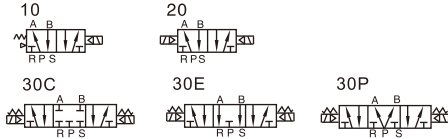


# Solenoid valve(5/2 way, 5/3 way)

## 4V100 Series



### 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.

### 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 μ m filter element)			
Acting	Internal pilot or external pilot			
Port size [Note1]	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	1.2MPa(175psi)			
Temperature	-20~70°C			
Material of body	Aluminum alloy			
Lubrication [Note2]	Not required			
Max.frequency [Note3]	5 cycle/sec	3cycle/sec	5 cycle/sec	3 cycle/sec
Weight (g)	4V110-M5:120 4V120-M5:175	200	4V110-06:120 4V120-06:175	200

[Note1] G thread is available.

[Note2] Once lubricated air is used, continue with same medium to optimise valve life span. Lubricants like ISO VG32 or equivalent are recommended.

[Note3] 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	3.5VA	3.5VA	4.0VA	2.5W	2.5W
Protection	IP65(DIN40050)				
Temperature classification	B Class				
Electrical entry	Terminal, Grommet				
Activating time	0.05 sec and below				

### Ordering code

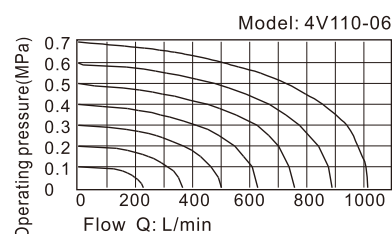
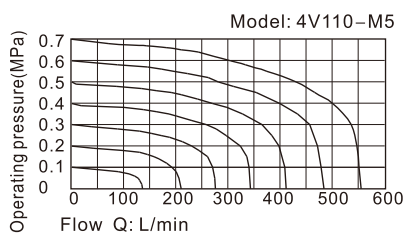
4V 1 10 06 A □ G

① ② ③ ④ ⑤ ⑥ ⑦

① Model	② Code	③ Valve type	④ Port size	⑤ Voltage	⑥ Electrical entry	⑦ Thread type
4V: Solenoid valve (5/2, 5/3 way)	1: 100 Series	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	M5: M5	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Blank: Terminal I: Grommet	No this code
		06: 1/8"	G: G			

Please refer to 76 for manifold specification and the order way.

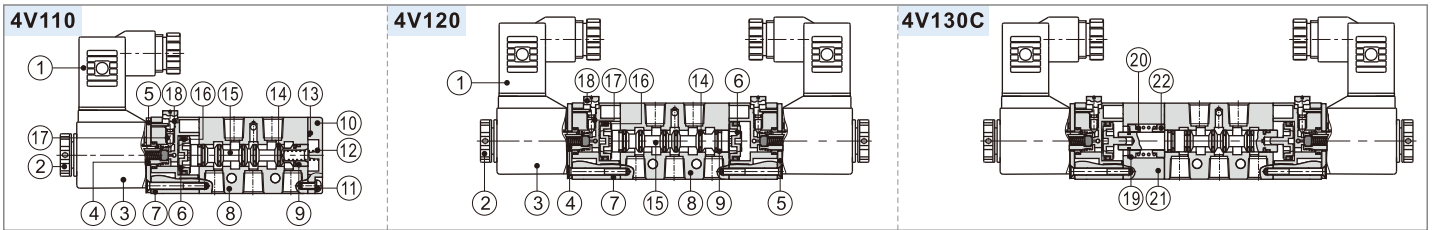
### Flow chart



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

## 4V100 Series

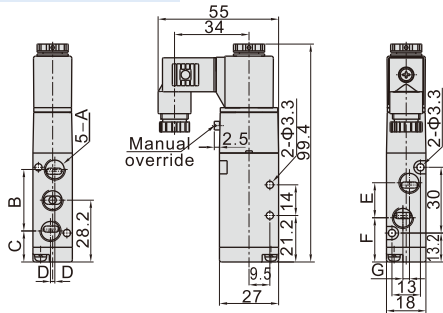
### Inner structure



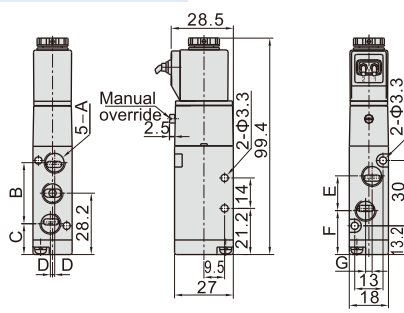
No.	Item	No.	Item	No.	Item	No.	Item	No.	Item	No.	Item	No.	Item	No.	Item	No.	Item	No.	Item	No.	Item
1	Connector	3	Coil	5	Fixed plate	7	Pilot kit	9	Wear ring	11	Fixed screw	13	Bottom cover gasket	15	Spool	17	Override spring	19	Spring holder	21	Side cover
2	Coil net	4	Armature	6	Piston	8	Body	10	Bottom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

### Dimensions

#### 4V110(Terminal)

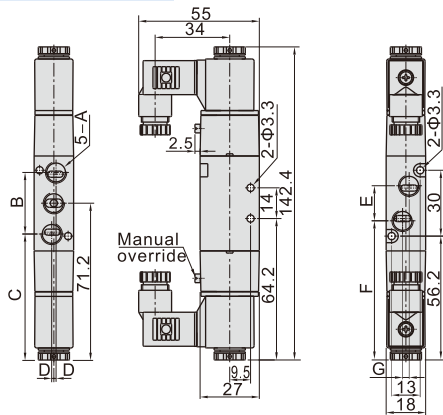


#### 4V110(Grommet)

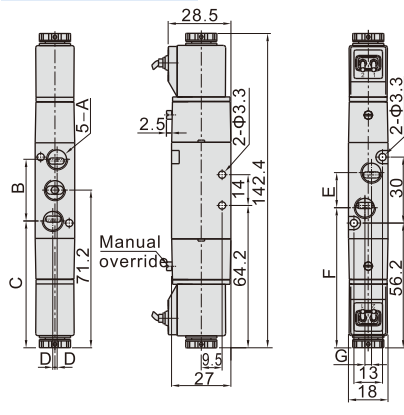


Model\Item	A	B	C	D	E	F	B
4V110-M5	M5x0.8	27	14.7	0	14	21.2	0
4V110-06	1/8"	28	14.2	1	16	20.2	3

#### 4V120(Terminal)

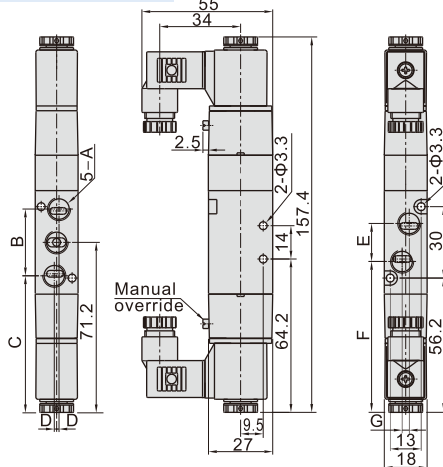


#### 4V120(Grommet)

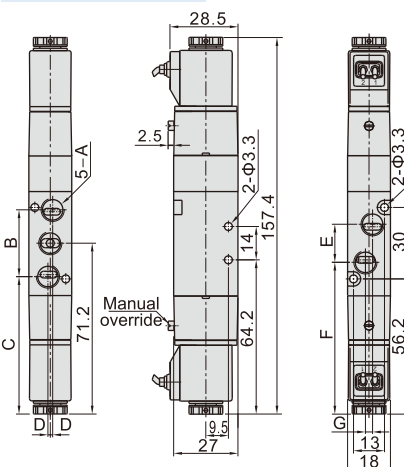


Model\Item	A	B	C	D	E	F	G
4V120-M5	M5x0.8	27	57.7	0	14	64.3	0
4V120-06	1/8"	28	57.2	1	16	63.2	3

#### 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