

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

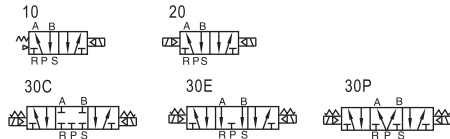


4V100 Series



4V100

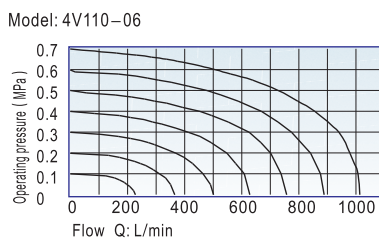
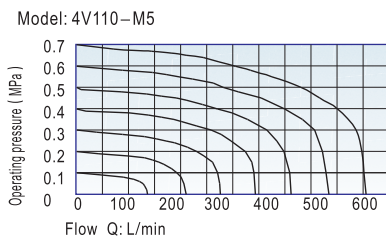
Symbol



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 40 μm filter element)			
Acting	Piloted			
Port size ①	In=Out=M5		In=Out=1/8"	
Orifice size	5.5mm ² (Cv=0.31)	5.0mm ² (Cv=0.28)	12.0mm ² (Cv=0.67)	9.0mm ² (Cv=0.50)
Valve type	5 port 3 position	5 port 2 position	5 port 3 position	5 port 2 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 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.

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

4V 1 10 06 A □ P

- Model**: 4V: Solenoid valve(5/2, 5/3 way)
- Code**: 1: 100 Series
- 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
- Port size**:
 - M5: M6
 - 06: 1/8"
- Thread type**:

Port size	Thread type
1/8"	P: PT
	T: NPT
	G: G
M5	Not this code
- Electrical entry**:
 - Blank: Terminal
 - I: Grommet
- Voltage**:
 - A: AC220V
 - B: DC24V
 - C: AC110V
 - E: AC24V
 - F: DC12V

Please refer to 37 for manifold specification and the order way.

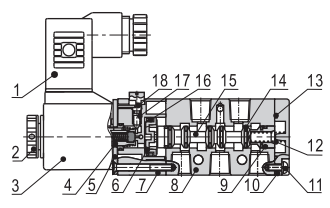


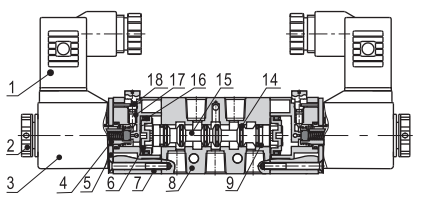
Solenoid valve(5/2 , 5/3 way)

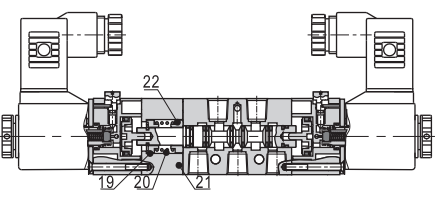


4V100 Series

Inner structure

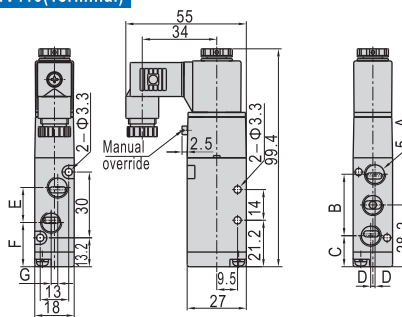

4V110

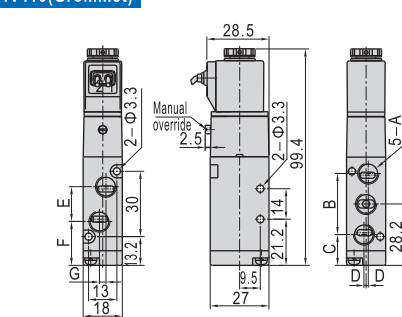

4V120


4V130C

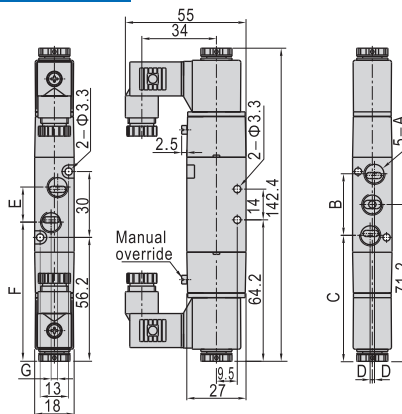
No.	Item	No.	Item	No.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit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

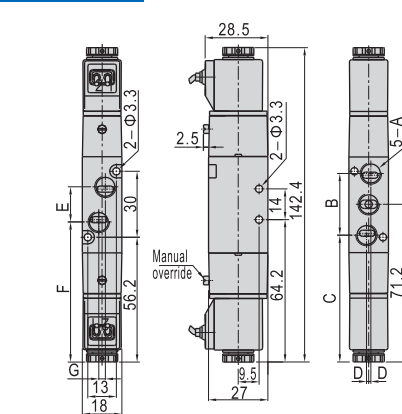
Dimensions


4V110(Terminal)

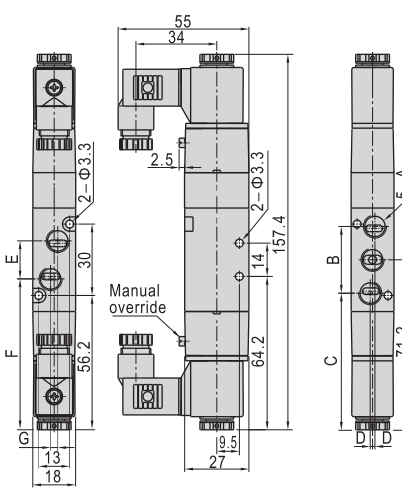

4V110(Grommet)

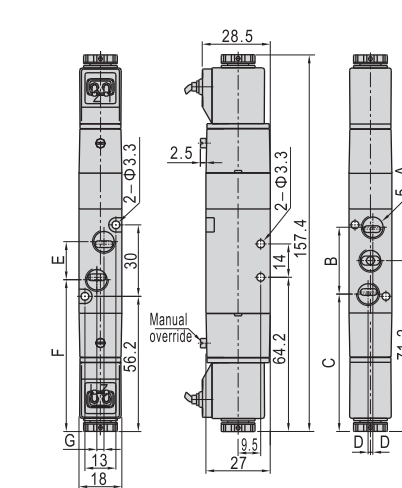
Model\Item	A	B	C	D	E	F	G
4V110-M5	M5x0.8	27	14.7	0	14	21.2	0
4V110-06	1/8"	28	14.2	1	16	20.2	3


4V120(Terminal)


4V120(Grommet)

Model\Item	A	B	C	D	E	F	G
4V120-M5	M5x0.8	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	M5x0.8	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)

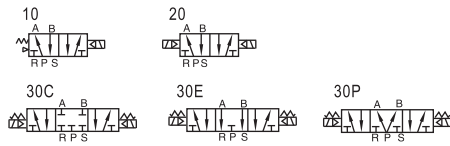


4V200 Series



4V200

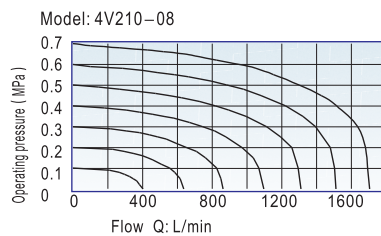
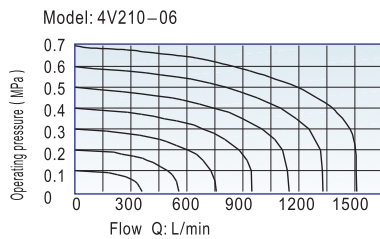
Symbol



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

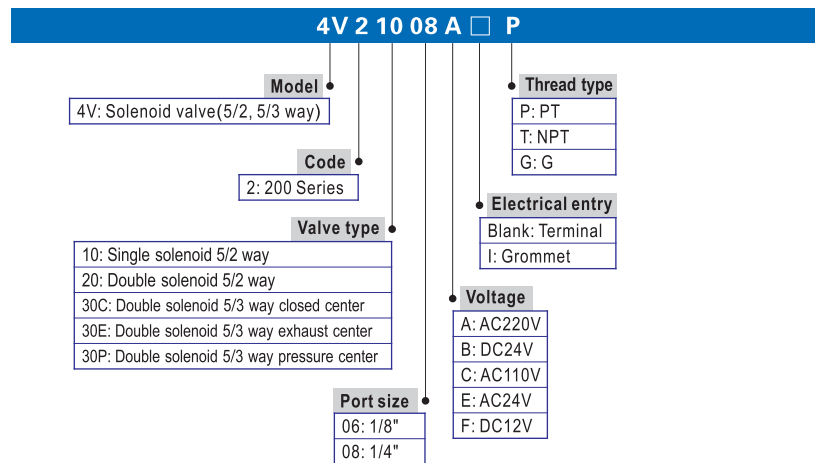
Model	4V210-06 4V220-06	4V230C-06 4V230E-06 4V230P-06	4V210-08 4V220-08	4V230C-08 4V230E-08 4V230P-08
Fluid	Air(to be filtered by 40 μm filter element)			
Acting	Piloted			
Port size ①	In=Out=Exhaust=1/8"		In=Out=1/4" Exhaust=1/8"	
Orifice size	14.0mm ² (Cv=0.78)	12.0mm ² (Cv=0.67)	16.0mm ² (Cv=0.89)	12.0mm ² (Cv=0.67)
Valve type	5 port 3 position	5 port 2 position	5 port 3 position	5 port 2 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	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 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.

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 37 for manifold specification and the order way.

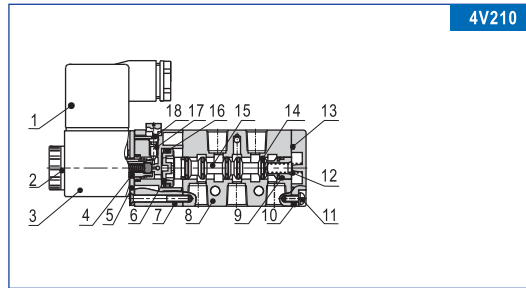


Solenoid valve(5/2 , 5/3 way)

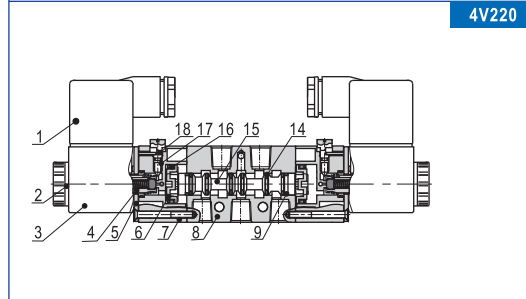


4V200 Series

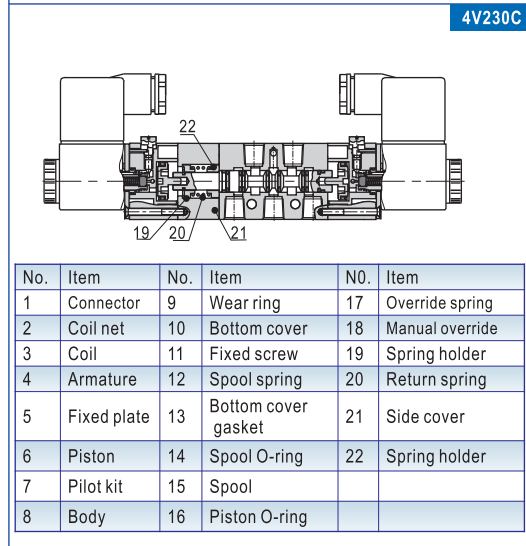
Inner structure



4V210



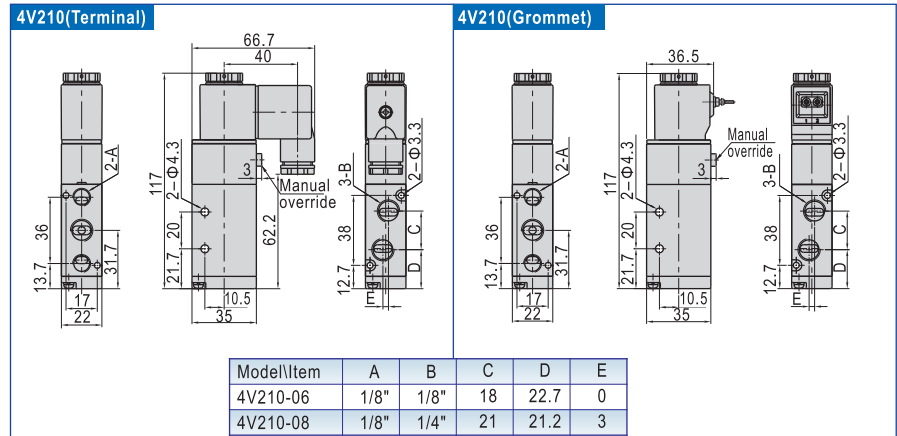
4V220



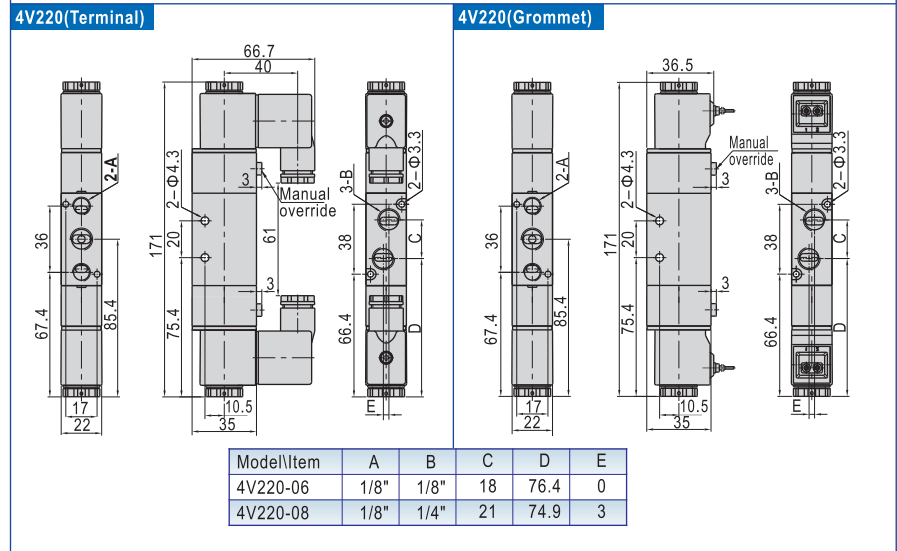
4V230C

No.	Item	No.	Item	No.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	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		

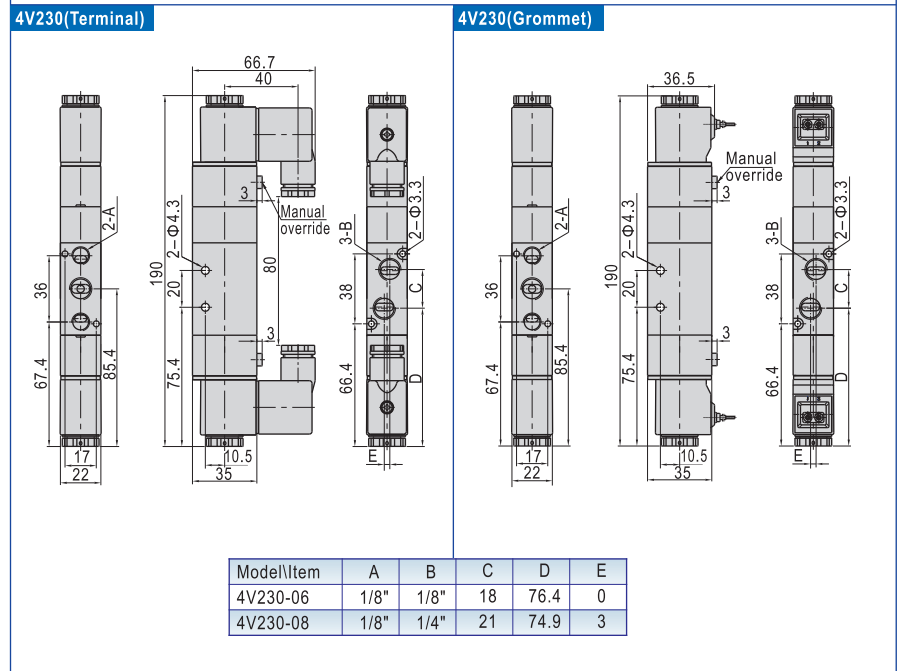
Dimensions



Model/Item	A	B	C	D	E
4V210-06	1/8"	1/8"	18	22.7	0
4V210-08	1/8"	1/4"	21	21.2	3



Model/Item	A	B	C	D	E
4V220-06	1/8"	1/8"	18	76.4	0
4V220-08	1/8"	1/4"	21	74.9	3



Model/Item	A	B	C	D	E
4V230-06	1/8"	1/8"	18	76.4	0
4V230-08	1/8"	1/4"	21	74.9	3



4V200

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

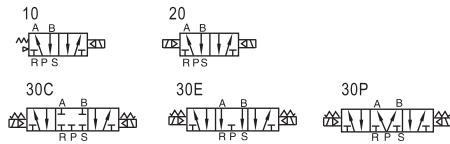


4V300 Series



4V300

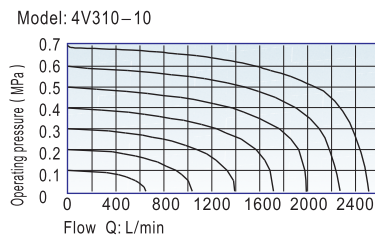
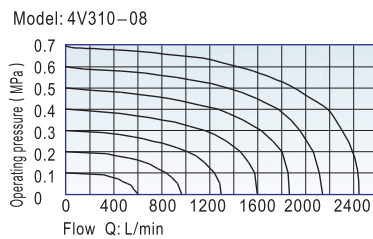
Symbol



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

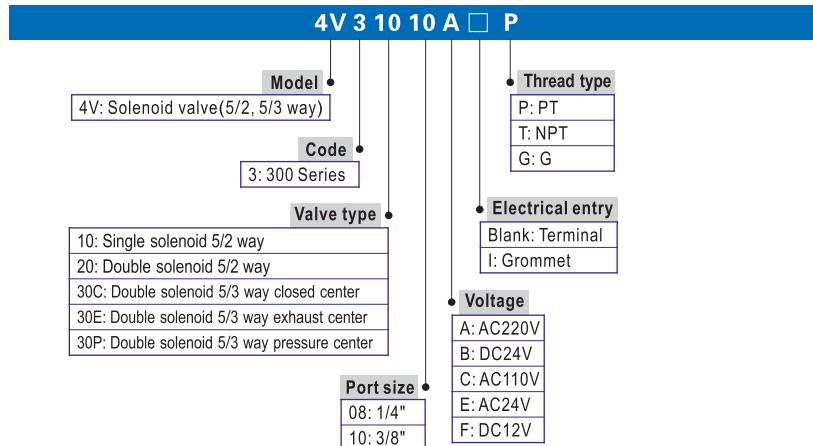
Model	4V310-08 4V320-08	4V330C-08 4V330E-08 4V330P-08	4V310-10 4V320-10	4V330C-10 4V330E-10 4V330P-10
Fluid	Air(to be filtered by 40 μ m filter element)			
Acting	Piloted			
Port size ①	In=Out=Exhaust=1/4"		In=Out=3/8" Exhaust=1/4"	
Orifice size	25.0mm ² (Cv=1.40)	18.0mm ² (Cv=1.00)	30.0mm ² (Cv=1.68)	18.0mm ² (Cv=1.00)
Valve type	5 port 3 position	5 port 2 position	5 port 3 position	5 port 2 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	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 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.

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 37 for manifold specification and the order way.

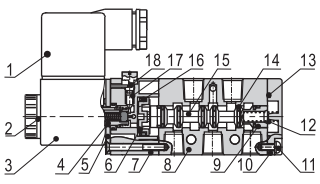


Solenoid valve(5/2 , 5/3 way)

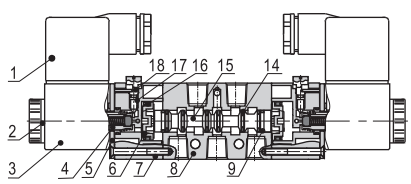


4V300 Series

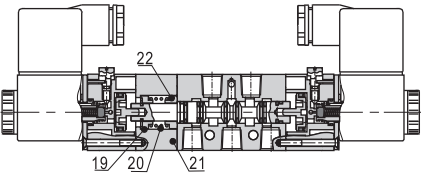
Inner structure



4V310



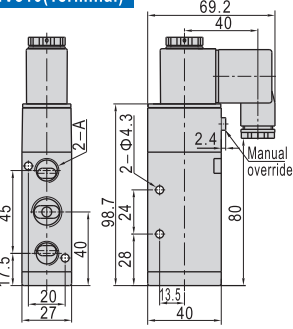
4V320



4V330C

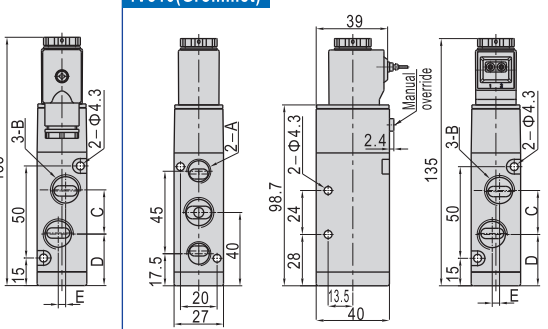
No.	Item	No.	Item	No.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit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

Dimensions



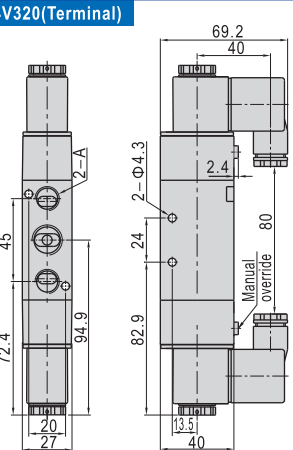
4V310(Terminal)

Model\Item	A	B	C	D	E
4V310-08	1/4"	1/4"	22	29	0
4V310-10	1/4"	3/8"	24	28	4



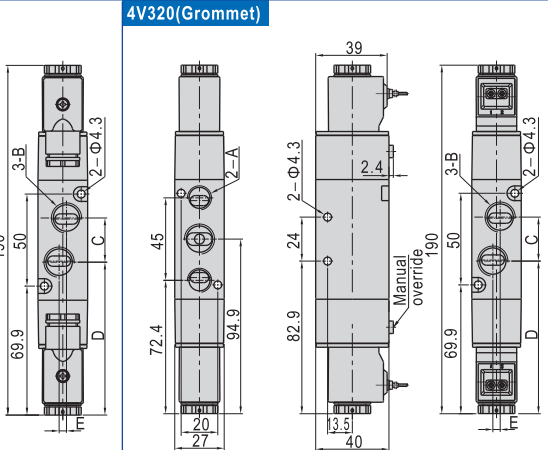
4V310(Grommet)

Model\Item	A	B	C	D	E
4V310-08	1/4"	1/4"	22	29	0
4V310-10	1/4"	3/8"	24	28	4



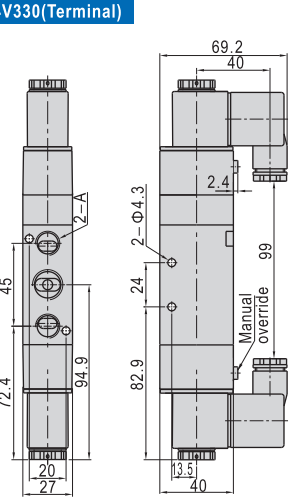
4V320(Terminal)

Model\Item	A	B	C	D	E
4V320-08	1/4"	1/4"	22	83.9	0
4V320-10	1/4"	3/8"	24	82.9	4



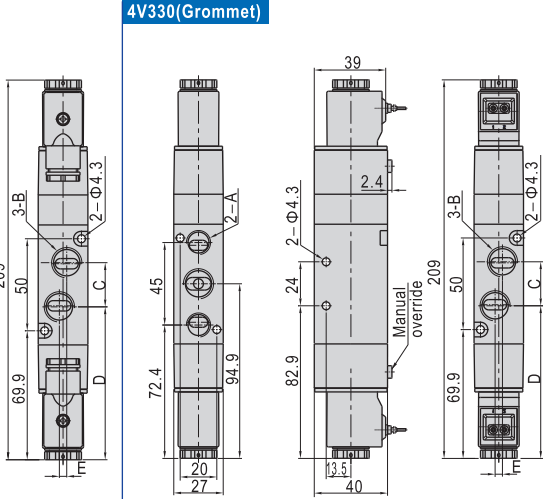
4V320(Grommet)

Model\Item	A	B	C	D	E
4V320-08	1/4"	1/4"	22	83.9	0
4V320-10	1/4"	3/8"	24	82.9	4



4V330(Terminal)

Model\Item	A	B	C	D	E
4V330-08	1/4"	1/4"	22	83.9	0
4V330-10	1/4"	3/8"	24	82.9	4



4V330(Grommet)

Model\Item	A	B	C	D	E
4V330-08	1/4"	1/4"	22	83.9	0
4V330-10	1/4"	3/8"	24	82.9	4



4V300



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

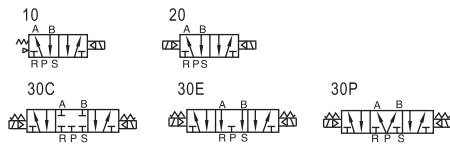


4V400 Series



4V400

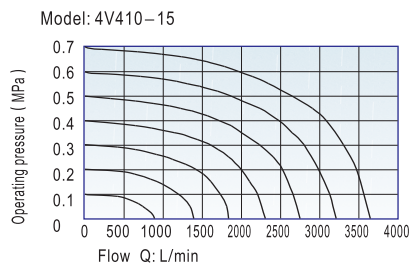
Symbol



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	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15
Fluid	Air(to be filtered by 40 μ m filter element)				
Acting	Pilot				
Port size ①	In=Out=Exhaust=1/2"				
Orifice size	50.0mm ² (Cv=2.79)		30.0mm ² (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 °C	-20~70				
Material of body	Aluminum alloy				
Lubrication ②	Not required				
Max. frequency ③	3 cycle/sec				
Weight	590g	7200g			770g

- ① PT thread, NPT thread and G thread are available.
- 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.

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

4V 4 10 15 A □ P

- Model**: 4V: Solenoid valve(5/2, 5/3 way)
- Code**: 4: 400 Series
- 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
- Port size**: 15: 1/2"
- Thread type**:
 - P: PT
 - T: NPT
 - G: G
- Electrical entry**:
 - Blank: Terminal
 - I: Grommet
- Voltage**:
 - A: AC220V
 - B: DC24V
 - C: AC110V
 - E: AC24V
 - F: DC12V

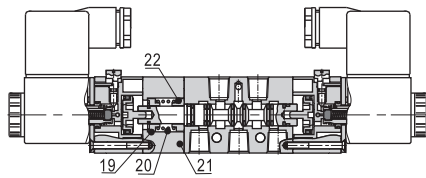
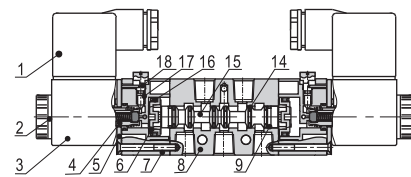
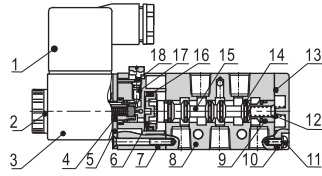
Please refer to 37 for manifold specification and the order way.



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

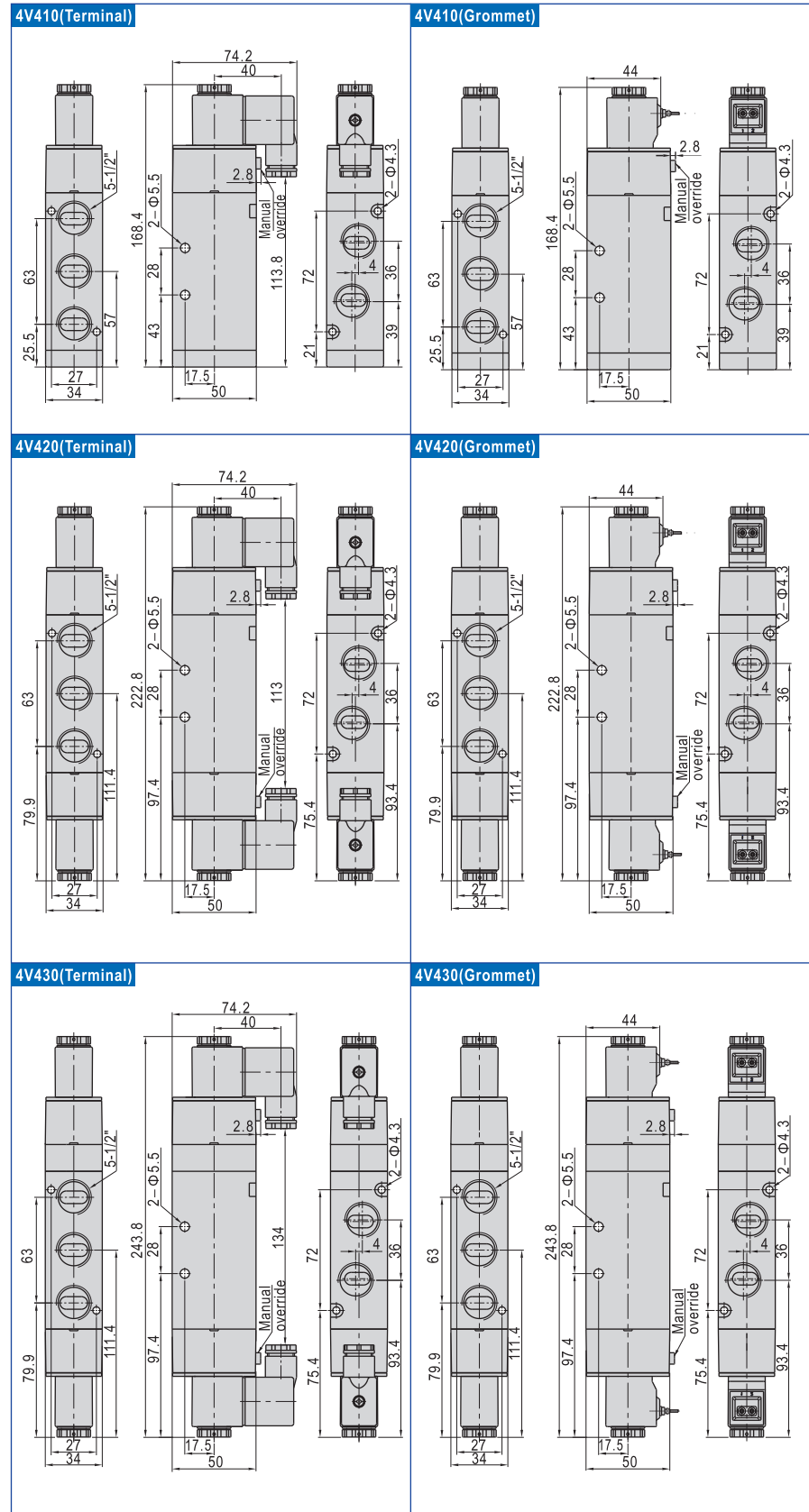
4V400 Series

Inner structure



No.	Item	No.	Item	No.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	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



4V400