

# Solenoid valve ( 5/2、5/3 way )

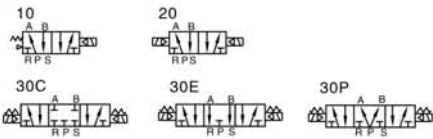
4V100 Series



4V100



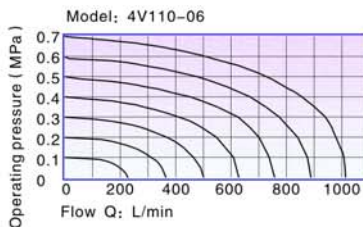
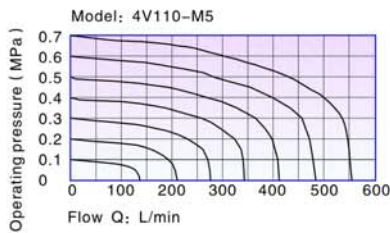
## Symbol



## Product feature

- 1、Pilot-oriented mode: optional for internal or external;
- 2、Structure in sliding column mode: good tightness and sensitive reaction;
- 3、Three position solenoid valves have three kinds of central function for your choice;
- 4、Double control solenoid valves have memory function;
- 5、Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life;
- 6、No need to add oil for lubrication;
- 7、It is available to form integrated valve group with the base to save installation space;
- 8、Affiliated manual devices are equipped to facilitate installation and debugging;
- 9、Several standard voltage grades are optional;

## Flow chart



## Specification

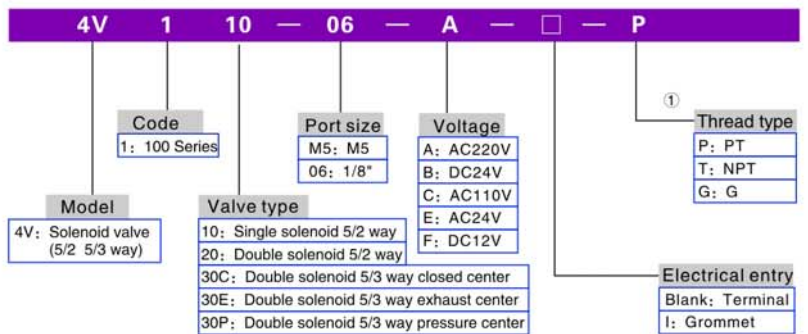
Model	4V110-M5 4V120-M5	4V130C-M5 4V130E-M5 4V130P-M5	4V110-06 4V120-06	4V130C-06 4V130E-06 4V130P-06
Fluid	Air (to be filtered by 40um filter element)			
Acting	Internal piloted			
Port size ①	In=Out=M5		In=Out =1/8"	
Orifice size	5.5mm <sup>2</sup> (Cv=0.31)	5.0mm <sup>2</sup> (Cv=0.28)	12.0mm <sup>2</sup> (Cv=0.67)	9.0mm <sup>2</sup> (Cv=0.50)
Valve type	5 port 2 position	5 port 3 position	5 port 2 position	5 port 3 position
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
Weight	4V110-M5:120g 4V120-M5:175g	200g	4V110-06:120g 4V120-06:175g	200g

- ① PT thread, NPT thread and G thread are available;
- ② It can not 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	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ±15% DC: ±10%
Power consumption	AC: 2.5VA DC: 2.5W
Protection	IP65 ( DIN40050 )
Temperature classification	B Class
Electrical entry	Terminal, Grommet
Activating time	0.05 sec and below

## Ordering code



- ① When the thread is M5 type, the code is blank. Please refer to PI-33 for manifold specification and the order way.

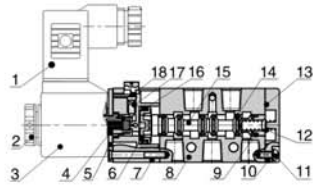


# Solenoid valve ( 5/2 、 5/3 way )

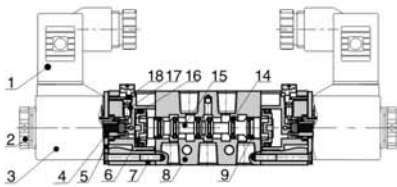
## 4V100 Series

### Inner structure

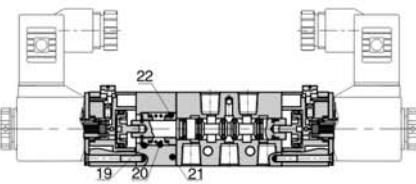
4V110



4V120



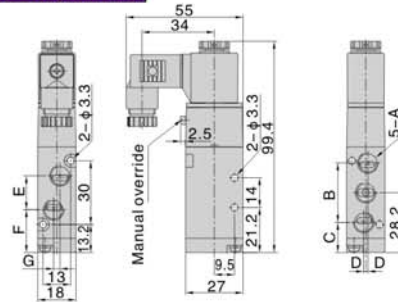
4V130C



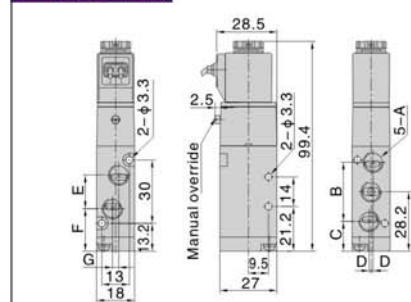
NO.	Item	NO.	Item	NO.	Item
1	Connector	9	Wearing ring	17	Override spring
2	Coil nut	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit	15	Spool		
8	Body	16	Piston O-ring		

### Dimensions

4V110(Terminal)

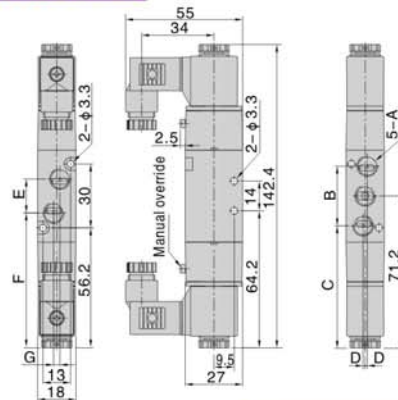


4V110(Grommet)

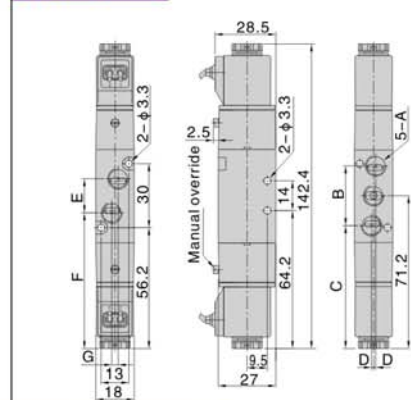


Model/Item	A	B	C	D	E	F	G
4V110-M5	M5 x 0.8	27	14.7	0	14	21.2	0
4V110-06	1/8"	28	14.2	1	16	20.2	3

4V120(Terminal)

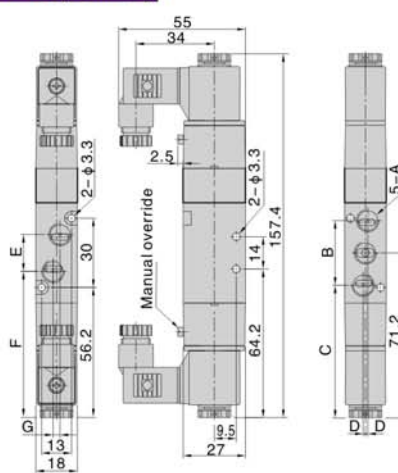


4V120(Grommet)

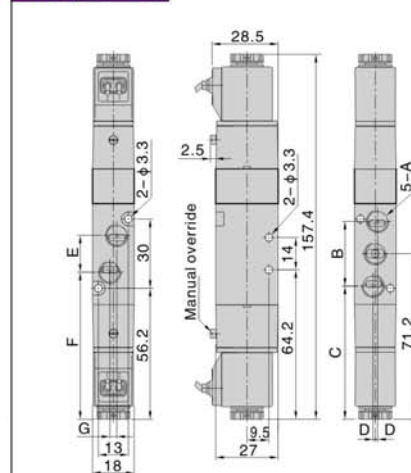


Model/Item	A	B	C	D	E	F	G
4V120-M5	M5 x 0.8	27	57.7	0	14	64.3	0
4V120-06	1/8"	28	57.2	1	16	63.2	3

4V130(Terminal)



4V130(Grommet)



Model/Item	A	B	C	D	E	F	G
4V130-M5	M5 x 0.8	27	57.7	0	14	64.3	0
4V130-06	1/8"	28	57.2	1	16	63.2	3



4V100



# Solenoid valve ( 5/2 、 5/3 way )

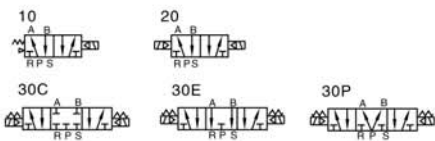
## 4V200 Series



4V200



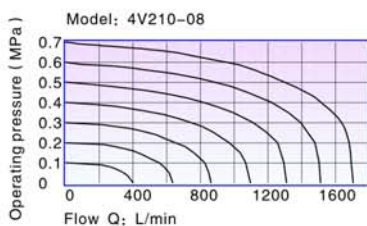
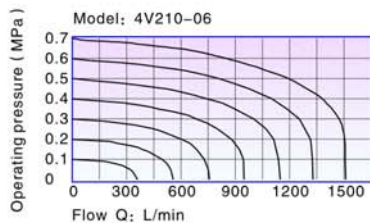
### Symbol



### Product feature

- 1、Pilot-oriented mode: optional for internal or external;
- 2、Structure in sliding column mode: good tightness and sensitive reaction;
- 3、Three position solenoid valves have three kinds of central function for your choice;
- 4、Double control solenoid valves have memory function;
- 5、Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life;
- 6、No need to add oil for lubrication;
- 7、It is available to form integrated valve group with the base to save installation space;
- 8、Affiliated manual devices are equipped to facilitate installation and debugging;
- 9、Several standard voltage grades are optional;

### Flow chart



### Specification

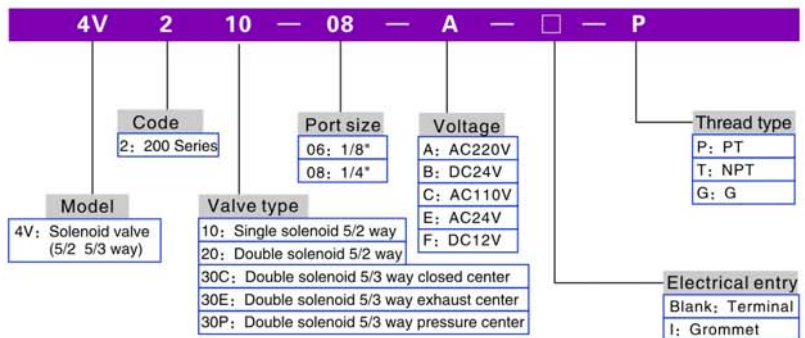
Model	4V210-06 4V220-06	4V230C-06 4V230E-06 4V230P-06	4V210-08 4V220-08	4V230C-08 4V230E-08 4V230P-08
Fluid	Air (to be filtered by 40um filter element)			
Acting	Internal piloted			
Port size ①	In=Out=Exhaust=1/8"		In=Out =1/4" Exhaust=1/8"	
Orifice size	14.0mm <sup>2</sup> (Cv=0.78)	12.0mm <sup>2</sup> (Cv=0.67)	16.0mm <sup>2</sup> (Cv=0.89)	12.0mm <sup>2</sup> (Cv=0.67)
Valve type	5 port 2 position		5 port 3 position	
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	
Weight	4V210-06:220g 4V220-06:320g	360g	4V210-08:220g 4V220-08:320g	360g

- ① PT thread, NPT thread and G thread are available;  
 ② It can not 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	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ± 15% DC: ± 10%
Power consumption	AC: 3.5VA DC : 3.0W
Protection	IP65 ( DIN40050 )
Temperature classification	B Class
Electrical entry	Terminal, Grommet
Activating time	0.05 sec and below

### Ordering code



Please refer to PI-33 for manifold specification and the order way.

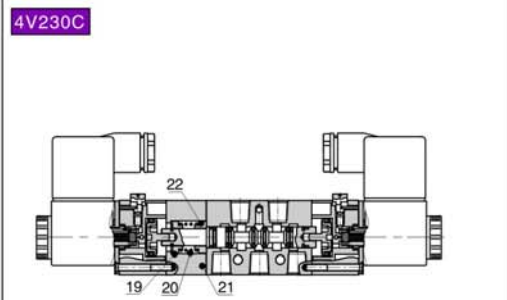
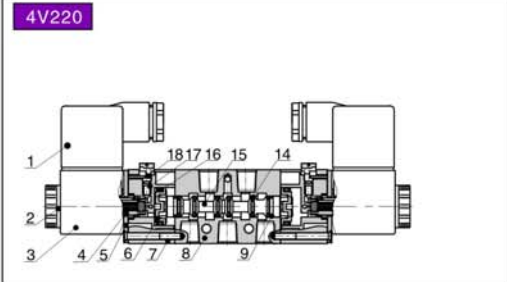
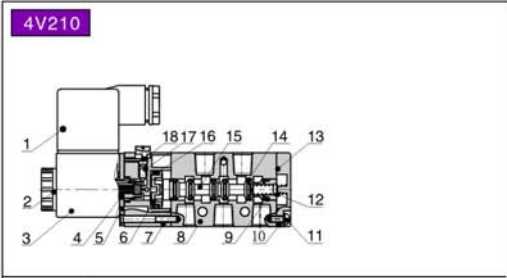


# Solenoid valve ( 5/2 、 5/3 way )

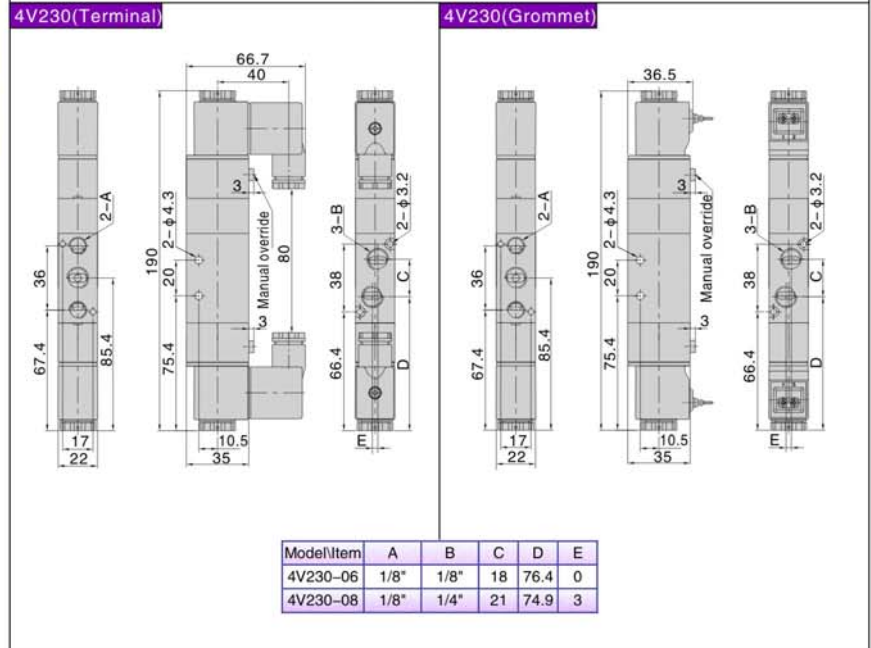
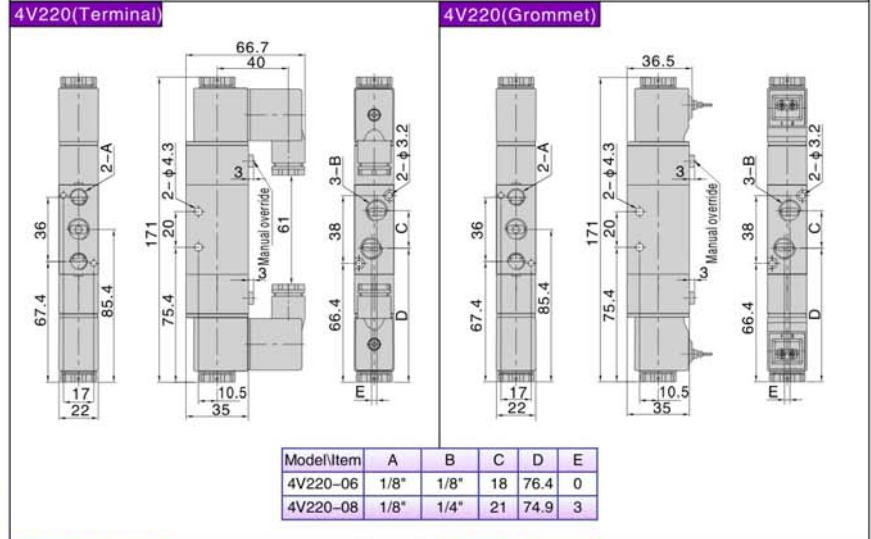
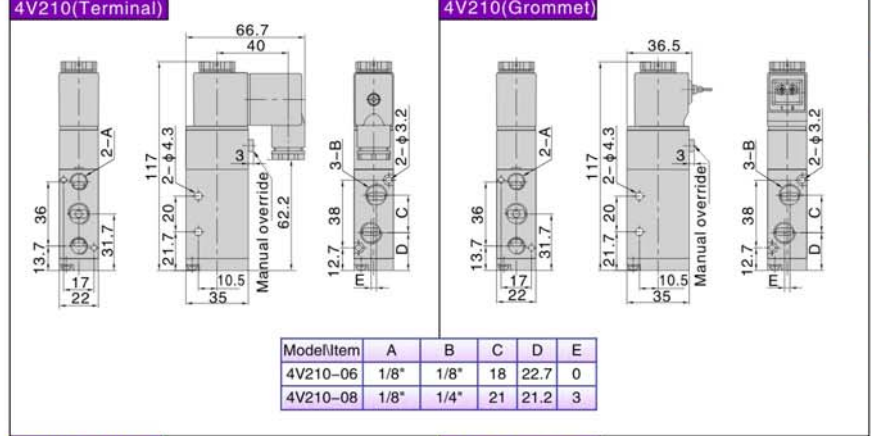
## 4V200 Series

### Inner structure

### Dimensions



NO.	Item	NO.	Item	NO.	Item
1	Connector	9	Wearing ring	17	Override spring
2	Coil nut	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit	15	Spool		
8	Body	16	Piston O-ring		



4V200





# Solenoid valve ( 5/2 、 5/3 way )

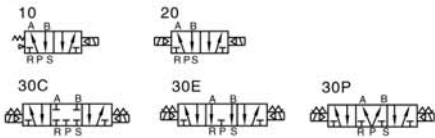
## 4V300 Series



4V300



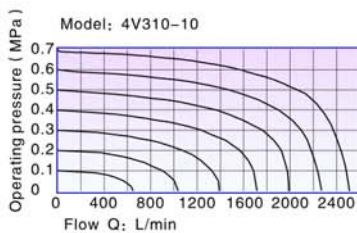
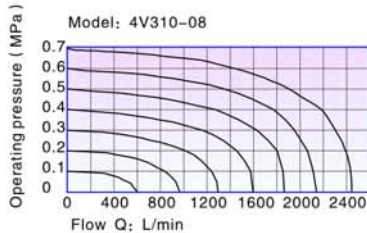
### Symbol



### Product feature

- 1、Pilot-oriented mode: optional for internal or external;
- 2、Structure in sliding column mode: good tightness and sensitive reaction;
- 3、Three position solenoid valves have three kinds of central function for your choice;
- 4、Double control solenoid valves have memory function;
- 5、Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life;
- 6、No need to add oil for lubrication;
- 7、It is available to form integrated valve group with the base to save installation space;
- 8、Affiliated manual devices are equipped to facilitate installation and debugging;
- 9、Several standard voltage grades are optional;

### Flow chart



### Specification

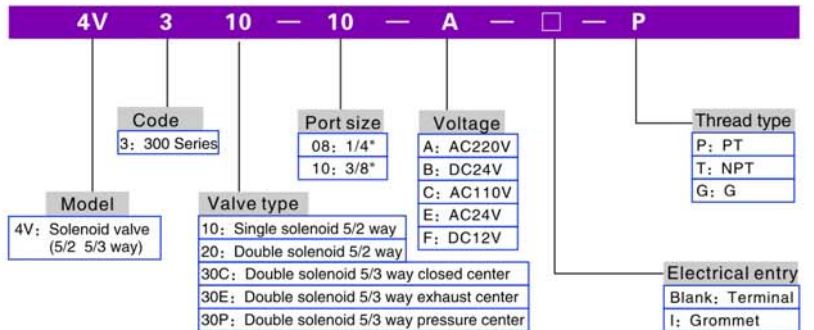
Model	4V310-08 4V320-08	4V330C-08 4V330E-08 4V330P-08	4V310-10 4V320-10	4V330C-10 4V330E-10 4V330P-10
Fluid	Air( to be filtered by 40um filter element)			
Acting	Internal piloted			
Port size ①	In=Out=Exhaust=1/4"		In=Out =3/8"	Exhaust=1/4"
Orifice size	25.0mm <sup>2</sup> (Cv=1.40)	18.0mm <sup>2</sup> (Cv=1.00)	30.0mm <sup>2</sup> (Cv=1.68)	18.0mm <sup>2</sup> (Cv=1.00)
Valve type	5 port 2 position	5 port 3 position	5 port 2 position	5 port 3 position
Operating pressure	0.15-0.8MPa(21-114Psi)			
Proof pressure	1.5MPa(215Psi)			
Temperature ℃	-20-70			
Material of body	Aluminum alloy			
Lubrication ②	Not required			
Max. frequency ③	4 cycle/sec	3 cycle/sec	4 cycle/sec	3 cycle/sec
Weight	4V310-08:310g 4V320-08:400g	450g	4V310-10:310g 4V320-10:400g	450g

- ① PT thread, NPT thread and G thread are available;
- ② It can not 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	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ± 15% DC: ± 10%
Power consumption	AC: 3.5VA DC : 3.0W
Protection	IP65 ( DIN40050 )
Temperature classification	B Class
Electrical entry	Terminal, Grommet
Activating time	0.05 sec and below

### Ordering code



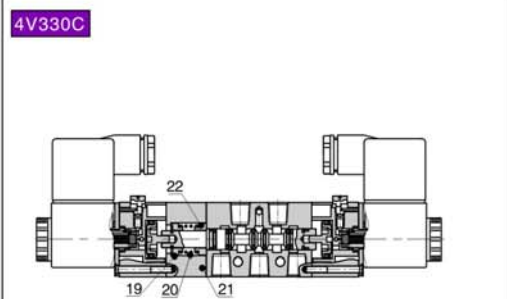
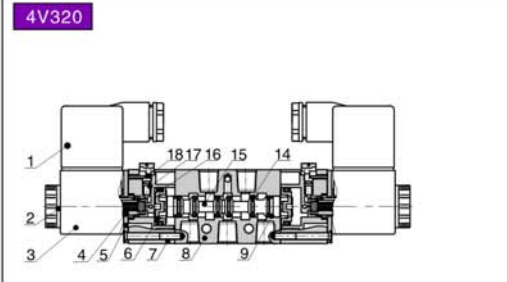
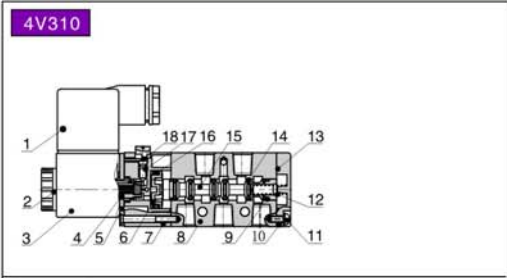
Please refer to PI-33 for manifold specification and the order way.



# Solenoid valve ( 5/2 、 5/3 way )

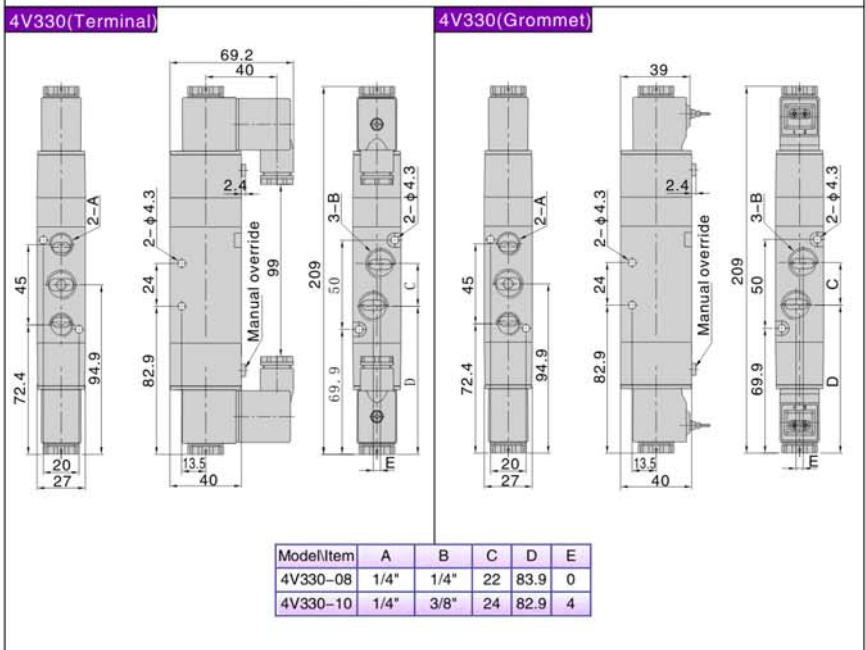
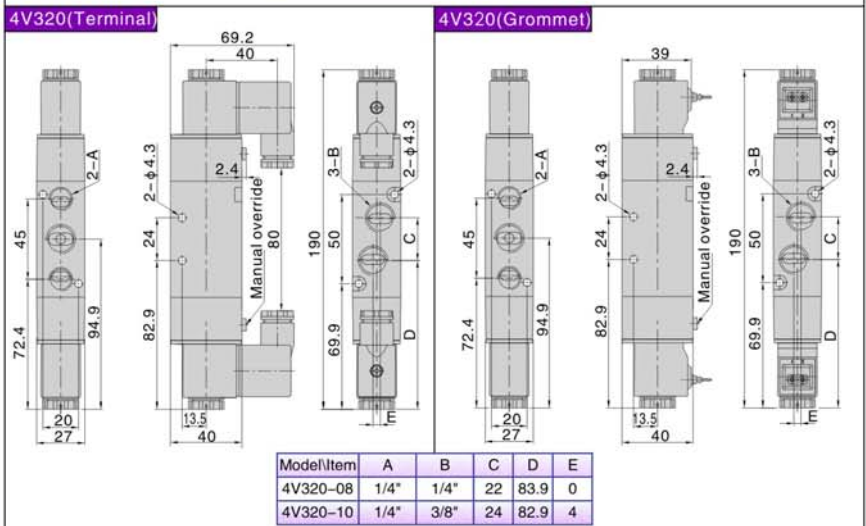
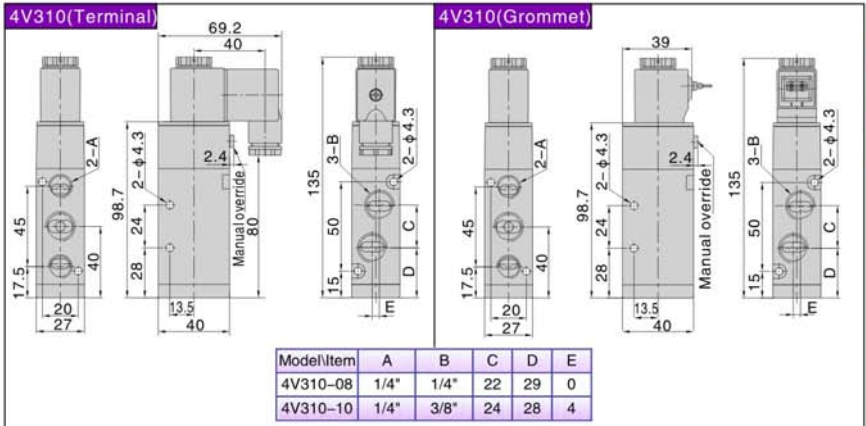
## 4V300 Series

### Inner structure



NO.	Item	NO.	Item	NO.	Item
1	Connector	9	Wearing ring	17	Override spring
2	Coil nut	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit	15	Spool		
8	Body	16	Piston O-ring		

### Dimensions



4V300





# Solenoid valve ( 5/2 、 5/3 way )

4V400 Series



4V400



## Specification

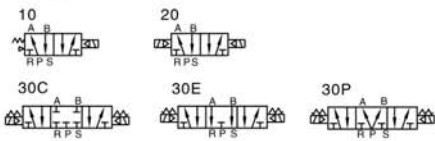
Model	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15
Fluid	Air(to be filtered by 40um filter element)				
Acting	Internal piloted				
Port size ①	In=Out=Exhaust=1/2"				
Orifice size	50.0mm <sup>2</sup> (Cv=2.79)		30.0mm <sup>2</sup> (Cv=1.68)		
Valve type	5 port 2 position		5 port 3 position		
Operating pressure	0.15-0.8MPa(21-114Psi)				
Proof pressure	1.5MPa(215Psi)				
Temperature ℃	-20-70				
Material of body	Aluminum alloy				
Lubrication ②	Not required				
Max. frequency ③	3 cycle/sec				
Weight	590g	720g			770g

① PT thread, NPT thread and G thread are available;

② It can not 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.

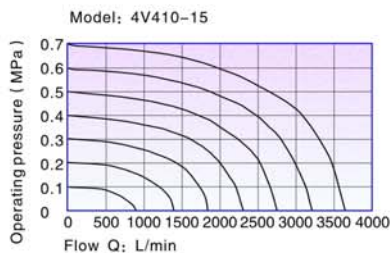
## Symbol



## Product feature

- 1、Pilot-oriented mode: optional for internal or external;
- 2、Structure in sliding column mode: good tightness and sensitive reaction;
- 3、Three position solenoid valves have three kinds of central function for your choice;
- 4、Double control solenoid valves have memory function;
- 5、Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life;
- 6、No need to add oil for lubrication;
- 7、It is available to form integrated valve group with the base to save installation space;
- 8、Affiliated manual devices are equipped to facilitate installation and debugging;
- 9、Several standard voltage grades are optional;

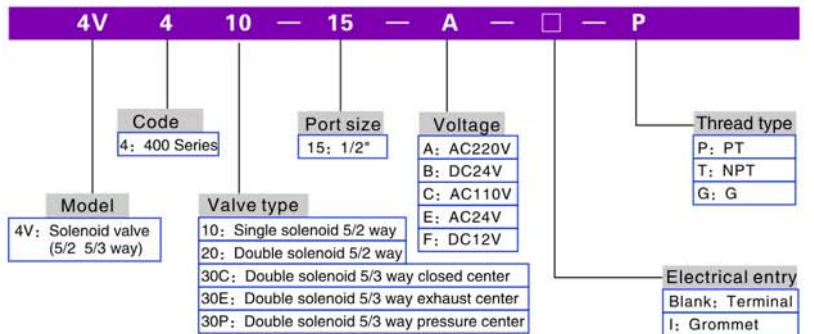
## Flow chart



## Coil specification

Item	Specification
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ±15% DC: ±10%
Power consumption	AC: 3.5VA DC: 3.0W
Protection	IP65 ( DIN40050 )
Temperature classification	B Class
Electrical entry	Terminal, Grommet
Activating time	0.05 sec and below

## Ordering code



Please refer to PI-33 for manifold specification and the order way.

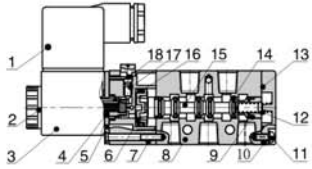


# Solenoid valve ( 5/2 、 5/3 way )

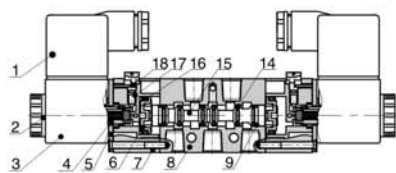
4V400 Series

## Inner structure

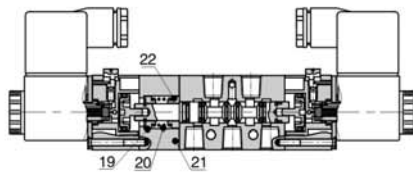
4V410



4V420



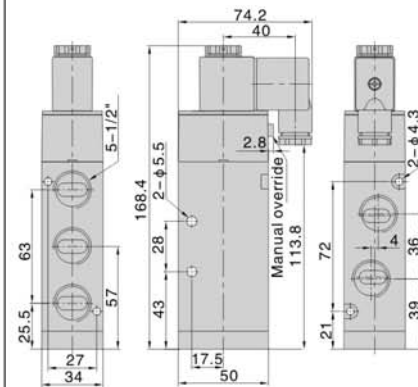
4V430C



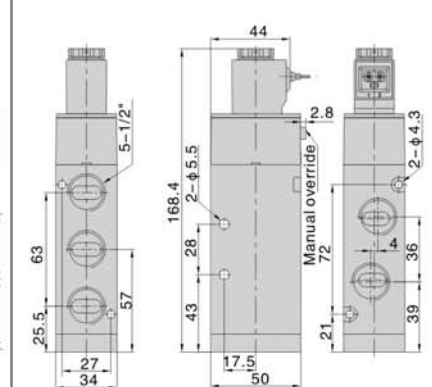
NO.	Item	NO.	Item	NO.	Item
1	Connector	9	Wearing ring	17	Override spring
2	Coil nut	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit	15	Spool		
8	Body	16	Piston O-ring		

## Dimensions

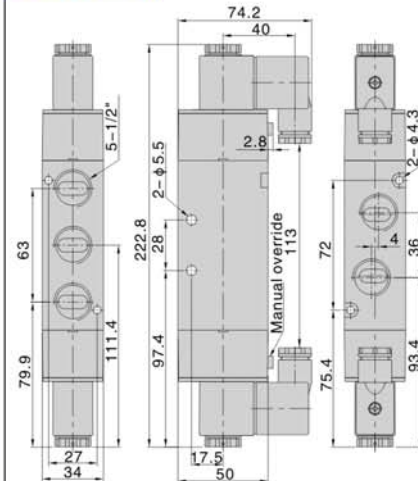
4V410(Terminal)



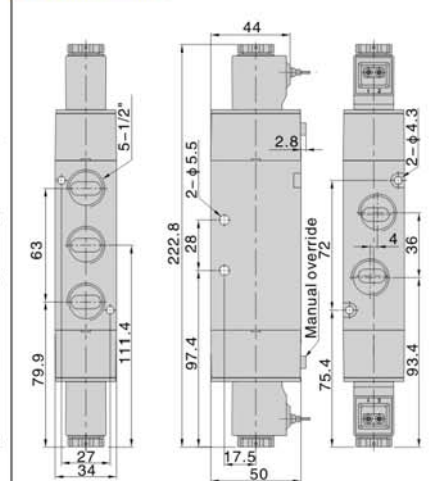
4V410(Grommet)



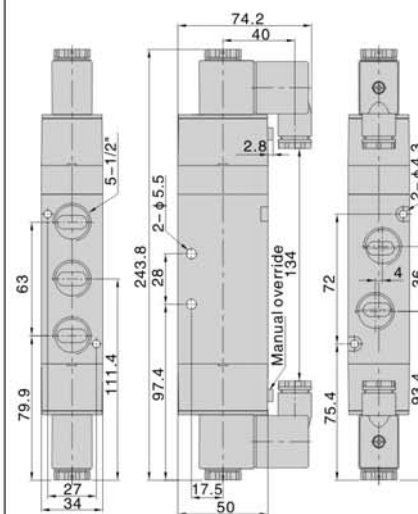
4V420(Terminal)



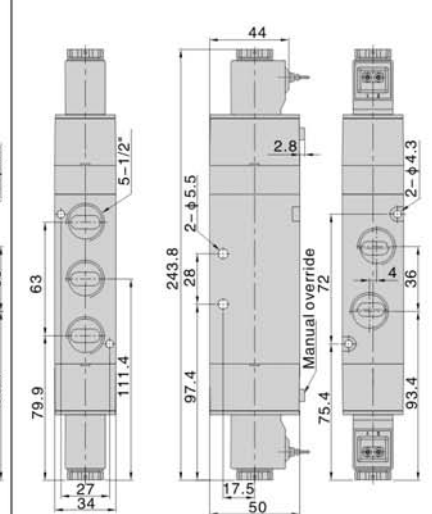
4V420(Grommet)



4V430(Terminal)



4V430(Grommet)



4V400