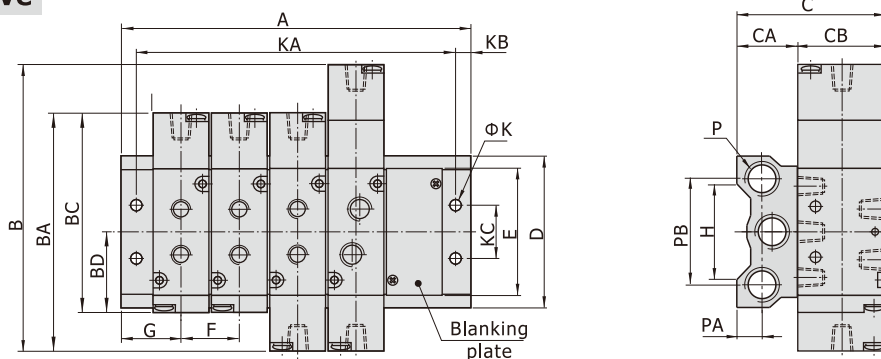
Product feature

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.

Manifold

Dimensions

With 4A air valve



[Unit: mm]

Model\Item	B	BA	BC	BD	C	CA	CB	D	E	F	G	H	K	KB	KC	P	PA	PB
100M□F	96	81	68.7	28	49	22	27	57.5	43	19	19	36	4.5	5	20	1/4"	10	40
200M□F	111	92	77.7	31.7	59	24	35	60	52	23	22	38	4.5	5	21	1/4"	10	42
300M□F	130	111	95.5	40	68	28	40	75	64	28	26	54	4.5	5	26	3/8"	13.5	53
400M□F	163	142	128	57	83	33	50	100	94	35	30.5	75	5.5	6	32	1/2"	15	68

Model\Item	A															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
100M□F	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323
200M□F	44	67	90	113	136	159	182	205	228	251	274	297	320	343	366	389
300M□F	52	80	108	136	164	192	220	248	276	304	332	360	-	-	-	-
400M□F	61	96	131	166	201	236	271	306	-	-	-	-	-	-	-	-

Model\Item	KA															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
100M□F	28	47	66	85	104	123	142	161	180	199	218	237	256	275	294	313
200M□F	34	57	80	103	126	149	172	195	218	241	264	287	310	333	356	379
300M□F	42	70	98	126	154	182	210	238	266	294	322	350	-	-	-	-
400M□F	49	84	119	154	189	224	259	294	-	-	-	-	-	-	-	-