

Valve

3V1
3V2
3V2M
3V3
3V100
3V200
3V300
4V100
4V200
4V300
4V400
HY-S1
HY-S2
HY-S3
HY-S4



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.

Specifications

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 40µm filter element)					
Acting	Internal piloted					
Port size ①	In=Exhaust =M5	In=Exhaust =1/8"	In=Exhaust =1/8"	In=PT1/4 Exhaust=1/8"	In=Exhaust =1/4"	In=PT3/8 Exhaust=1/4"
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)	30.0mm ² (Cv=1.68)
Valve type	5 port 2 position					
Operating pressure	0.15~0.8MPa(21~114psi)					
Proof pressure	1.2MPa(175psi)					
Temperature (°C)	-20~70					
Material of body	Aluminum alloy					
Lubrication ②	Not required					
Max. frequency ③	5 cycle/sec				4 cycle/sec	
Weight(g)	4M110:120 4M120:175	4M210:220 4M220:320	4M310:310 4M320:400			

① PT thread, G thread and NPT 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 specifications

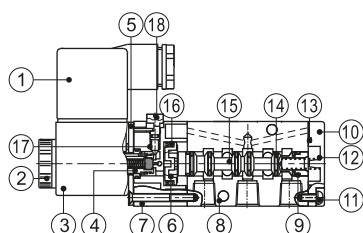
Item	4M110 4M120					4M210	4M220	4M310	4M320	
Standard voltage	AC220V	AC110V	AC24V	DC24V	DC12V	AC220V	AC110V	AC24V	DC24V	DC12V
Scope of voltage	AC: ±15%					DC: ±10%				
Power consumption	3.5VA	3.5VA	4.0VA	2.5VA	2.5VA	4.5VA	4.5VA	5.0VA	3.0W	3.0W
Protection	IP65(DIN40050)									
Temperature classification	B Class									
Electrical entry	Terminal, Grommet									
Activating time	0.05 sec and below									

Ordering code

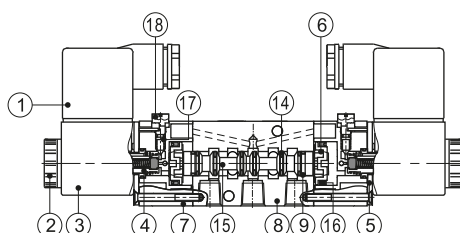
Model	Code	Valve type	Port size	Voltage	Electrical entry	Thread type
4M	3	10	10	A	☐	☐
4M	4M	10	M5	A	Blank	Port size
4M	4M	10	M5	A	Terminal	Thread type
4M	4M	10	M5	A	Grommet	1/8"
4M	4M	10	M5	A	Blank	1/4"
4M	4M	10	M5	A	Grommet	3/8"
4M	4M	10	M5	A	Blank	M5
4M	4M	10	M5	A	Grommet	Not this code

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	Reset spring
9	Wear ring	18	Manual reset

