

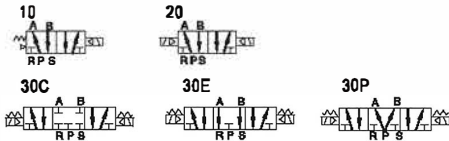
# Solenoid valve(5/2 way, 5/3 way)



## 4V100 Series



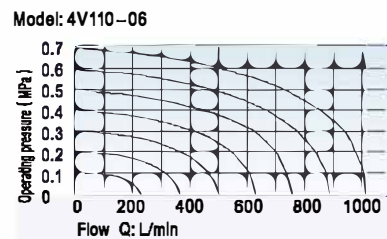
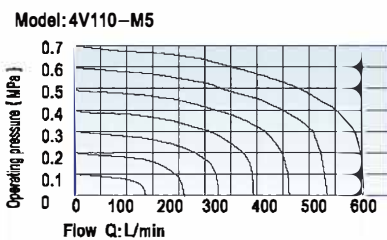
### Symbol



### 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 <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 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**:
 

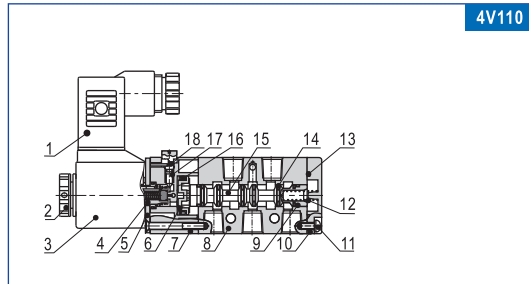
Port size	Thread type
1/8"	Blank: PT
	T: NPT
	G: G
M5	Not this code
- Electrical entry**:
  - Blank: Terminal
  - I: Grommet

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

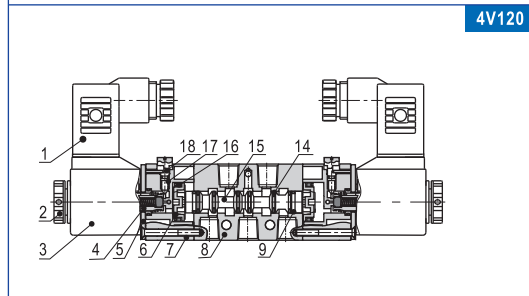
# Solenoid valve(5/2 way,5/3 way)

## 4V100 Series

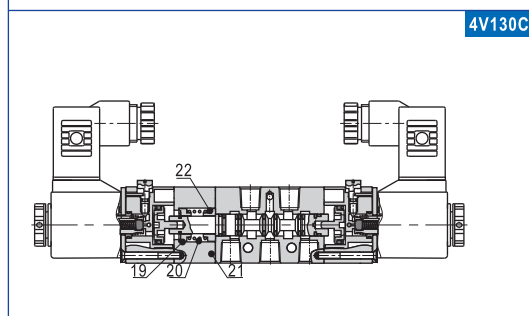
### Inner structure



4V110



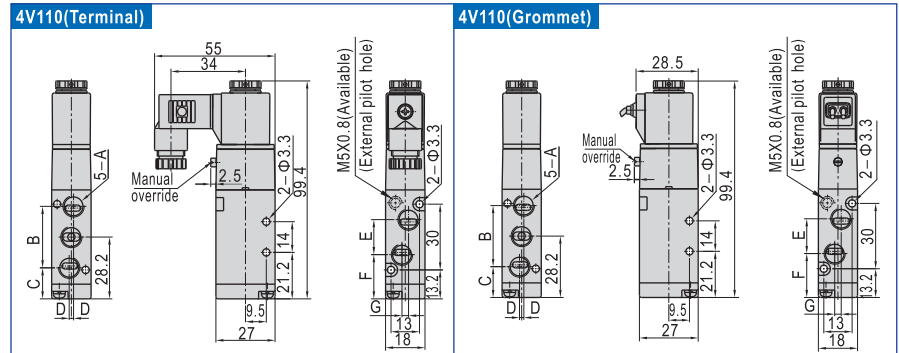
4V120



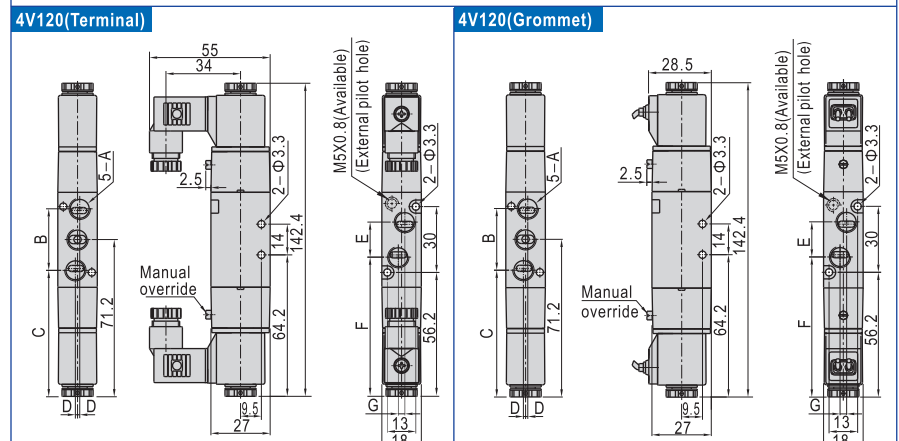
4V130C

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		

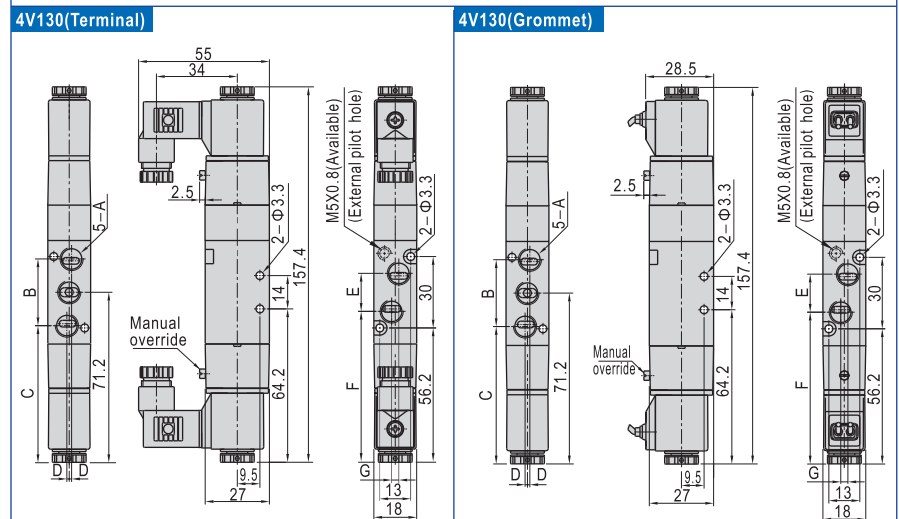
### Dimensions



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

