

Solenoid valve(5/2 way)

4M(NAMUR) Series

AIRTAC



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 ² (Cv=0.31)	12.0mm ² (Cv=0.67)	14.0mm ² (Cv=0.78)	16.0mm ² (Cv=0.89)	25.0mm ² (Cv=1.40)	30mm ² (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

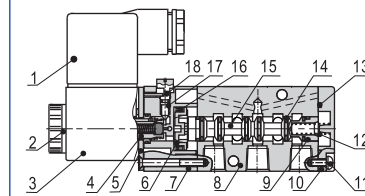
Item	4M110 4M120		4M210 4M220 4M310 4M320	
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V			
Scope of voltage	AC: ± 15%		DC: ± 10%	
Power consumption	AC:2.5VA	DC:2.5W	AC:3.5VA	DC:3.0W
Protection	IP65(DIN40050)			
Temperature classification	B Class			
Electrical entry	Terminal, Grommet			
Activating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

Ordering code

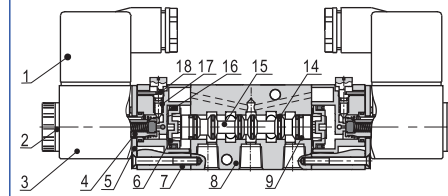
4M 3 10 10 A □ □	
Model	4M: Solenoid valve (5/2 way NAMUR type)
Code	1: 100 Series 2: 200 Series 3: 300 Series
Valve type	10: Single solenoid 20: Double solenoid
Port size	M5: M5 06: 1/8" 08: 1/4" 10: 3/8"
Thread type	Port size Thread type 1/8" Blank: PT 1/4" T: NPT 3/8" G: G M5 Not this code
Electrical 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

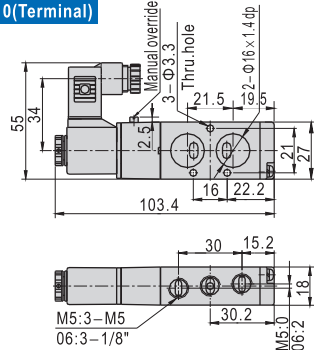
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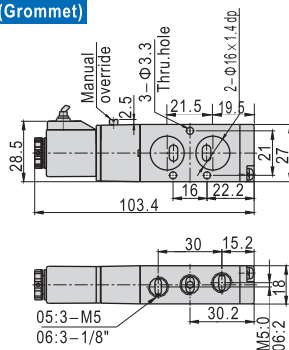
4M(NAMUR) Series

■ Dimensions

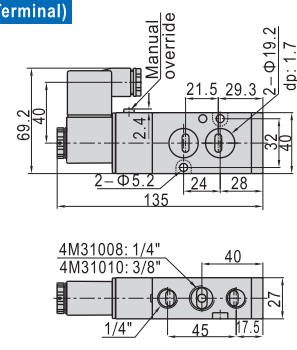
4M110(Terminal)



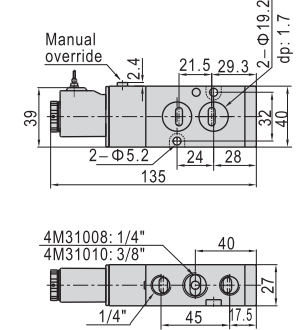
4M110(Grommet)



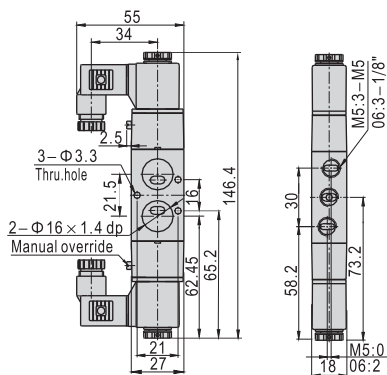
4M310(Terminal)



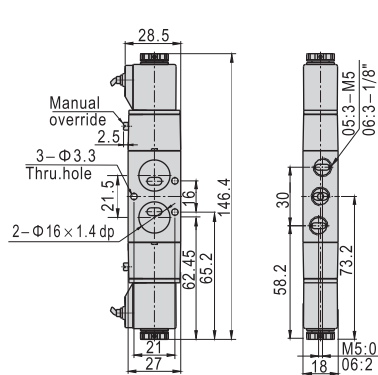
4M310(Grommet)



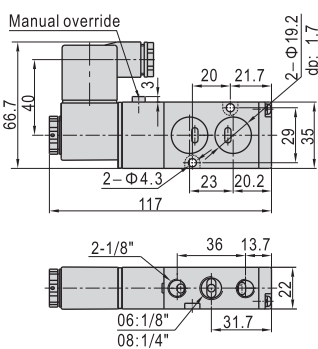
4M120(Terminal)



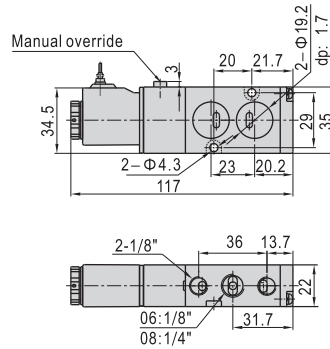
4M120(Grommet)



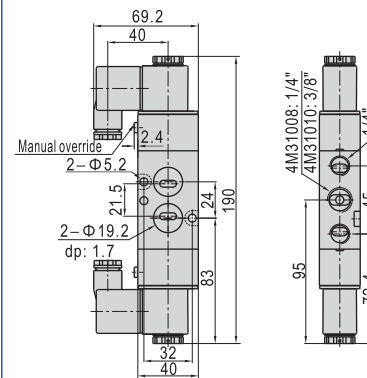
4M210(Terminal)



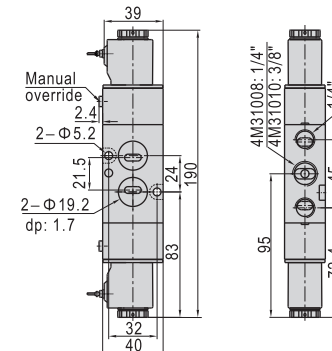
4M210(Grommet)



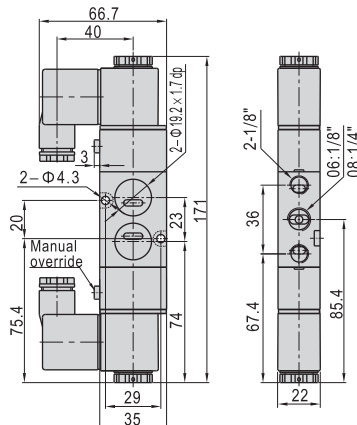
4M320(Terminal)



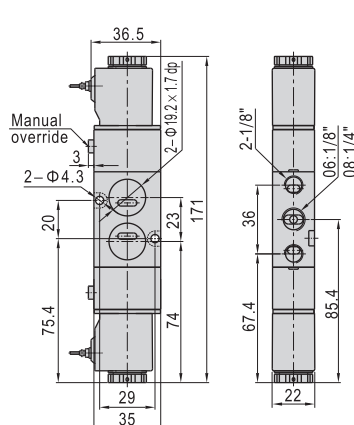
4M320(Grommet)



4M220(Terminal)



4M220(Grommet)



4M