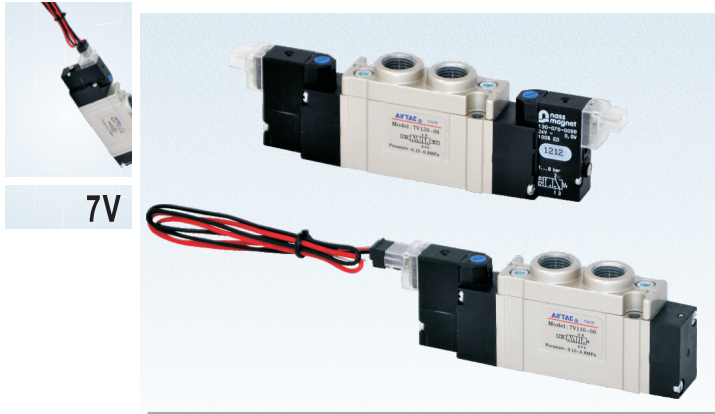


Solenoid valve(5/2 way \ 5/3 way)



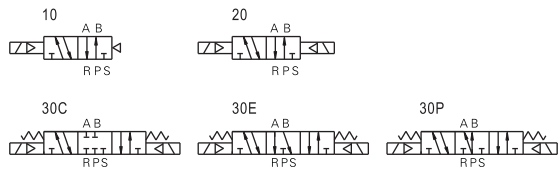
7V Series



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	Main valve and pilot valve centralized exhaust					
Max. frequency ③	8 cycle/sec		5 cycle/sec	8 cycle/sec		5 cycle/sec

Symbol

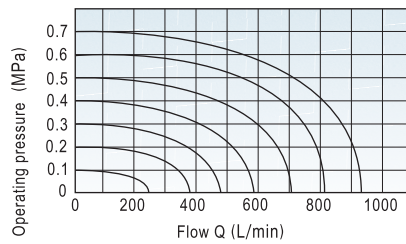


Product feature

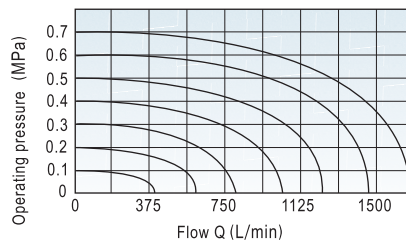
1. Plug terminal, option for horizontal (JPC type) and vertical (M type) installation.
2. Aluminium alloy die-casting body, Improved internal structure for larger flow rate.
3. Air filter installed in the piston seat. Make sure clear air used.
4. Aluminium alloy die-casting body, Optimise internal structure for larger flow rate.
5. Tubing options allow direct tubing(7V) on the valves or manifold mount (7MV) for space saving.
6. Option '7MV' is used with valve sub base.

Flow chart

Model: 7V110-06、7MV110



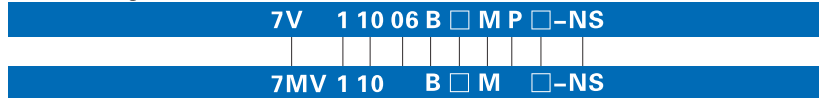
Model: 7V210-08、7MV210



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



<p>Model</p> <ul style="list-style-type: none"> 7V: Solenoid valve(5/2 5/3 way) (Directly plug) 7MV: Solenoid valve(5/2 5/3 way) (Manifold plug) 	<p>Pilot valve type</p> <ul style="list-style-type: none"> NS: Nass pilot valve 								
<p>Code</p> <ul style="list-style-type: none"> 1: 100 Series 2: 200 Series 	<p>Manual override type</p> <ul style="list-style-type: none"> Blank: Slotted type (Push-turn locking) E: Lever type (Push-turn locking) 								
<p>Valve type</p> <ul style="list-style-type: none"> 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 	<p>Thread type</p> <table border="1"> <thead> <tr> <th>Series</th> <th>Thread type</th> </tr> </thead> <tbody> <tr> <td>7V</td> <td>P: PT T: NPT G: G</td> </tr> <tr> <td>7MV</td> <td>No this code</td> </tr> </tbody> </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								
<p>Port size</p> <table border="1"> <thead> <tr> <th>Series</th> <th>Port size</th> </tr> </thead> <tbody> <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> </tbody> </table>	Series	Port size	7V100	06: 1/8"	7V200	08: 1/4"	7MV	No this code	<p>Electrical entry</p> <ul style="list-style-type: none"> 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								
<p>Voltage</p> <ul style="list-style-type: none"> B: DC24V 	<p>Coil type</p> <table border="1"> <thead> <tr> <th>Coil type</th> <th>Adapt to electrical entry</th> </tr> </thead> <tbody> <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> </tbody> </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.

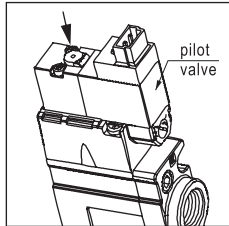


Solenoid valve(5/2 way \ 5/3 way)

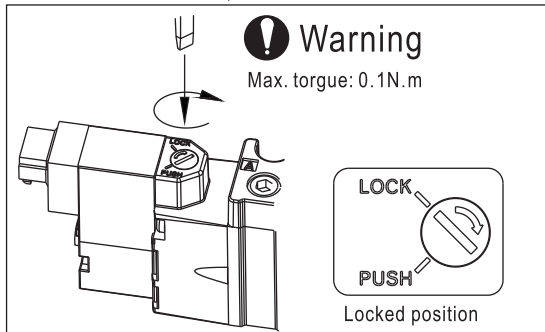
7V Series

How to mounting and using

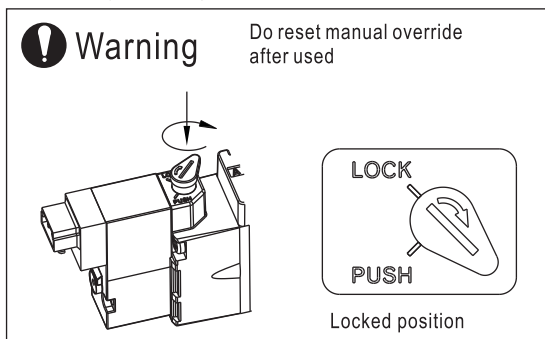
1. Handle with care;
2. Prevent rough handling of miniature pilot valve & coil;
3. Tightening torque of 0.1~0.15N.m is sufficient to secure pilot valve (M1.6 screw), in case of tampering;
4. Manual override:
 - 4.1. Ensure no personnel is in the way, prior to activating manual override;
 - 4.2. For push button option, activate by push the button in the direction shown;



- 4.3. For slotted option, push the slotted button with correct size screw driver & turn to lock;



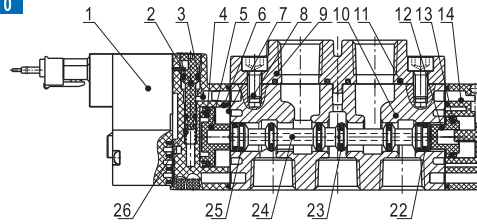
- 4.4. For lever option, it can be simply turn the lever to detent at the manually overriding position.



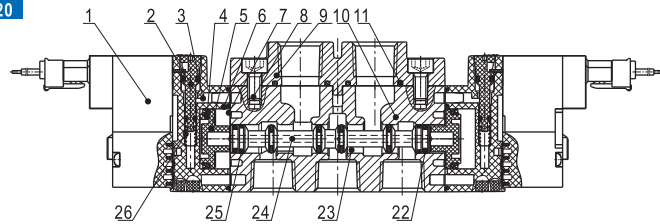
- 4.5. Do reset manual override after used.

Inner structure

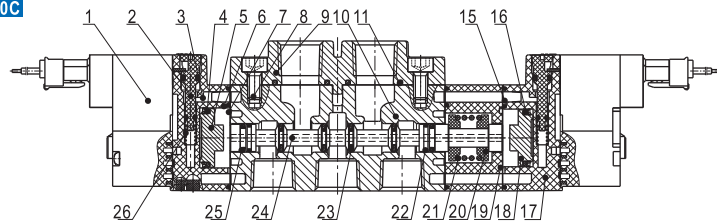
7V110



7V120

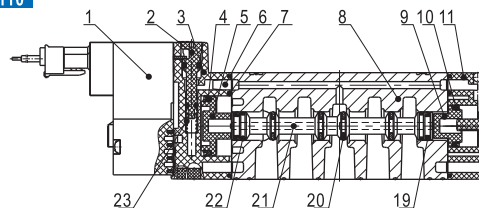


7V130C

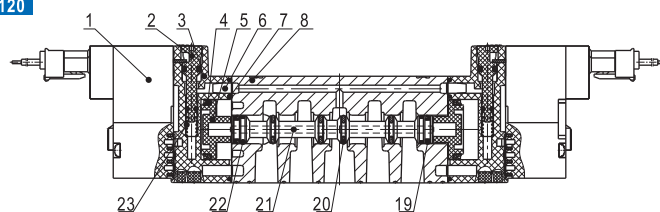


NO. Item	NO. Item	NO. Item	NO. Item	NO. Item	NO. Item
1 Pilot valve	6 Filter element	11 Gasket	16 Piston O-ring	21 Spring	26 Spring
2 Manual override	7 O-ring	12 Small piston	17 Piston holder	22 Wear ring	
3 Piston holder	8 Screw	13 Piston O-ring	18 Big piston	23 Spool O-ring	
4 Piston O-ring	9 Port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

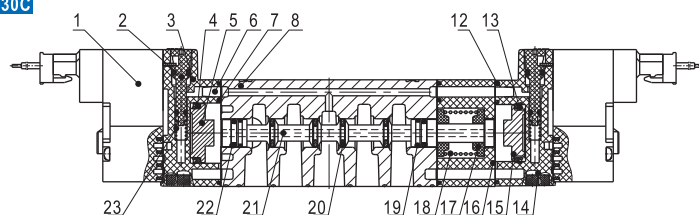
7MV110



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	



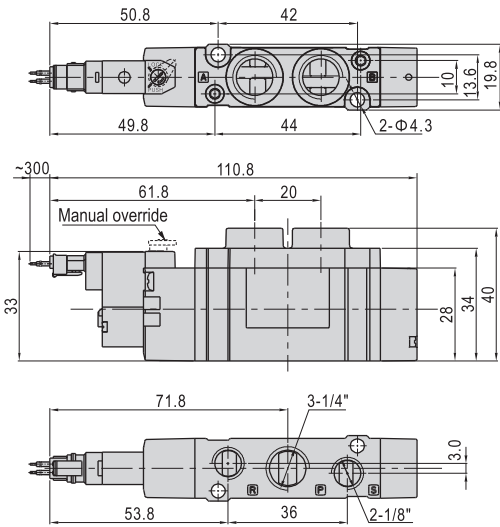
7V

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

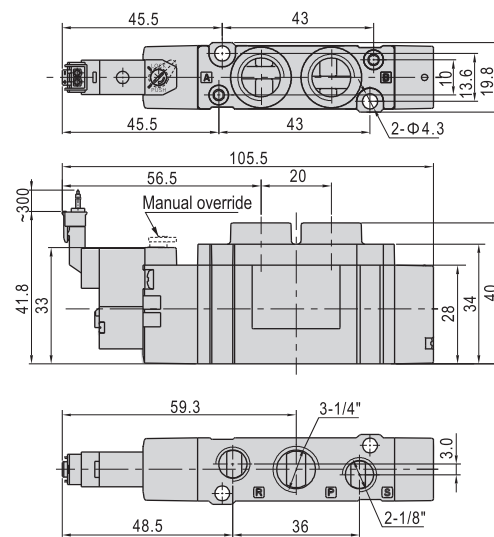


7V Series

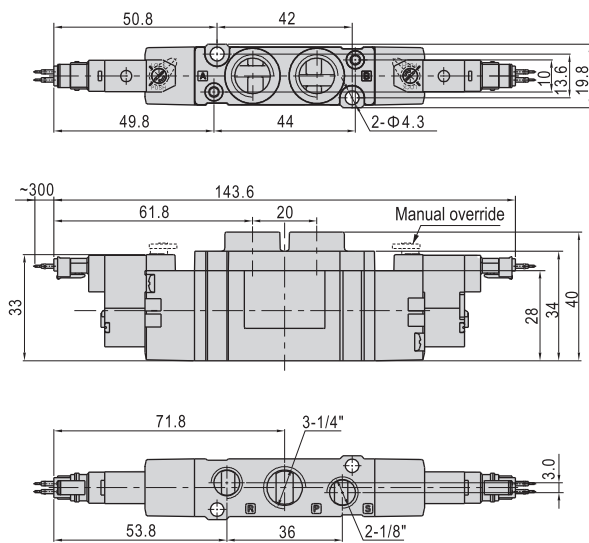
7V210(JPC type)



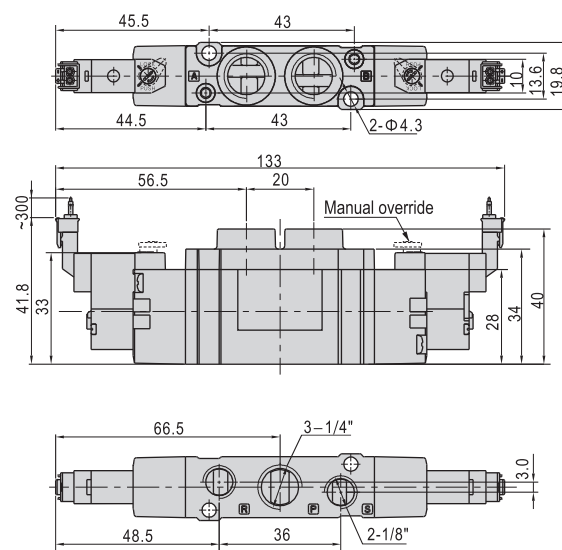
7V210(M type)



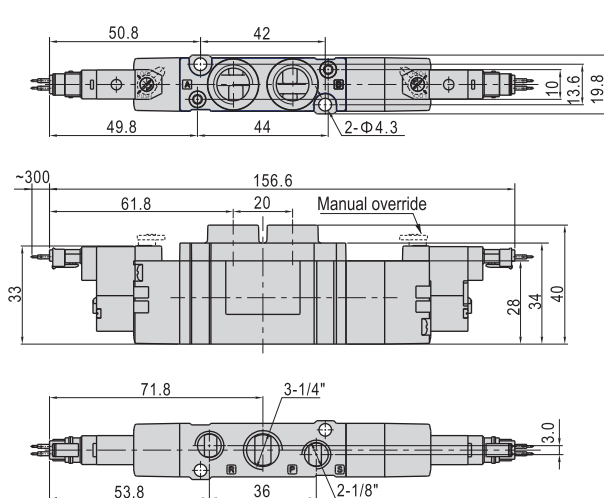
7V220(JPC type)



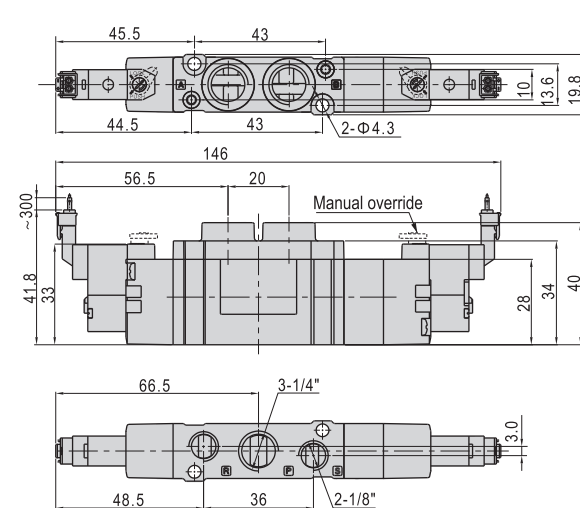
7V220(M type)



7V230(JPC type)



7V230(M type)



7V



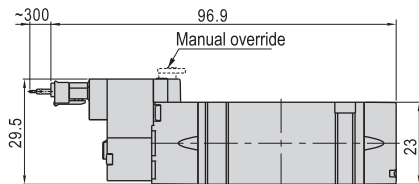
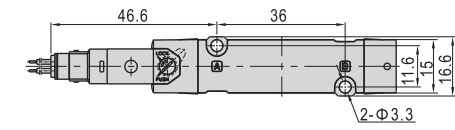
Solenoid valve(5/2 way \ 5/3 way)



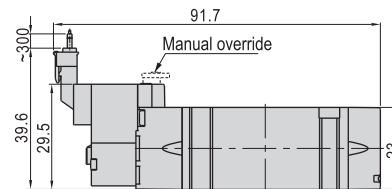
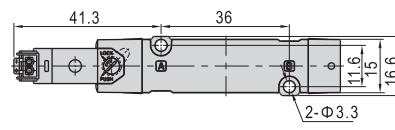
7V Series



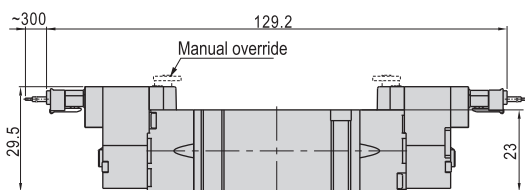
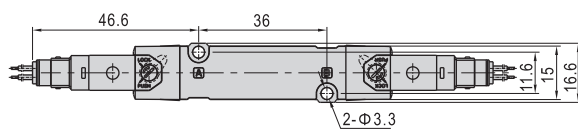
7MV110(JPC type)



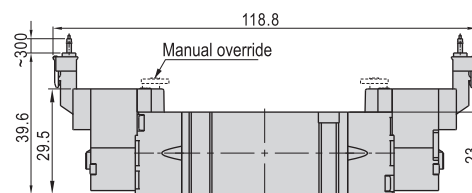
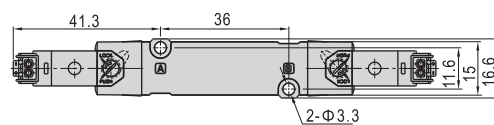
7MV110(M type)



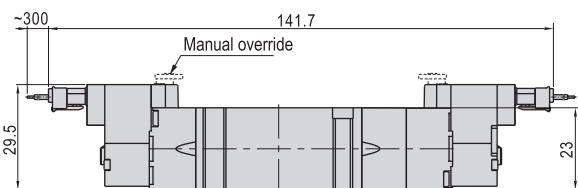
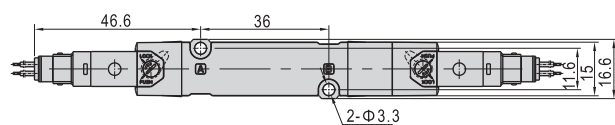
7MV120(JPC type)



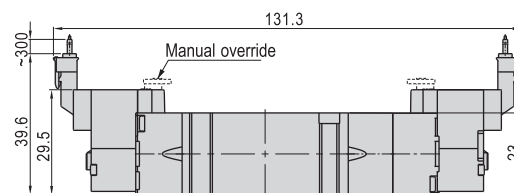
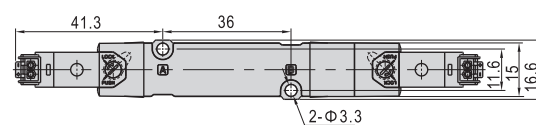
7MV120(M type)



7MV130(JPC type)



7MV130(M type)



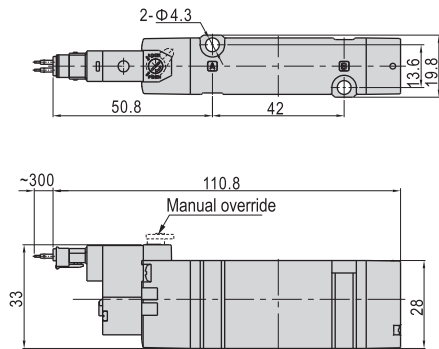
Solenoid valve(5/2 way \ 5/3 way)



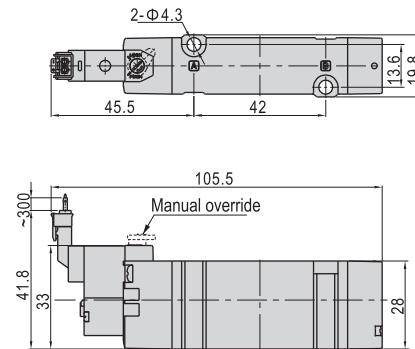
7V Series



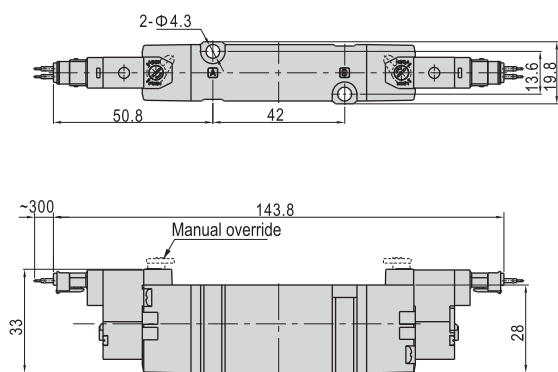
7MV210(JPC type)



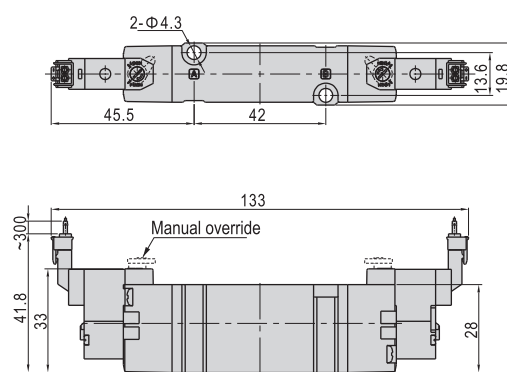
7MV210(M type)



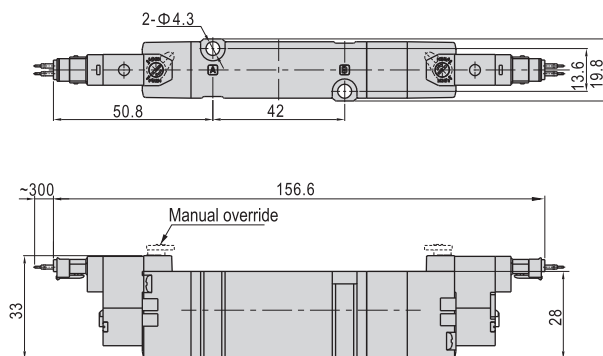
7MV220(JPC type)



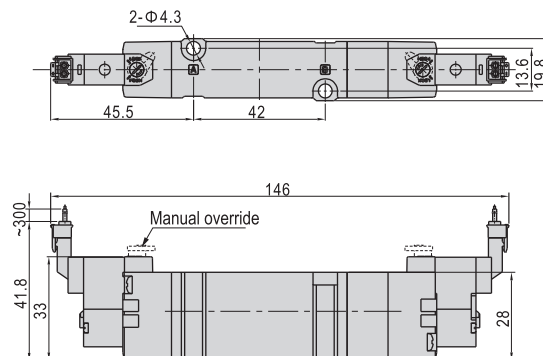
7MV220(M type)



7MV230(JPC type)



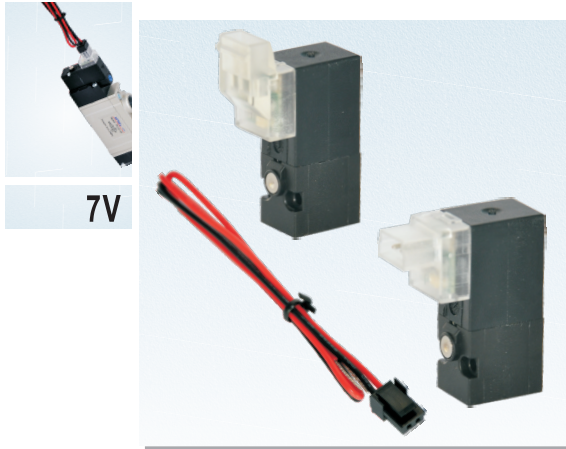
7MV230(M type)



Solenoid valve(Accessories)



Pilot valve for 7V, 7MV Series



7V

Symbol



Points to note prior connection

1. Corrector connection to solenoid is un-directional.
2. Polarity sensitive red to "+" black to "-".

Specification

Model	CPV10B-NS	CPV10BM-NS	CPV10BL-NS
Fluid	Air(to be filtered by 40 μ m 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

Partnership of pilot valve with main valve

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.

1 Ordering code for pilot valve

CPV 10 B □ □ -NS

Model

CPV: Pilot valve for 7V series

Pilot valve type

NS: Nass pilot valve

Width of valve

10: 10mm

Electrical entry

Blank: Plug connector (JPC type)

M: Plug connector (M type)

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)

2 Ordering code for plug connector

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

Dimensions

