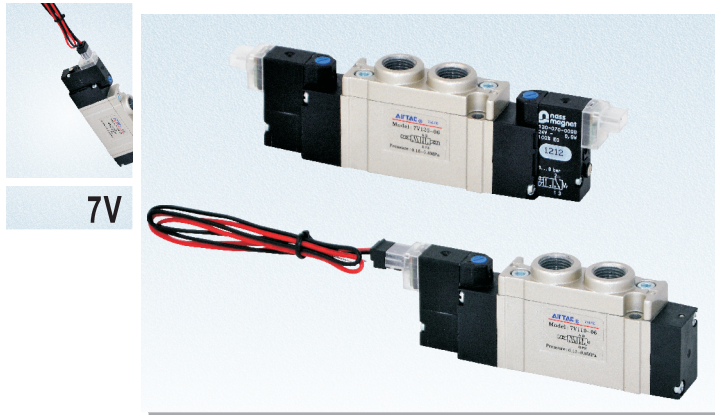


Solenoid valve(5/2 way \ 5/3 way)

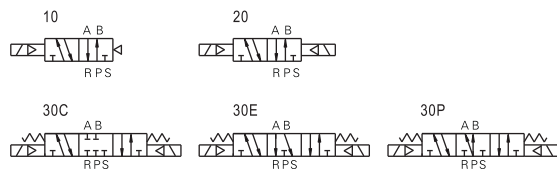
AirTAC

7V Series



7V

Symbol

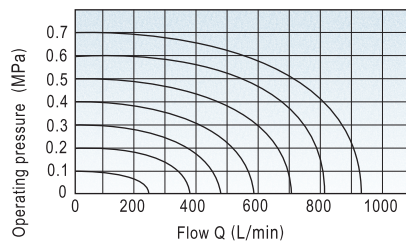


Product feature

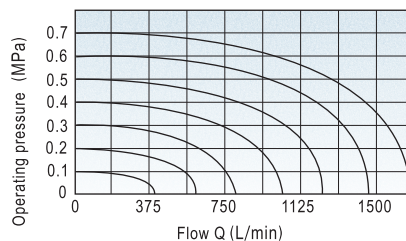
- 1、插接式接電方式，端子有水平安裝(JPC型)與垂直安裝(M型)可供選擇；
- 2、內排式結構，能將先導氣收集後集中從R、S孔排出；
- 3、活塞座內安裝濾心，能有效濾除先導氣中雜質，確保閥的正常穩定工作；
- 4、本體鋁合金壓鑄成型，型腔造型合理，有效增大流量；
- 5、接管方式有閥體直接接管型(7V)與底座接管型(7MV)可供選擇，并可與底座集成閥組，節省安裝空間；
- 6、7MV需與底座配套使用。

Flow chart

Model: 7V110-06、7MV110



Model: 7V210-08、7MV210



Specification

Model	7V110-06	7V120-06	7V130-06	7V210-08	7V220-08	7V230-08
Port size ①	In=Out=Exhaust=1/8"			In=Out=1/4" Exhaust=1/8"		
Model	7MV110	7MV120	7MV130	7MV210	7MV220	7MV230
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	80g	90g	100g	120g	135g	145g
Fluid	Air(to be filtered by 40 μ m filter element)					
Acting	Pilot					
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					
Exhaust type of pilot valve	主閥和先導閥集中排氣式					
Max. frequency ③	8 cycle/sec		5 cycle/sec	8 cycle/sec		5 cycle/sec

① PT thread、NPT thread and G thread are available.(Except 7MV series).

② It can't stop in the midway of lubricating. Lubricants like ISO VG32 or equivalent are recommended.

③ The maximum actuation frequency is in the no-load state.

Coil specification

Item	Specification
Standard voltage	DC24V
Scope of voltage	DC: ± 10%
Power consumption	DC: 0.9W(Standard) 0.6W(Lower power consumption, available)
Protection	Dustproof
Temperature classification	B Class
Electrical entry	Terminal
Activating time	0.05 sec and below

Ordering code

7V	1	10	06	B	M	P	-NS
7MV	1	10		B	M		-NS

Model 7V: Solenoid valve(5/2 5/3 way) (Directly plug) 7MV: Solenoid valve(5/2 5/3 way) (Manifold plug)	Pilot valve type N: Nass pilot valve								
Code 1: 100 Series 2: 200 Series	Manual override type Blank: Slotted type (Push-turn locking) E: Lever type (Push-turn locking)								
Valve type 10: Single solenoid 5/2 way 20: Double solenoid 5/2 way 30C: Double solenoid 5/3 way closed center 30E: Double solenoid 5/3 way exhaust center 30P: Double solenoid 5/3 way pressure center	Thread type <table border="1"> <tr> <th>Series</th><th>Thread type</th></tr> <tr> <td>7V</td><td>P: PT T: NPT G: G</td></tr> <tr> <td>7MV</td><td>No this code</td></tr> </table>	Series	Thread type	7V	P: PT T: NPT G: G	7MV	No this code		
Series	Thread type								
7V	P: PT T: NPT G: G								
7MV	No this code								
Port size <table border="1"> <tr> <th>Series</th><th>Port size</th></tr> <tr> <td>7V100</td><td>06: 1/8"</td></tr> <tr> <td>7V200</td><td>08: 1/4"</td></tr> <tr> <td>7MV</td><td>No this code</td></tr> </table>	Series	Port size	7V100	06: 1/8"	7V200	08: 1/4"	7MV	No this code	Electrical entry Blank: Plug connector (JPC type) M: Plug connector (M type)
Series	Port size								
7V100	06: 1/8"								
7V200	08: 1/4"								
7MV	No this code								
Voltage B: DC24V	Coil type <table border="1"> <tr> <th>Coil type</th><th>Adapt to electrical entry</th></tr> <tr> <td>Blank: Standard type</td><td>Plug connector(JPC type) Plug connector(M type)</td></tr> <tr> <td>L: Lower power consumption type</td><td>Plug connector(JPC type)</td></tr> </table>	Coil type	Adapt to electrical entry	Blank: Standard type	Plug connector(JPC type) Plug connector(M type)	L: Lower power consumption type	Plug connector(JPC type)		
Coil type	Adapt to electrical entry								
Blank: Standard type	Plug connector(JPC type) Plug connector(M type)								
L: Lower power consumption type	Plug connector(JPC type)								

Please refer to P52~53 for manifold specification and the order way.



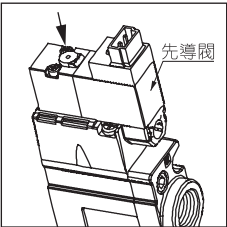
Solenoid valve(5/2 way \ 5/3 way)

AirTAC

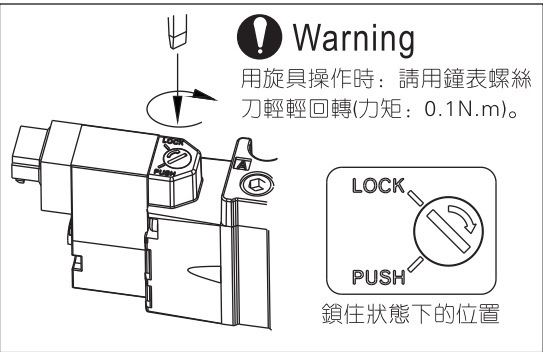
7V Series

How to mounting and using

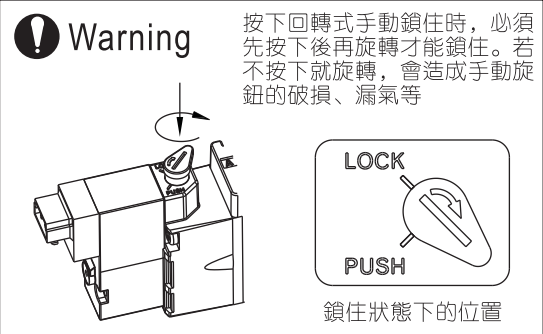
- 1、拿取電磁閥時切勿將其摔、掉落，以免造成電磁閥損壞；
- 2、因電磁先導閥為精密元件故安裝調試電磁閥時，切勿讓外力碰、撞先導閥，以免因此造成電磁閥損壞；
- 3、使用時請勿隨意拆解電磁閥，如因意外引起先導閥螺絲 (M1.6×14)鬆動，請用0.1~0.15N.m力矩將其擰緊；
- 4、關於手動操作：
 - 4.1、手動操作時，請先確認無危險後方可讓連接裝置進行作動；
 - 4.2、非鎖定推壓式使用方法：
沿箭頭方向向下推壓



- 4.3、旋具按下回轉鎖定式使用方法：
按下後按箭頭方向旋轉，若不旋轉，則與非鎖定推壓式的使用方法相同。



- 4.4、手動按下回轉鎖定式使用方法：
壓下後沿箭頭方向旋轉，如不旋轉，則與非鎖定推壓式的使用方法相同。



Inner structure

7V110

7V120

7V130C

NO.	Item	NO.	Item	NO.	Item	NO.	Item	NO.	Item	NO.	Item
1	Pilot valve	6	Filter element	11	Gasket	16	Piston O-ring	21	Spring	26	Spring
2	Manual override	7	O-ring	12	Small piston	17	Piston holder	22	Wear ring		
3	Piston holder	8	Screw	13	Piston O-ring	18	Big piston	23	Spool O-ring		
4	Piston O-ring	9	Port block	14	Bottom cover	19	Side cover	24	Spool		
5	Big piston	10	Body	15	Gasket	20	Spring holder	25	Spool gasket		

7MV110

7MV120

7MV130C

NO.	Item	NO.	Item	NO.	Item	NO.	Item	NO.	Item
1	Pilot valve	6	Filter element	11	Bottom cover	16	Side cover	21	Spool
2	Manual override	7	O-ring	12	Gasket	17	Spring holder	22	Spool gasket
3	Piston holder	8	Body	13	Piston O-ring	18	Spring	23	Spring
4	Piston O-ring	9	Small piston	14	Piston holder	19	Wear ring		
5	Big piston	10	Piston O-ring	15	Big piston	20	Spool O-ring		



7V

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



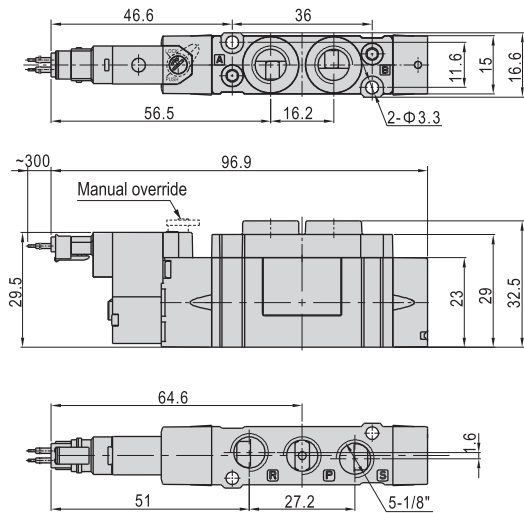
7V Series



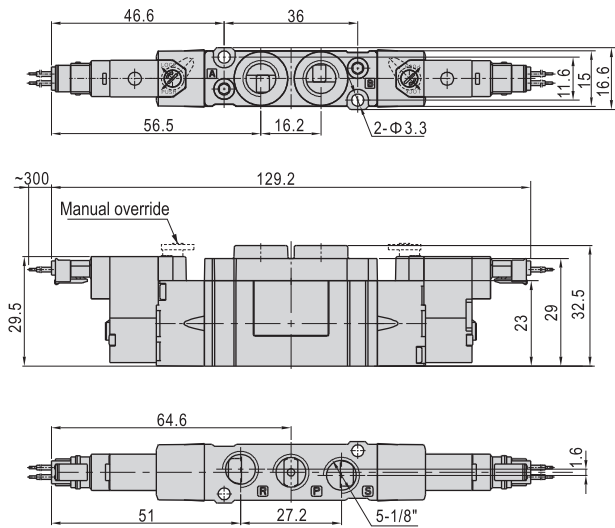
7V

■ Dimensions

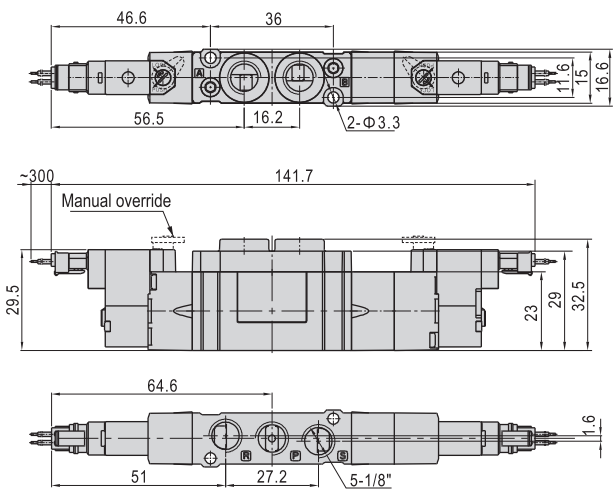
7V110(JPC type)



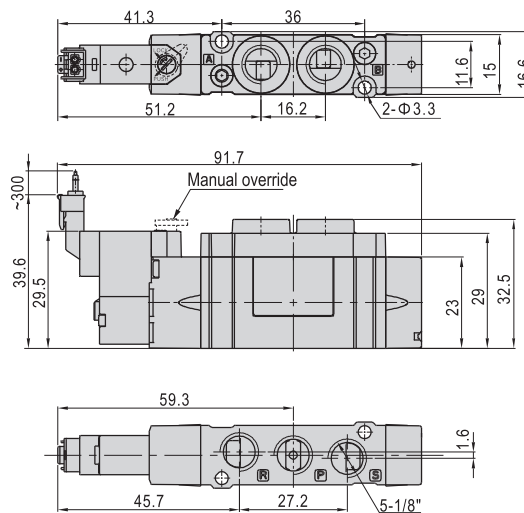
7V120(JPC type)



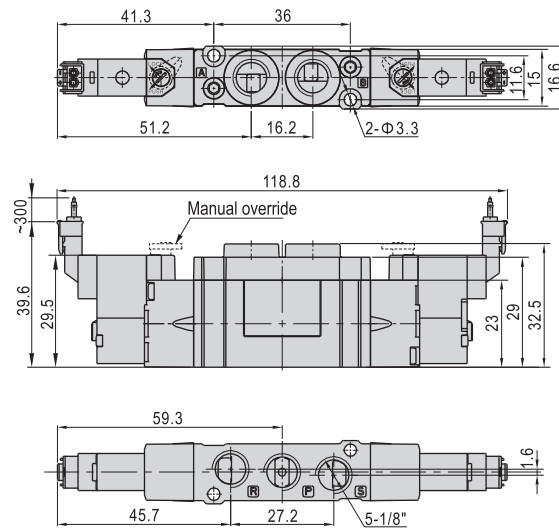
7V130(JPC type)



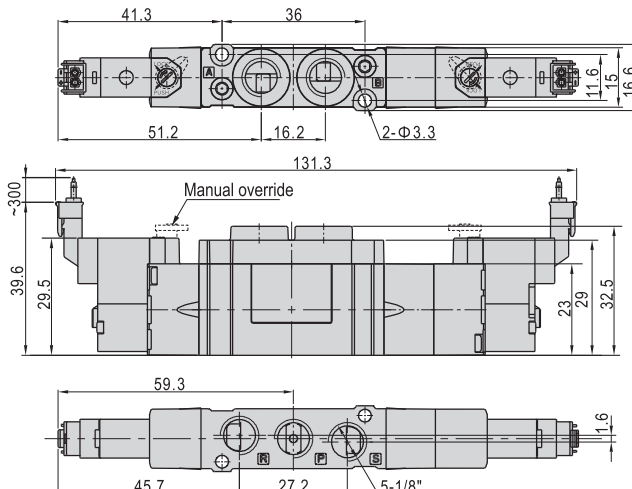
7V110(M type)



7V120(M type)



7V130(M type)

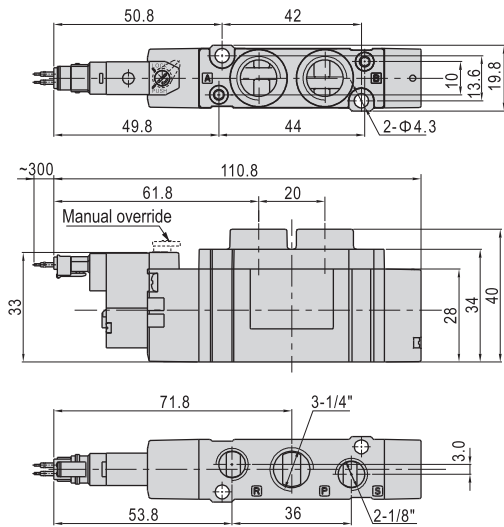


Solenoid valve(5/2 way \ 5/3 way)

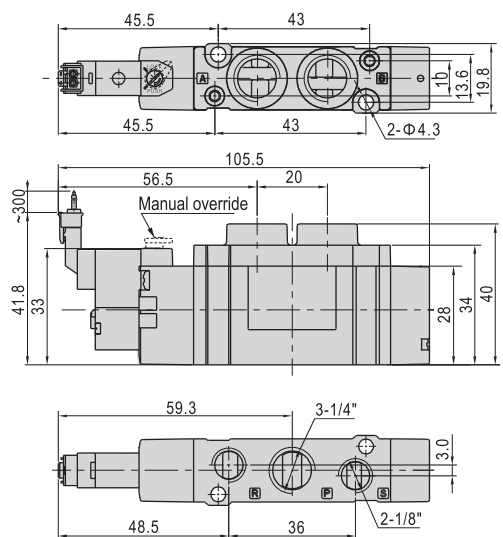


7V Series

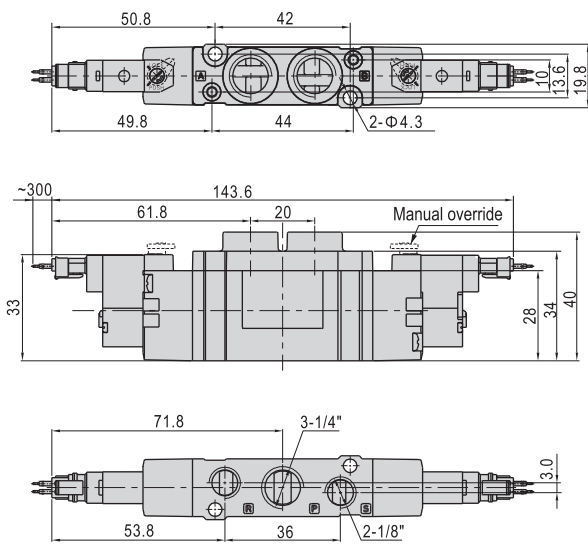
7V210(JPC type)



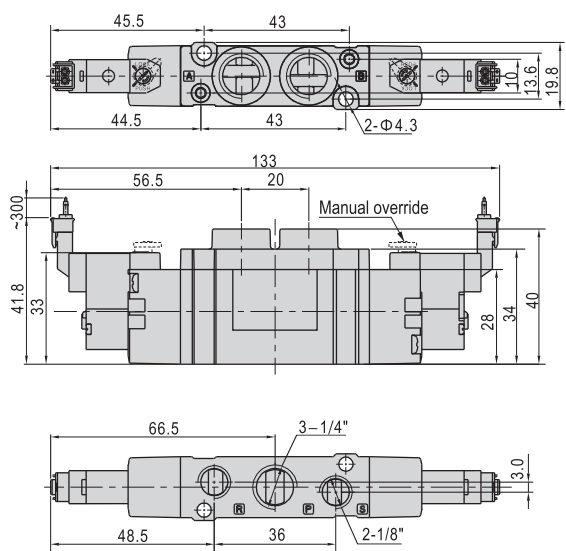
7V210(M type)



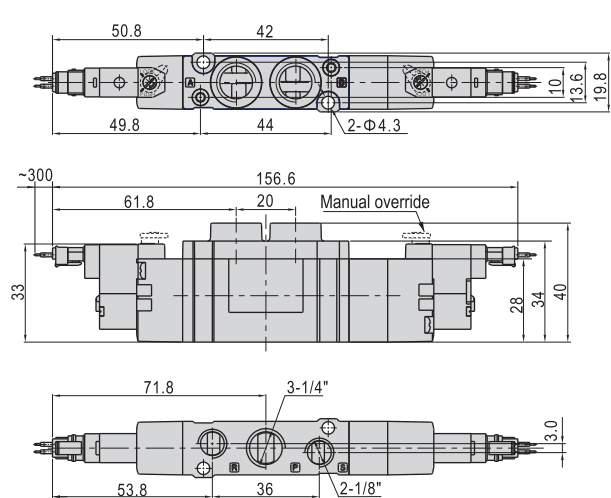
7V220(JPC type)



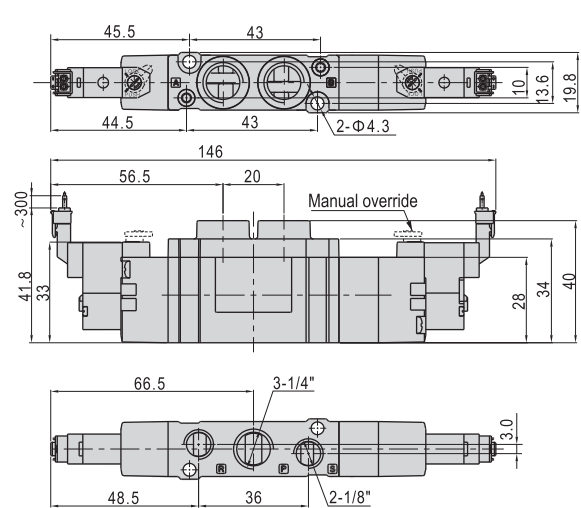
7V220(M type)



7V230(JPC type)



7V230(M type)



7V



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

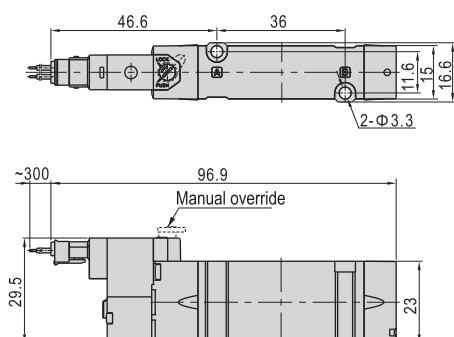
AirTAC

7V Series

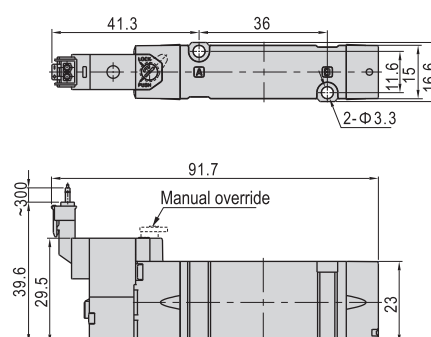


7V

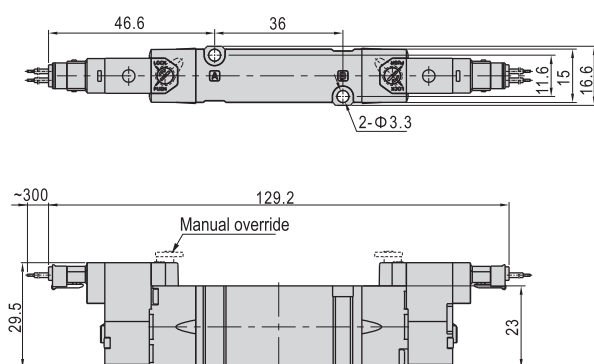
7MV110(JPC type)



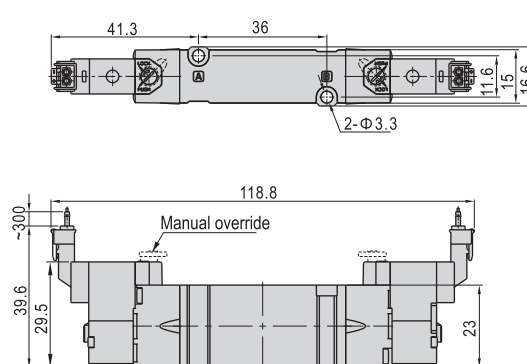
7MV110(M type)



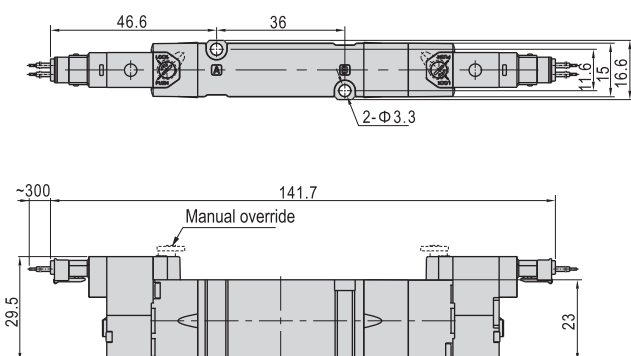
7MV120(JPC type)



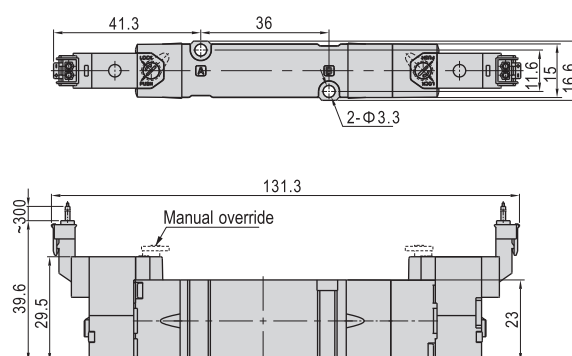
7MV120(M type)



7MV130(JPC type)



7MV130(M type)

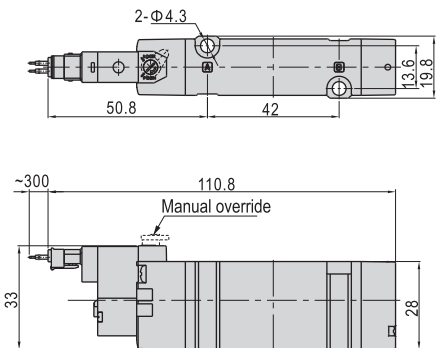


Solenoid valve(5/2 way \ 5/3 way)

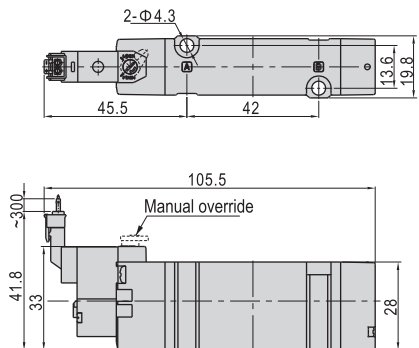


7V Series

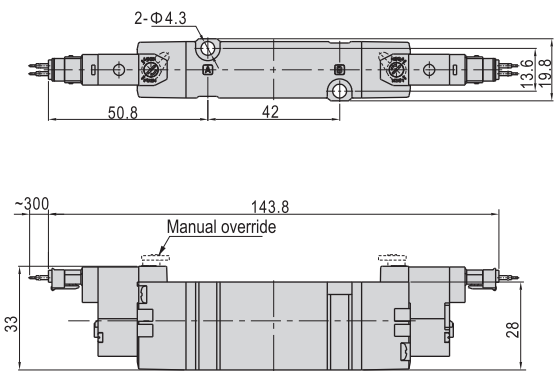
7MV210(JPC type)



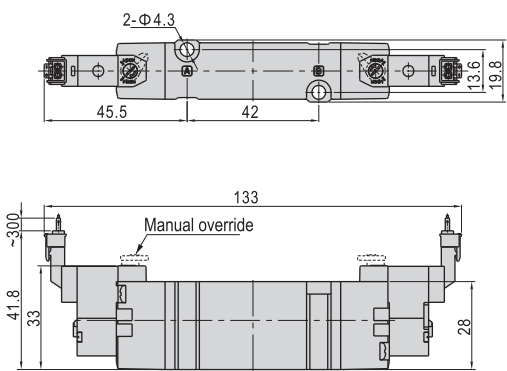
7MV210(M type)



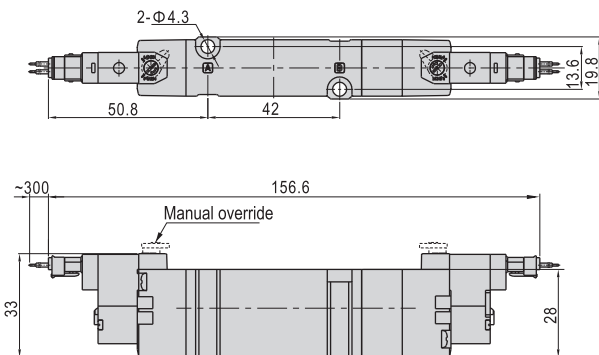
7MV220(JPC type)



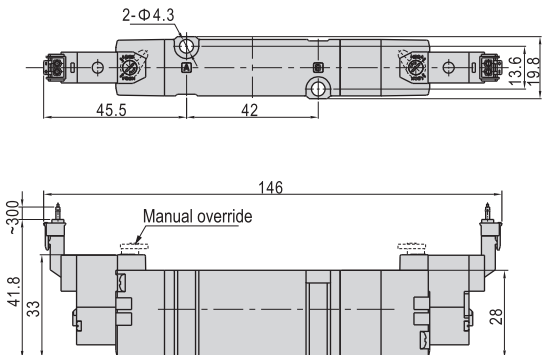
7MV220(M type)



7MV230(JPC type)



7MV230(M type)



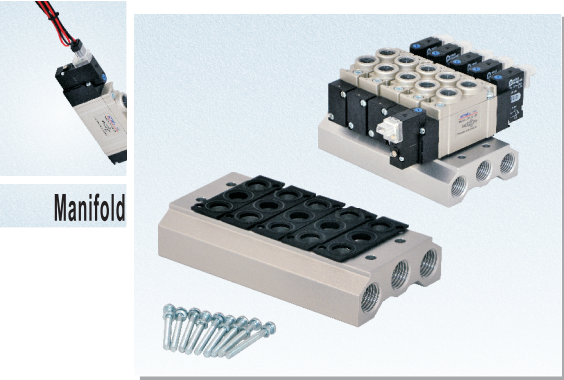
7V



Solenoid valve(Accessories)



Manifold for 7V 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.

Specification

Item\Manifold model	7V100M	7V200M
Fluid	Air(to be filtered by 40 μ m filter element)	
Temperature °C	-20~70	
Adaptable valve's series	7V100 Series	7V200 Series

Ordering code

Ordering code contains the two parts of the manifold's and the blank plate's.

1 Ordering code for manifold

7V100M 5F P

Model	Thread type
7V100M: 7V100 Series manifold	P: PT
7V200M: 7V200 Series manifold	T: NPT
	G: G

Number of stations
1F: 1 Station
2F: 2 Stations
.....
16F: 16 Stations

2 Ordering code for blank plate

P-7V100M R2

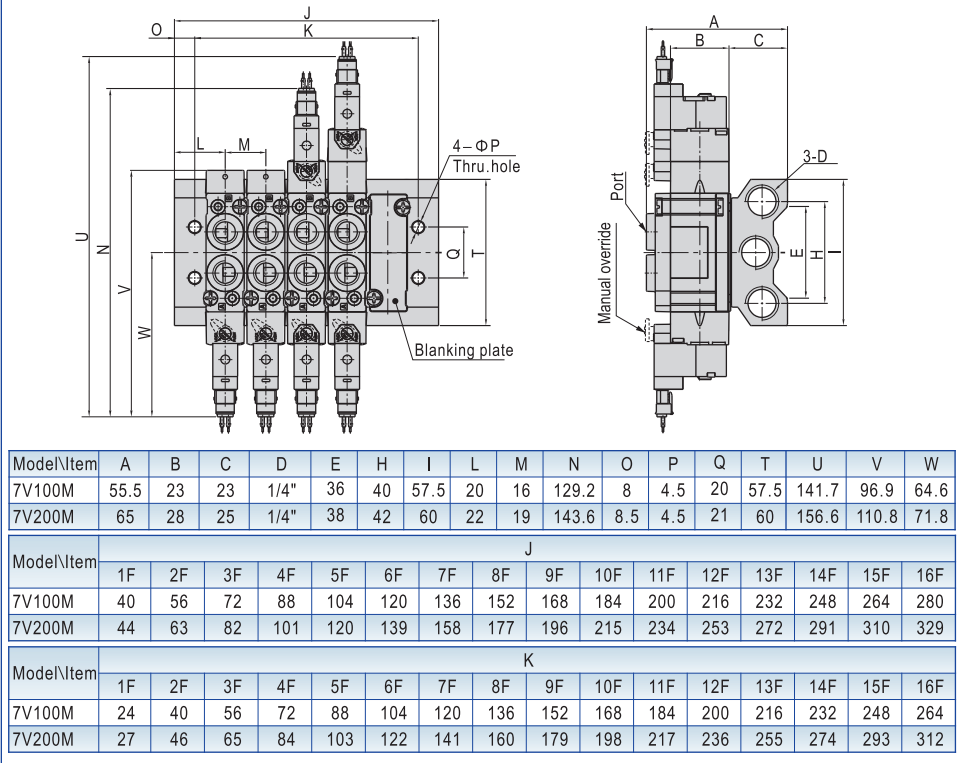
Model	Code
7V100M: 7V100 Series manifold	R2: Blank plate for manifold
7V200M: 7V200 Series manifold	

Note:

1. Manifold assembly contains manifold, gasket, screw. 2. Blank plate assembly contains blank plate, screw.

Dimensions

With 7V100\7V200 solenoid valve



Model\Item	A	B	C	D	E	H	I	L	M	N	O	P	Q	T	U	V	W
7V100M	55.5	23	23	1/4"	36	40	57.5	20	16	129.2	8	4.5	20	57.5	141.7	96.9	64.6
7V200M	65	28	25	1/4"	38	42	60	22	19	143.6	8.5	4.5	21	60	156.6	110.8	71.8

Model\Item	J															
	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

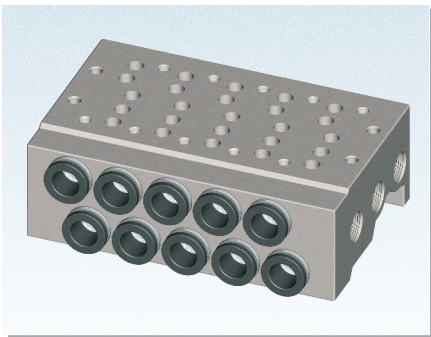
Model\Item	K															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
7V100M	24	40	56	72	88	104	120	136	152	168	184	200	216	232	248	264
7V200M	27	46	65	84	103	122	141	160	179	198	217	236	255	274	293	312



Solenoid valve(Accessories)



Manifold for 7MV Series



Manifold

Specification

Item\Manifold model	7MV100M	7MV200M
Fluid	Air(to be filtered by 40 μ m filter element)	
Temperature ℃	-20~70	
Adaptable valve's series	7MV100 Series	7MV200 Series

Ordering code

Ordering code contains the two parts of the manifold's and the blank plate's.

1 Ordering code for manifold

7MV100M 5F P6 P		
Model	7MV100M: 7MV100 Series manifold	
	7MV200M: 7MV200 Series manifold	
Number of stations	1F: 1 Station	
	2F: 2 Stations	
		
	16F: 16 Stations	
Thread type	P: PT	
	T: NPT	
	G: G	
OD of work port	Model	OD of work port
	7MV100M	P6: Φ6mm
		P8: Φ8mm
	7MV200M	P8: Φ8mm
		P10: Φ10mm

2 Ordering code for blank plate

P-7MV100M R2	
Model	7MV100M: 7MV100 Series manifold
	7MV200M: 7MV200 Series manifold
Code	R2: Blank plate for manifold

Note:

1. Manifold assembly only contains manifold. 2. Blank plate assembly contains blank plate, gasket, screw.

Dimensions

With 7MV100\7MV200 solenoid valve

Technical drawing of a manifold assembly (left view). Dimensions shown include L, K, W, V, T, U, M, N, O, R, Q. Labels include 4-ΦP Thru. hole and Blanking plate.

Technical drawing of a manifold assembly (right view). Dimensions shown include A, B, 3-D, E, C, F, G, H, I. Labels include Manual override, Port B, and Port A.

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	141.7	129.2	96.9	64.6
7MV200M	19.2	19.2	21	1/4"	21	42	73	5.1	6	21	19	4.5	31.5	21	156.6	143.6	110.8	71.8

		J																
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	

		K																
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	



AirTAC

- 1、插接線與線圈連接具有方向性，方向不正確即無法連接。
- 2、插接線接入電路系統時注意不要接反了方向，紅線接“+”，黑線接“-”。

Model	CPV10B-NS	CPV10BM-NS	CPV10BL-NS
Fluid	Air(to be filtered by 40 μm filter element)		
Acting	Direct acting		
Orifice size	Φ0.7mm		Φ0.5mm
Valve type	3 port 2 position		
Lubrication	Not required		
Operating pressure	0~0.8MPa(0~114psi)		
Proof pressure	1.5MPa(215psi)		
Standard voltage	DC24V		
Scope of voltage	± 10 %		
Protection	Dustproof		
Temperature classification	B Class		
Power consumption	0.9W		0.6W

Main valve	Matching pilot valve	Voltage of coil	Wiring diagram of coil	Matching plug connector
7V100	CPV10B-NS	DC24V		7V110-007-P1
7MV100	CPV10BM-NS			
7V200	CPV10BL-NS			
7MV200				

Ordering code
Ordering code contains the two parts of the pilot valve's and the plug connector's.

CPV 10 B □ □ -NS

- Model**
CPV: Pilot valve for 7V series
- Width of valve**
10: 10mm
- Voltage**
B: DC24V
- Coil type**

Coil type	Adapt to electrical entry
Blank: Standard type	Plug connector(JPC type) Plug connector(M type)
L: Lower power consumption type	Plug connector(JPC type)
- Pilot valve type**
N: Nass pilot valve
- Electrical entry**

Blank: Plug connector (JPC type)	
M: Plug connector (M type)	

The ordering code of plug connector is 7V110-007-P1. Note: The length of wire is 300mm.

M Type(Pilot valve)

