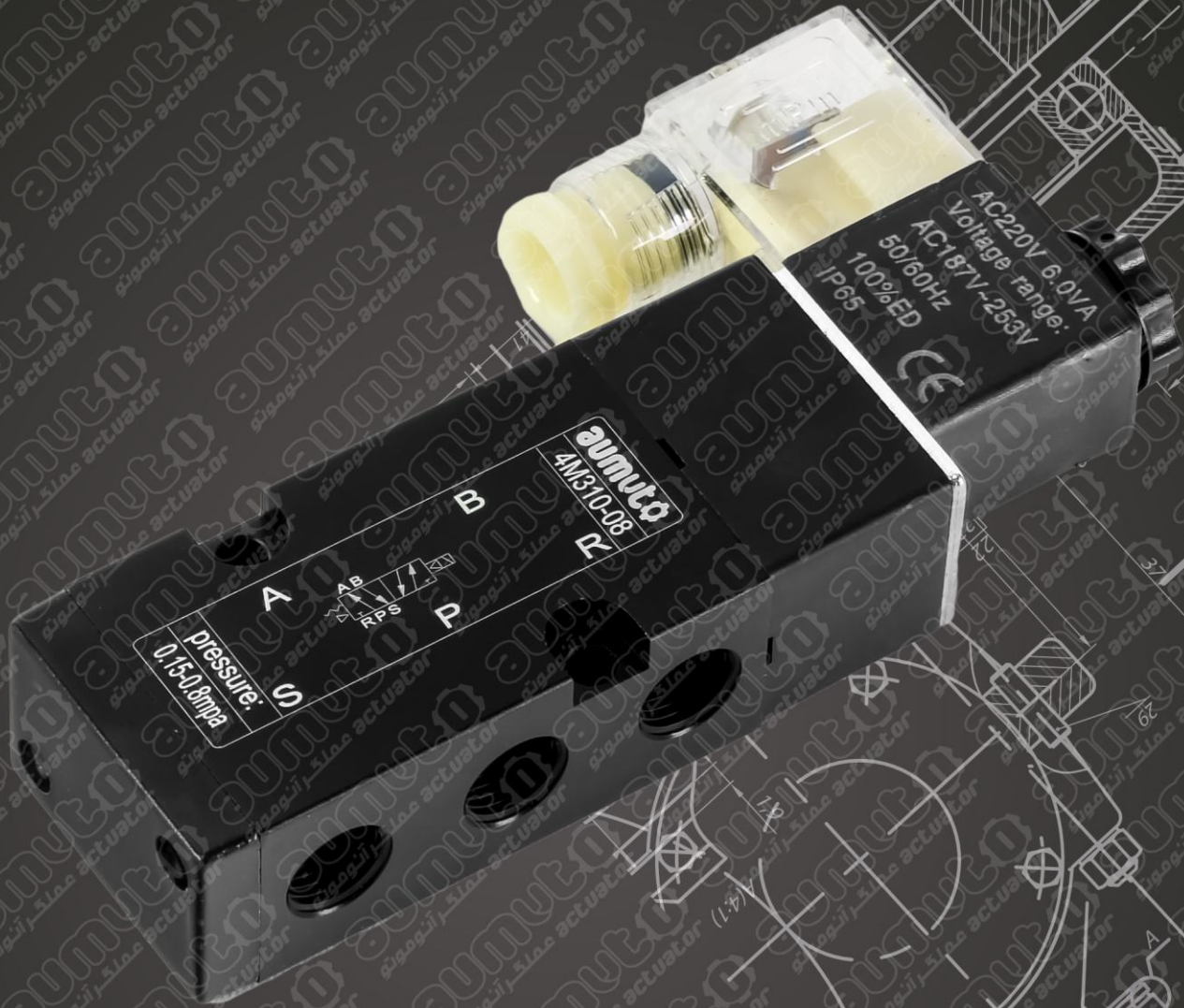


# اكتواتور

actuator عملگر آنوموتو



Solenoid Valve



## Solenoid Valve (5/2 WAY) 4M (NAMUR) Series



### Symbol



### Product feature

1. Internally piloted structure.
2. Structure in sliding column mode: good tightness and sensitive reaction.
3. Double control solenoid valves have memory function.
4. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
5. No need to add oil for lubrication.
6. Install in the side plate with the surface upward, which can be used by directly connecting with the actuators.
7. Affiliated manual devices are equipped to facilitate installation and debugging.
8. Several standard voltage grades are optional.

### Flow chart

Please refer to the same types of 4V series solenoid valves.



### Specification

Model	4M110-M5 4M120-M5	4M110-06 4M120-06	4M210-06 4M220-06	4M210-08 4M220-08	4M310-08 4M320-08	4M310-10 4M320-10
Fluid	Air (to be filtered by 40 μm filter element)					
Acting	Internal piloted					
Port size ①	In=Out=M5	In=Out=1/8"	In=Out=1/8"	In=Out=1/4"	In=Out=1/4"	In=Out=3/8"
Orifice size	5.5mm <sup>2</sup> (Cv=0.31)	12.0mm <sup>2</sup> (Cv=0.67)	14.0mm <sup>2</sup> (Cv=0.78)	16.0mm <sup>2</sup> (Cv=0.89)	25.0mm <sup>2</sup> (Cv=1.40)	30mm <sup>2</sup> (Cv=1.67)
Valve type	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			4 cycle/sec		
Weight	4M110:120g 4M120:175g	4M210:220g 4M220:320g	4M310:310g 4M320:400g			

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	4M110 4M120	4M210 4M220 4M310 4M320
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V	
Scope of voltage	AC: ± 15% DC: ± 10%	
Power consumption	AC:2.5VA DC:2.5W	AC:3.5VA DC:3.0W
Protection	IP65(DIN40050)	
Temperature classification	B Class	
Electrical entry	Terminal, Grommet	
Activating time	0.05 sec and below	

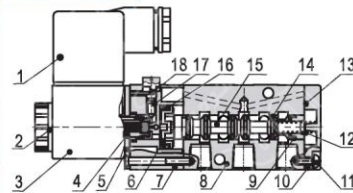
### Ordering code

**4M 3 10 10 A** □ □

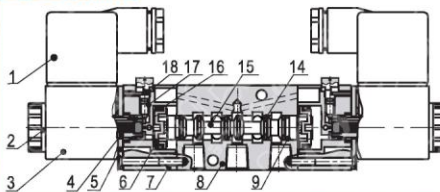
- Model**: 4M: Solenoid valve (5/2 way NAMUR type)
- Code**:
  - 1: 100 Series
  - 2: 200 Series
  - 3: 300 Series
- Valve type**:
  - 10: Single solenoid
  - 20: Double solenoid
- Port size**:
  - M5: M5
  - 06: 1/8"
  - 08: 1/4"
  - 10: 3/8"
- Thread type**:
  - Port size
  - Thread type
  - 1/8": Blank: PT
  - 1/4": T: NPT
  - 3/8": G: G
  - M5: Not this code
- Electrical entry**:
  - Blank: Terminal
  - I: Grommet
- Voltage**:
  - A: AC220V
  - B: DC24V
  - C: AC110V
  - E: AC24V
  - F: DC12V

### Inner structure

#### Single solenoid



#### Double solenoid



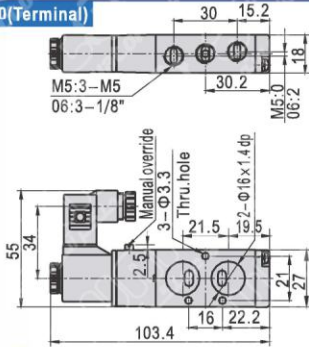
No.	Item	No.	Item
1	Connector	10	Bottom cover
2	Coil net	11	Fixed screw
3	Coil	12	Spool spring
4	Armature	13	Bottom cover gasket
5	Fixed plate	14	Spool O-ring
6	Piston	15	Spool
7	Pilot kit	16	Piston O-ring
8	Body	17	Override spring
9	Wear ring	18	Manual override



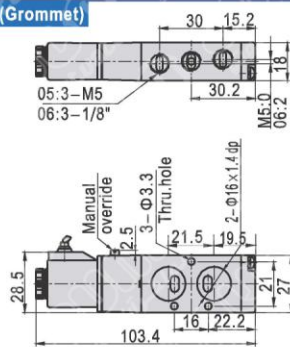
## Solenoid Valve (5/2 WAY) 4M (NAMUR) Series

### Dimensions

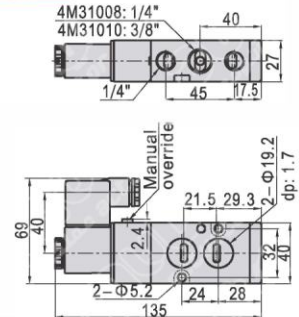
4M110(Terminal)



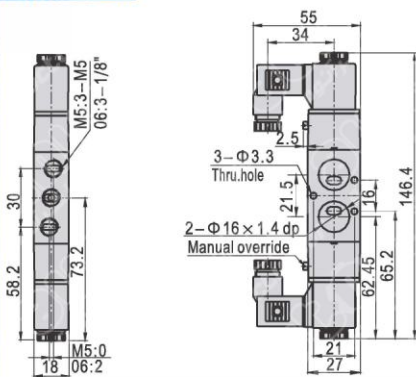
4M110(Grommet)



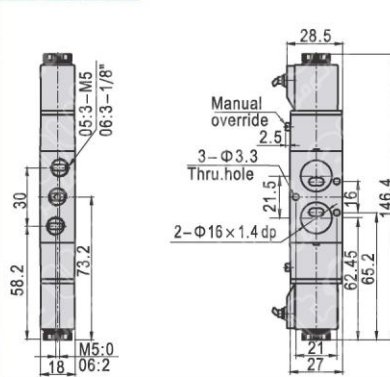
4M310(Terminal)



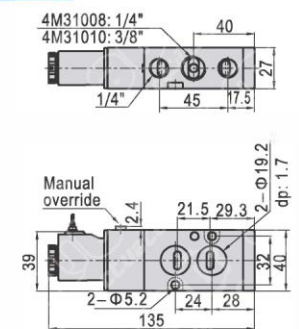
4M120(Terminal)



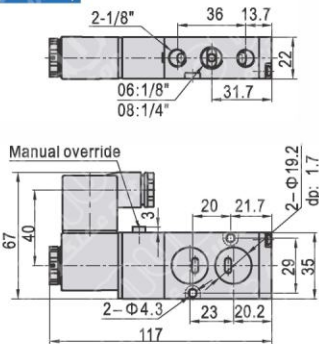
4M120(Grommet)



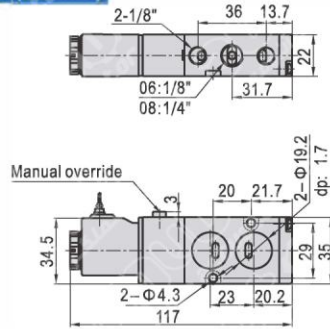
4M310(Grommet)



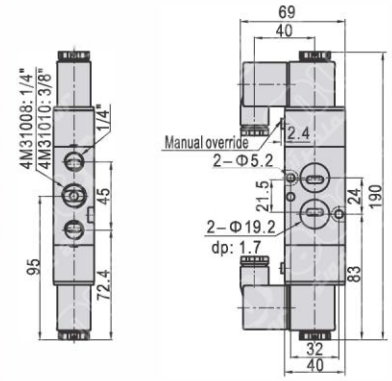
4M210(Terminal)



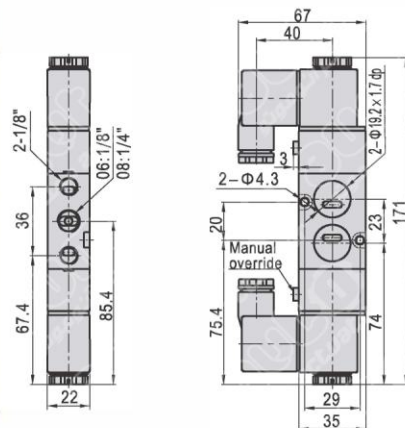
4M210(Grommet)



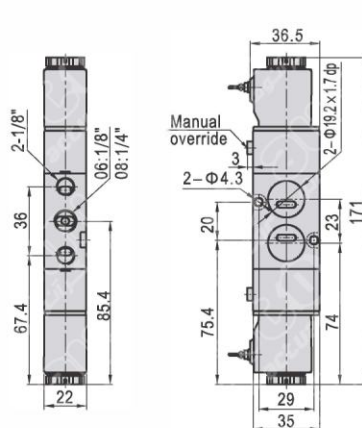
4M320(Terminal)



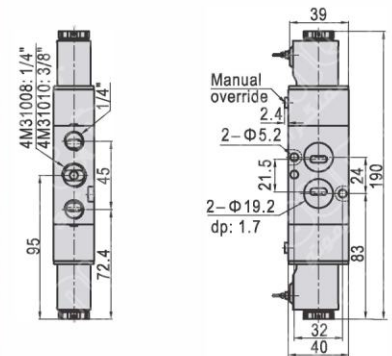
4M220(Terminal)



4M220(Grommet)



4M320(Grommet)





# اوموتو

**actuator** عملگر انوموتو

B u i l d A Q u a l i t y

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تلفن: ۰۲۱-۳۳۹۹۸۲۰۴-۵ تلفکس: ۰۲۱-۴۰۳۳۰۳۴۰

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