

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



7A Series

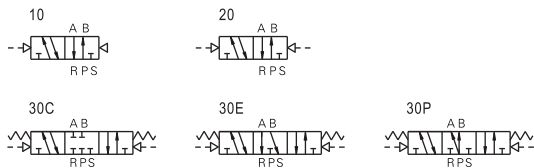


Specification

Model	7A110-06	7A120-06	7A130-06	7A210-08	7A220-08	7A230-08
Port size ①	In=Out=Exhaust=1/8"			In=Out=1/4" Exhaust=1/8"		
Model	7MA110	7MA120	7MA130	7MA210	7MA220	7MA230
Orifice size	9.5mm ²		8.0mm ²	14.0mm ²		11.0mm ²
Cv value	0.55		0.48	0.83		0.65
Valve type	5 port 2 position		5 port 3 position	5 port 2 position		5 port 3 position
Weight	65g	75g	85g	105g	120g	130g
Fluid	Air(to be filtered by 40 μ m filter element)					
Acting	Exterior control					
Operating pressure	0.15~0.8MPa(21~114psi)					
Proof pressure	1.5MPa(215psi)					
Temperature °C	-20~70					
Material of body	Aluminum alloy					
Lubrication ②	Not required					
Max. frequency ③	5 cycle/sec		3 cycle/sec	5 cycle/sec		3 cycle/sec

- ① PT thread、NPT thread and G thread are available.(Except 7MA series).
② Once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.
③ The maximum actuation frequency is in the no-load state.

Symbol

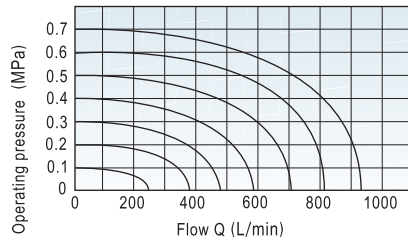


Product feature

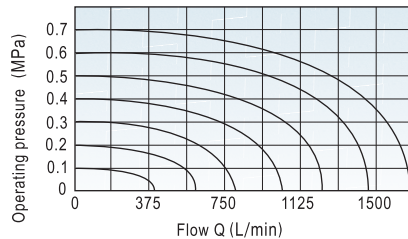
1. Collective exhaust type. exhausting air through R and S.
2. Aluminium alloy die-casting body, Improved internal structure for larger flow rate.
3. Tubing options allow direct tubing(7A) on the valves or manifold mount (7MA)for space saving.
4. Option '7MA' is used with valve sub base.

Flow chart

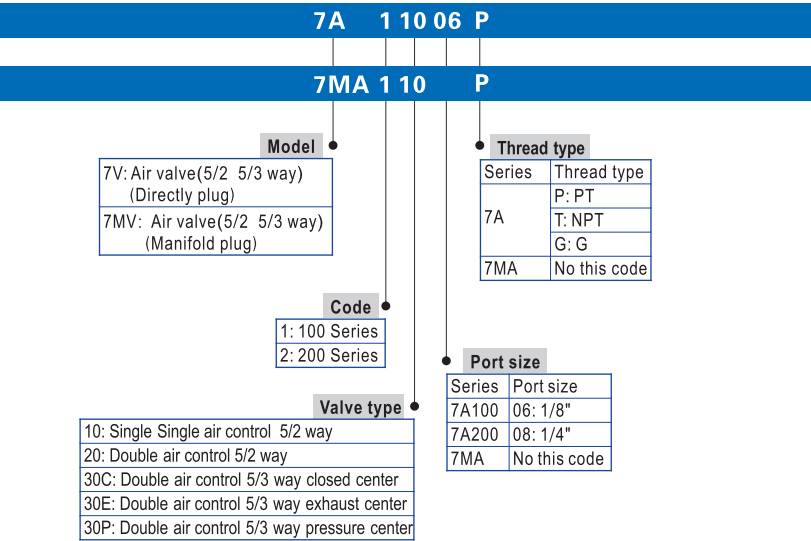
Model: 7A110-06、7MA110



Model: 7A210-08、7MA210



Ordering code



Please refer to P80 for manifold specification and the order way.



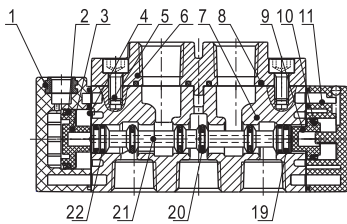
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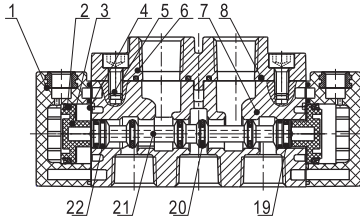
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Inner structure

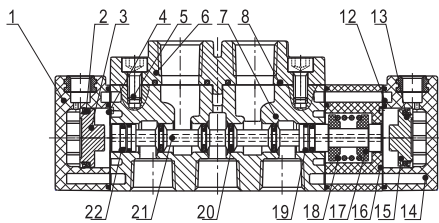
7A110



7A120

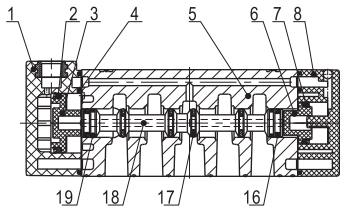


7A130C

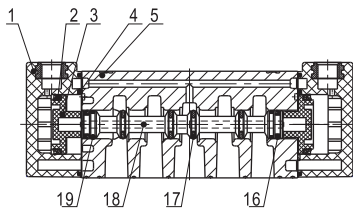


NO.	Item	NO.	Item	NO.	Item	NO.	Item	NO.	Item
1	Pilot body	6	Port block	11	Bottom cover	16	Side cover	21	Spool
2	Piston O-ring	7	Body	12	Gasket	17	Spring holder	22	Spool gasket
3	Big piston	8	Screw	13	Piston O-ring	18	Spring		
4	O-ring	9	Small piston	14	Pilot body	19	Wear ring		
5	Screw	10	Gasket	15	Big piston	20	Spool O-ring		

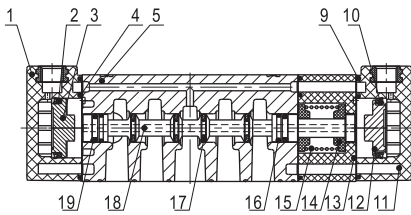
7MA110



7MA120



7MA130C



NO.	Item	NO.	Item	NO.	Item	NO.	Item	NO.	Item
1	Pilot body	5	Body	9	Gasket	13	Side cover	17	Spool O-ring
2	Piston O-ring	6	Small piston	10	Piston O-ring	14	Spring holder	18	Spool
3	Big piston	7	Gasket	11	Pilot body	15	Spring	19	Spool gasket
4	O-ring	8	Bottom cover	12	Big piston	16	Wear ring		



7A

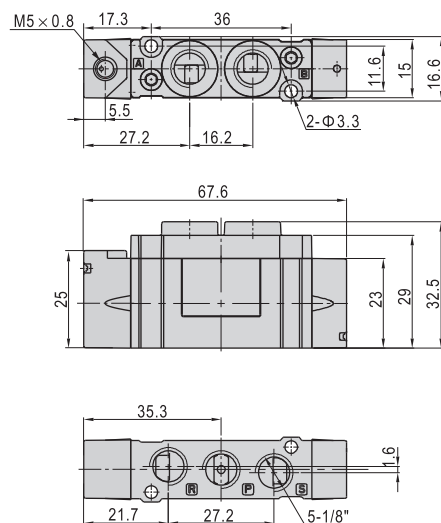
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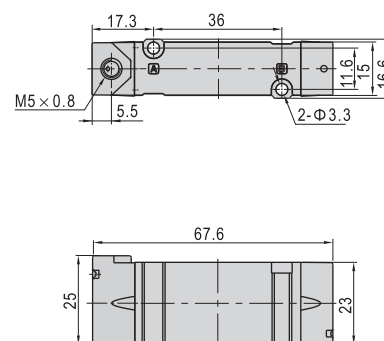
7A Series

■ Dimensions

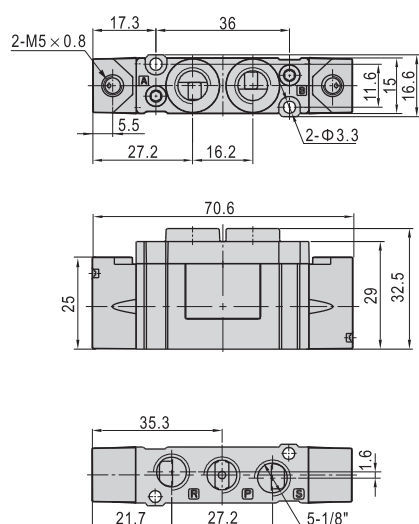
7A110



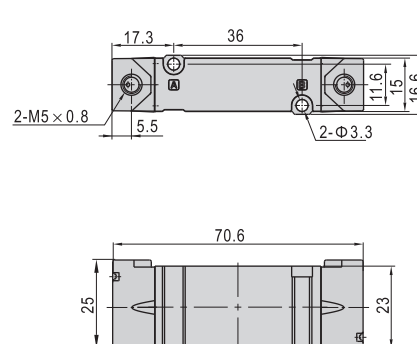
7MA110



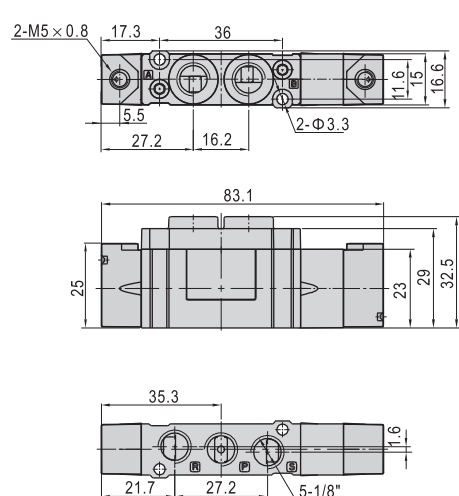
7A120



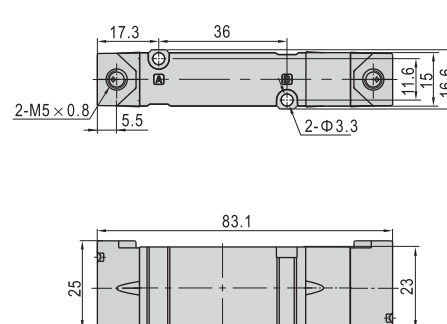
7MA120



7A130



7MA130

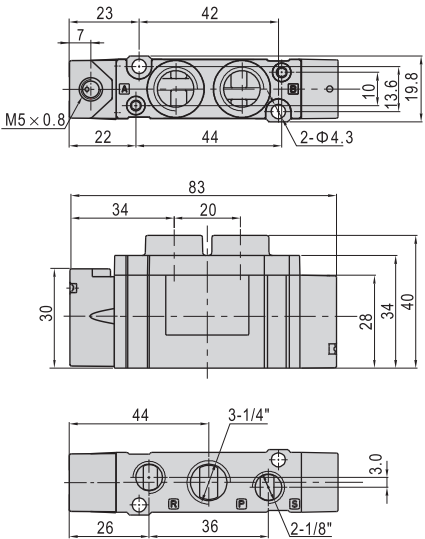


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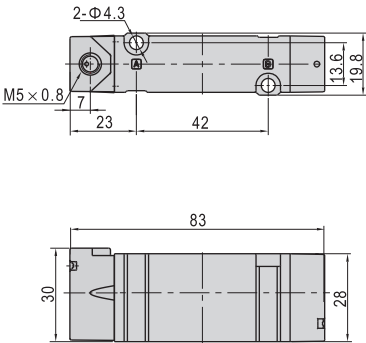
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7A Series

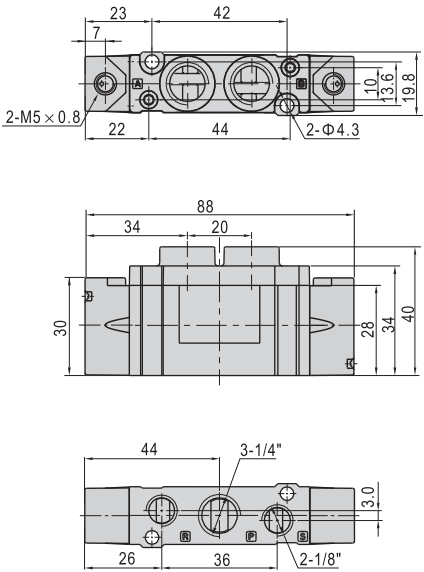
7A210



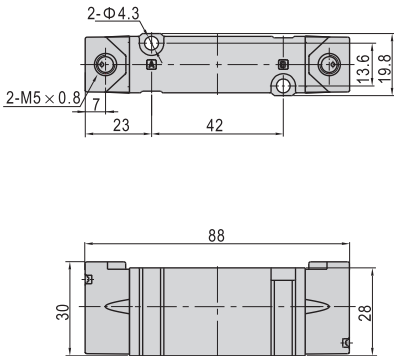
7MA210



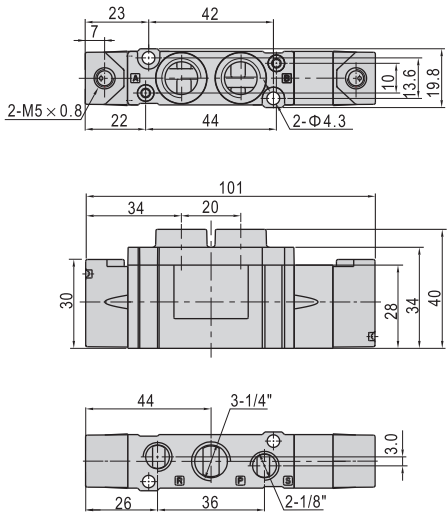
7A220



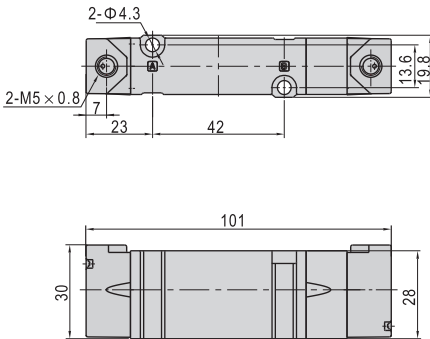
7MA220



7A230



7MA230

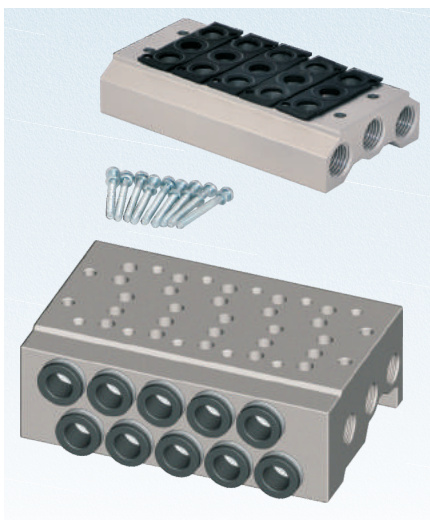


7A

Air valve(Accessories)

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Manifold for 7A Series



Product feature

1. It is available to integrate the direction control valves of the same series to form value 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.
4. The manifold's plugged ports can make it easy and fast to joint tube.

Ordering code for blank plate

P-7V100M R2

P-7MV100M R2

Model	Code
7V100M: 7V100 Series manifold	R2: Blank plate for manifold
7V200M: 7V200 Series manifold	
7MV100M: 7MV100 Series manifold	
7MV200M: 7MV200 Series manifold	

- Note:
1. Blank plate assembly of 7V series contains blank plate, screw.
 2. Blank plate assembly of 7MV series contains blank plate, gasket, screw.

Specification

Item\Manifold model	7V100M	7V200M	7MV100M	7MV200M
Fluid	Air(to be filtered by 40 μ m filter element)			
Temperature °C	-20~70			
Adaptable valve's series	7A100 Series	7A200 Series	7MA100 Series	7MA200 Series

Ordering code for manifold

7V100M 5F P

7MV100M 5F P6 P

Model	Thread type	OD of work port
7V100M: 7V100 Series manifold	P: PT	Model
7V200M: 7V200 Series manifold	T: NPT	7V100M/7V200M No this code
7MV100M: 7MV100 Series manifold	G: G	P6: Φ6mm
7MV200M: 7MV200 Series manifold		7MV100M P8: Φ8mm
		7MV200M P8: Φ8mm
		P10: Φ10mm

Note:

Manifold assembly of 7V series contains manifold, gasket, screw. Manifold assembly of 7MV series only contains manifold.

Dimensions

With 7A100/7A200 air valve

Model\Item	A	B	C	D	E	H	I	L	M	N	O	P	Q	T	U	V	W
7V100M	55.5	25	23	1/4"	36	40	57.5	20	16	70.6	8	4.5	20	57.5	83.1	67.6	35.3
7V200M	65	30	25	1/4"	38	42	60	22	19	88	8.5	4.5	21	60	101	83	44

Model\Item	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
7V100M	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264	280
7V200M	44	63	82	101	120	139	158	177	196	215	234	253	272	291	310	329

Model\Item	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
7V100M	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264
7V200M	27	46	65	84	103	122	141	160	179	198	217	236	255	274	293	312

With 7MA100/7MA200 air valve

Model\Item	A	B	C	D	E	F	G	H	L	M	N	P	Q	R	T	U	V	W
7MV100M	15.3	13.8	20	1/4"	20	38	67	5.1	5.5	18.5	16	4.5	28	20	83.1	70.6	67.6	35.3
7MV200M	19.2	19.2	21	1/4"	21	42	73	5.1	6	21	19	4.5	31.5	21	101	88	83	44

Model\Item	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
7MV100M	36.5	52.5	68.5	84.5	100.5	116.5	132.5	148.5	164.5	180.5	196.5	212.5	228.5	244.5	260.5	276.5
7MV200M	42	61	80	99	118	137	156	175	194	213	232	251	270	289	308	327

Model\Item	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
7MV100M	26	42	58	74	90	106	122	138	154	170	186	202	218	234	250	266
7MV200M	30	49	68	87	106	125	144	163	182	201	220	239	258	277	296	315