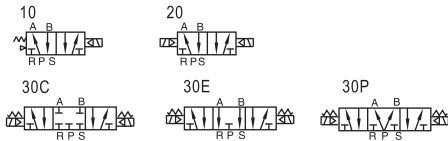


Solenoid valve(5/2 way,5/3 way)

4V100 Series



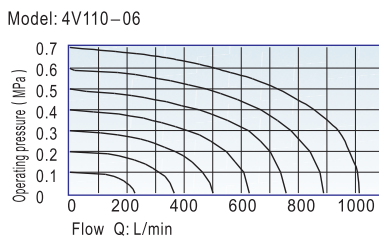
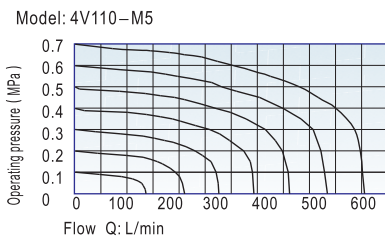
Symbol



Product feature

1. Pilot-oriented mode: Internal pilot or external pilot.
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	Internal pilot or external pilot			
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 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 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 □ □ -W

- 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: M5
 - 06: 1/8"
- Voltage**:
 - A: AC220V
 - B: DC24V
 - C: AC110V
 - E: AC24V
 - F: DC12V
- Pilot type**:
 - Blank: Internal pilot
 - Without M5 thread hole
 - W: External pilot
 - With M5 thread hole
- Thread type**:

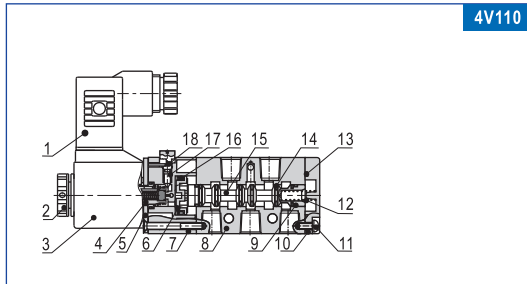
Port size	Thread type
1/8"	Blank: PT
	T: NPT
	G: G
M5	Not this code
- Electrical entry**:
 - Blank: Terminal
 - I: Grommet

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

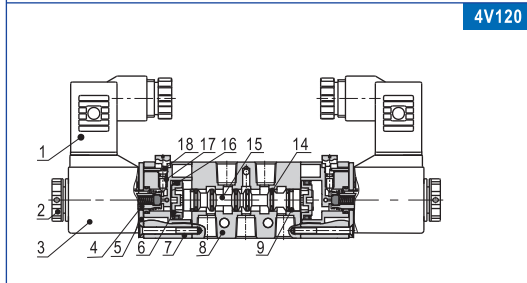
Solenoid valve(5/2 way,5/3 way)

4V100 Series

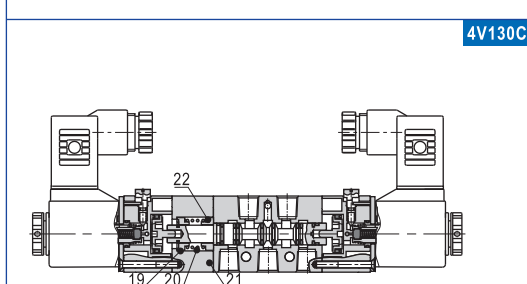
Inner structure



4V110



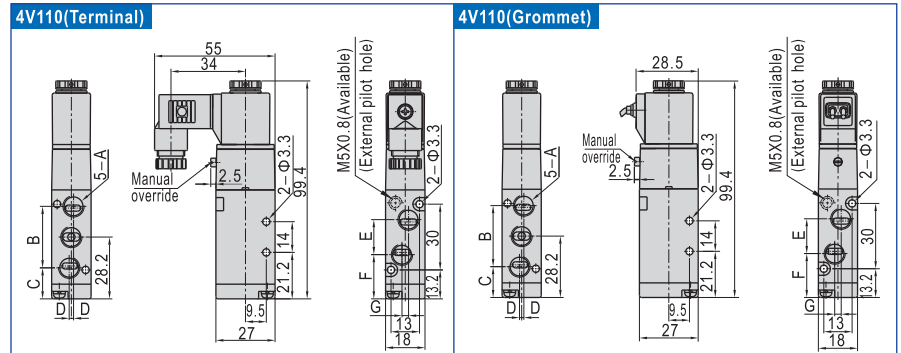
4V120



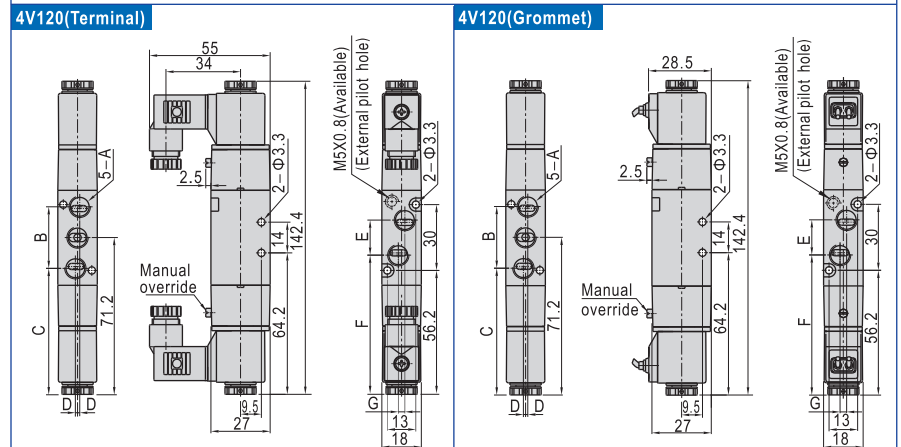
4V130C

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		

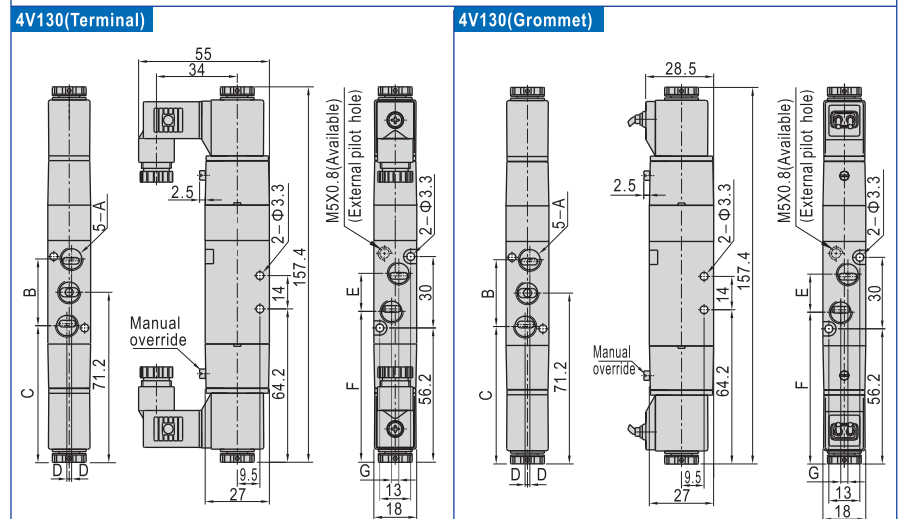
Dimensions



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



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



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 way, 5/3 way)

4V200 Series

4V200



Specification

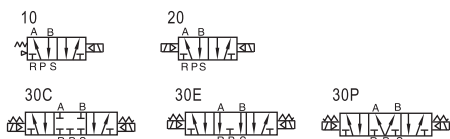
Model	4V210-06 4V220-06	4V230C-06 4V230E-06 4V230P-06	4V210-08 4V220-08	4V230C-08 4V230E-08 4V230P-08
Fluid	Air(to be filtered by 40 μ m filter element)			
Acting	Internal pilot or external pilot			
Port size ①	In=Out=Exhaust=1/8"		In=Out=1/4" Exhaust=1/8"	
Orifice size	14.0mm ² (Cv=0.78)	12.0mm ² (Cv=0.67)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

Symbol



Product feature

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

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

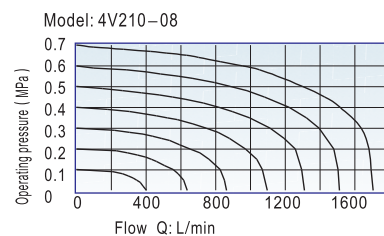
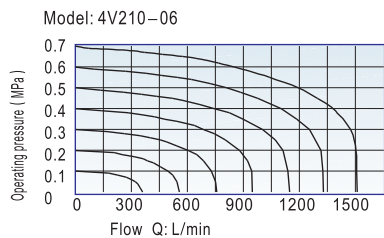
4V 2 10 08 A □ □ -W

- Model**: 4V: Solenoid valve(5/2, 5/3 way)
- Code**: 2: 200 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**:
 - 06: 1/8"
 - 08: 1/4"
- Voltage**:
 - A: AC220V
 - B: DC24V
 - C: AC110V
 - E: AC24V
 - F: DC12V
- Thread type**:
 - Blank: PT
 - T: NPT
 - G: G
- Electrical entry**:
 - Blank: Terminal
 - I: Grommet
- Pilot type**:
 - Blank: Internal pilot
 - W: External pilot

Without M5 thread hole (for blank pilot type)
With M5 thread hole (for W pilot type)

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

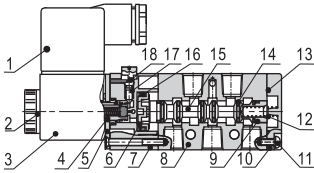
Flow chart



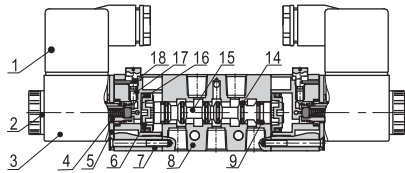
Solenoid valve(5/2 way,5/3 way)

4V200 Series

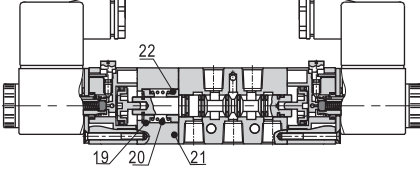
Inner structure



4V210



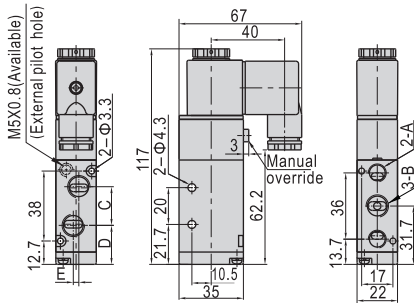
4V220



4V230C

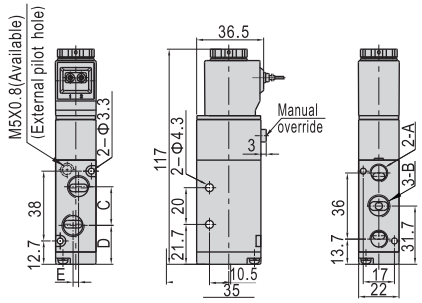
No.	Item	No.	Item	No.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit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

Dimensions



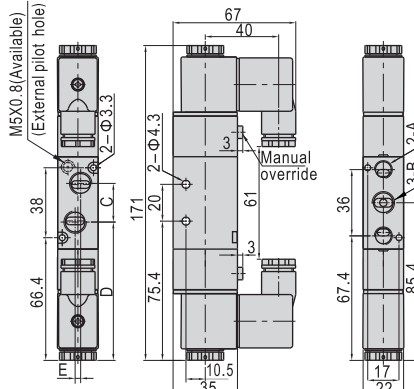
4V210(Terminal)

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



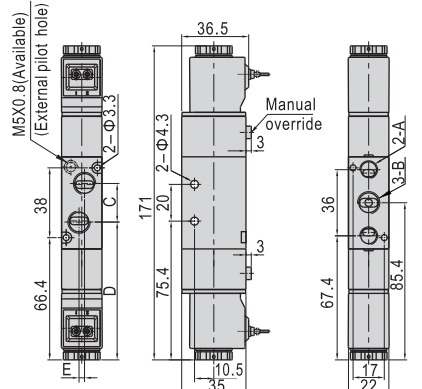
4V210(Grommet)

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



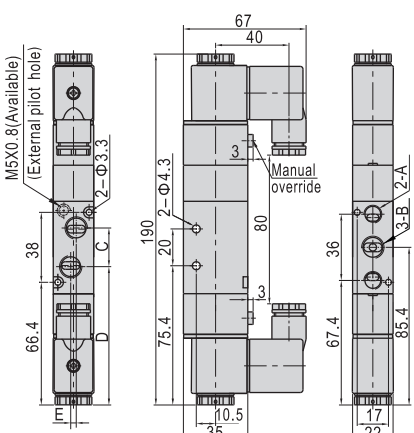
4V220(Terminal)

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



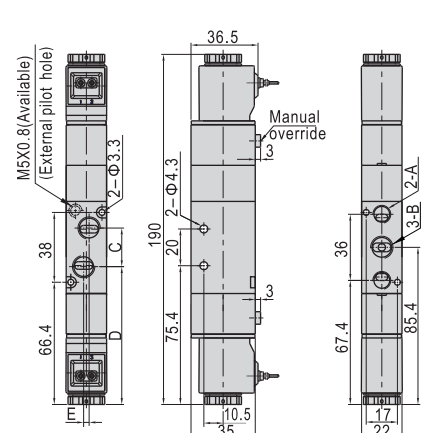
4V220(Grommet)

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



4V230(Terminal)

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



4V230(Grommet)

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

29

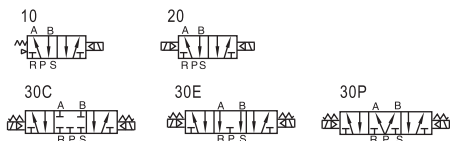
Solenoid valve(5/2 way,5/3 way)

4V300 Series

4V300



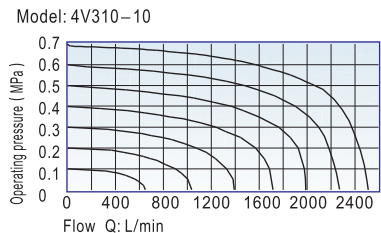
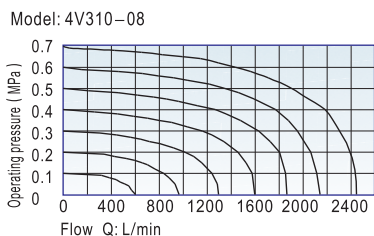
Symbol



Product feature

1. Pilot-oriented mode: Internal pilot or external pilot.
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	Internal pilot or external pilot			
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 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	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

4 V 3 10 10 A □ □ -W

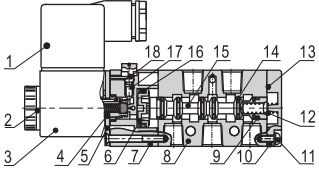
- Model**
 - 4V: Solenoid valve(5/2, 5/3 way)
- Code**
 - 3: 300 Series
- Valve type**
 - 10: Single solenoid 5/2 way
 - 20: Double solenoid 5/2 way
 - 30C: Double solenoid 5/3 way closed center
 - 30E: Double solenoid 5/3 way exhaust center
 - 30P: Double solenoid 5/3 way pressure center
- Port size**
 - 08: 1/4"
 - 10: 3/8"
- Voltage**
 - A: AC220V
 - B: DC24V
 - C: AC110V
 - E: AC24V
 - F: DC12V
- Pilot type**
 - Blank: Internal pilot
 - W: External pilot
- Thread type**
 - Blank: PT
 - T: NPT
 - G: G
- Electrical entry**
 - Blank: Terminal
 - I: Grommet

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

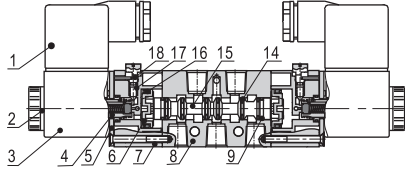
Solenoid valve(5/2 way,5/3 way)

4V300 Series

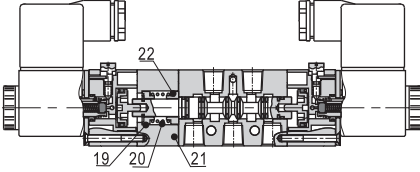
Inner structure



4V310



4V320

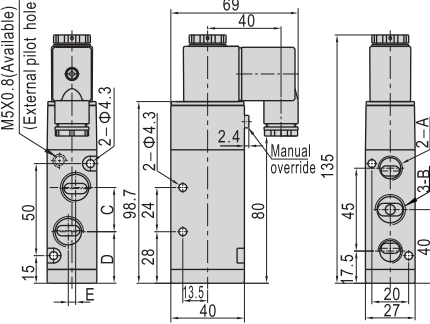


4V330C

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

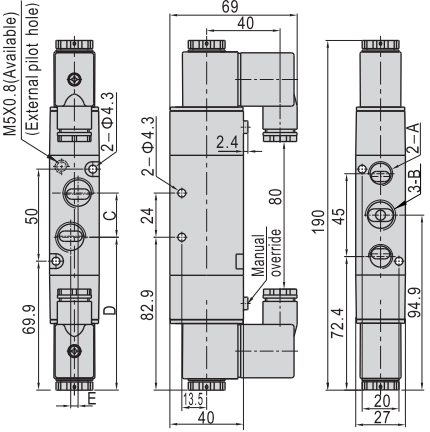
4V310(Terminal)



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

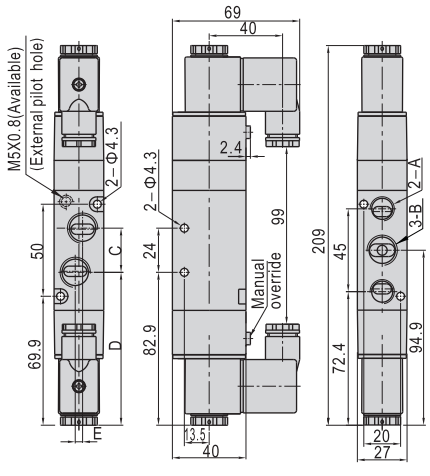
4V320(Terminal)



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)



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

31

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

4V400 Series

4V400



Specification

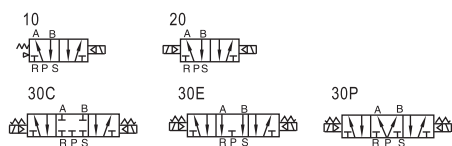
Model	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15
Fluid	Air(to be filtered by 40 μ m filter element)				
Acting	Internal pilot or external pilot				
Port size ①	In=Out=Exhaust=1/2"				
Orifice size	50.0mm ² (Cv=2.79)		30.0mm ² (Cv=1.68)		
Valve type	5 port 2 position		5 port 3 position		
Operating 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.

Symbol



Product feature

1. Pilot-oriented mode: Internal pilot or external pilot.
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.

Coil specification

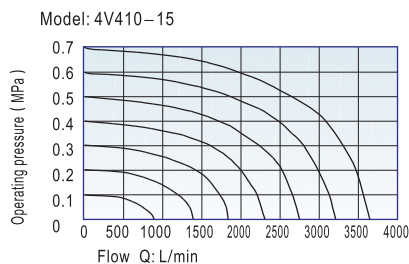
Item	Specification
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ± 15% DC: ± 10%
Power consumption	AC:3.5VA DC:3.0W
Protection	IP65(DIN40050)
Temperature classification	B Class
Electrical entry	Termina, Grommet
Activating time	0.05 sec and below

Ordering code

4V 4 10 15 A □ □ -W

- 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"
- Voltage**:
 - A: AC220V
 - B: DC24V
 - C: AC110V
 - E: AC24V
 - F: DC12V
- Pilot type**:
 - Blank: Internal pilot
 - Without M5 thread hole
 - W: External pilot
 - With M5 thread hole
- Thread type**:
 - Blank: PT
 - T: NPT
 - G: G
- Electrical entry**:
 - Blank: Terminal
 - I: Grommet

Flow chart

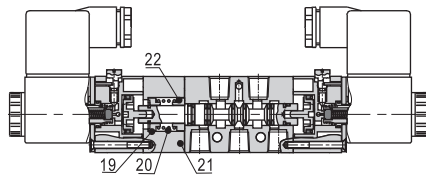
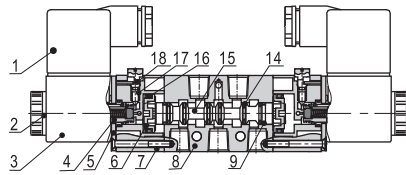
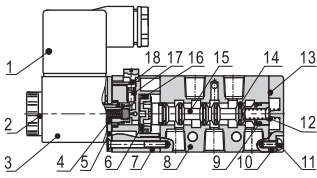


Please refer to 37 for manifold specification and the order way.

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

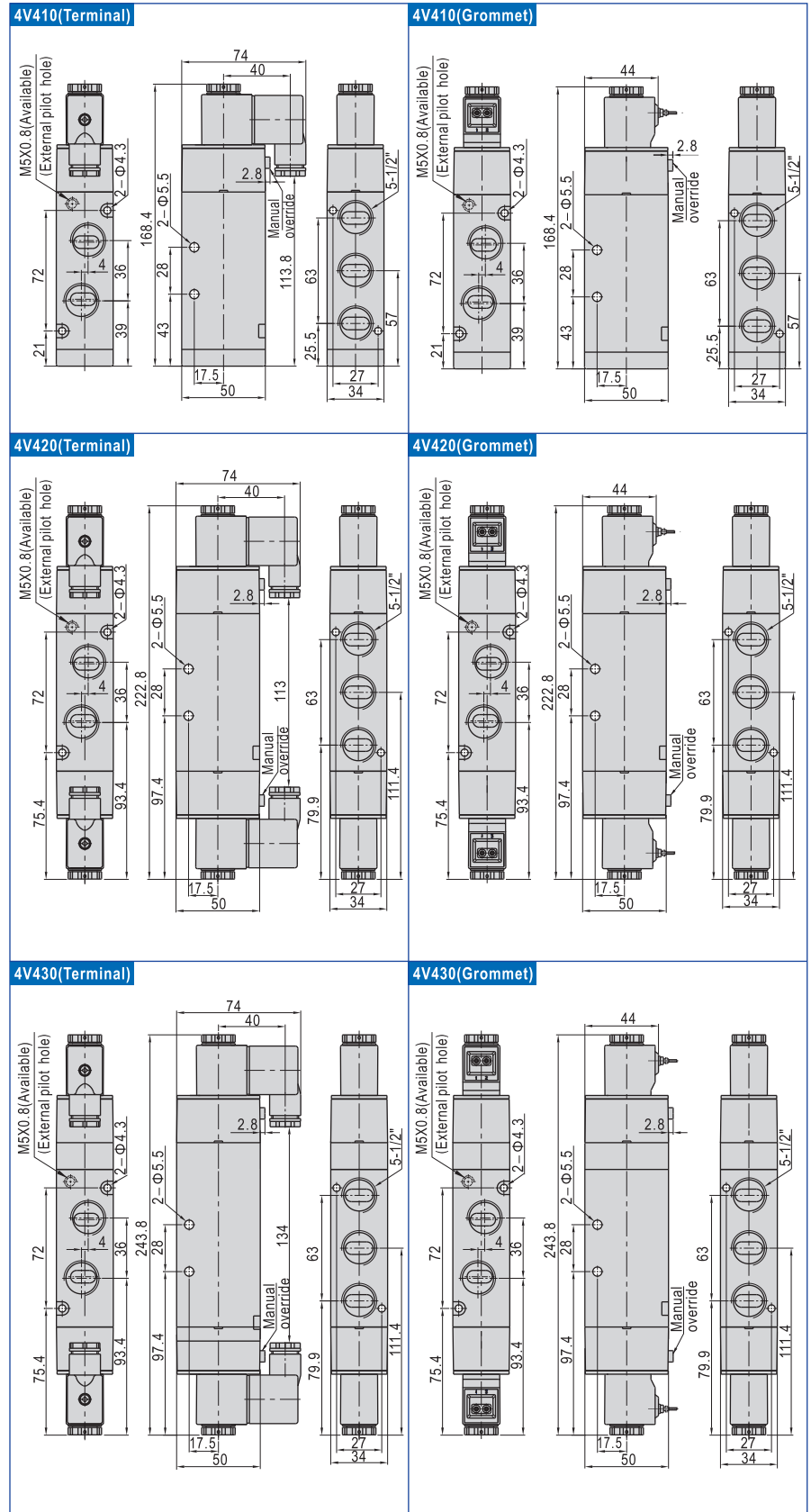
4V400 Series

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