

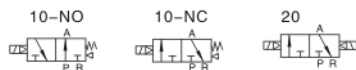
# Solenoid valve ( 3/2 way )

3V100 Series

**AIRTAC**



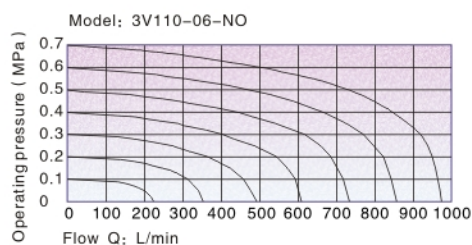
## Symbol



## Product feature

- 1、Pilot-oriented mode: internally piloted
- 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、Affiliated manual devices are equipped to facilitate installation and debugging;
- 7、Several standard voltage grades are optional;
- 8、Integrate with the manifold to save installation space.

## Flow chart



## Specification

Model	3V110-M5	3V120-M5	3V110-06	3V120-06
Fluid	Air( to be filtered by 40um filter element)			
Acting	Internally piloted			
Port size ①	M5		1/8"	
Orifice size	5.5mm <sup>2</sup> (Cv=0.31)		12.0mm <sup>2</sup> (Cv=0.67)	
Valve type	3 port 2 position			
Lubrication ②	Not required			
Operating pressure	0.15~0.8MPa(21~114Psi)			
Proof pressure	1.5MPa(215Psi)			
Temperature ℃	-20~70			
Material of body	Aluminum alloy			

① PT thread、NPT thread and G thread are available;

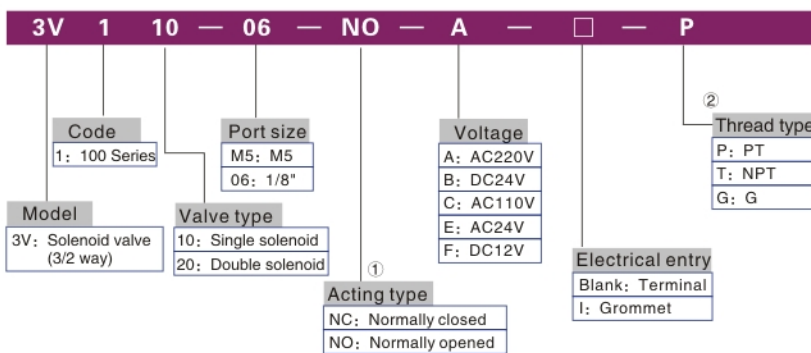
② It can not stop in the midway of lubricating. Lubricants like ISO VG32 or equivalent are recommended.

## 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
Max. frequency ①	5 cycle/sec

① The maximum actuation frequency is in the no-load state.

## Ordering code



①Remark: 2 position double control solenoid valves have no differences between normally opened and normally closed state, thus this code is blank.

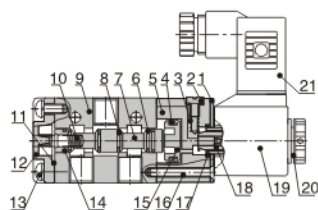
②When the thread is M5 type, the code is blank.  
Please refer to PI-33 for manifold specification and the order way.

# Solenoid valve ( 3/2 way )

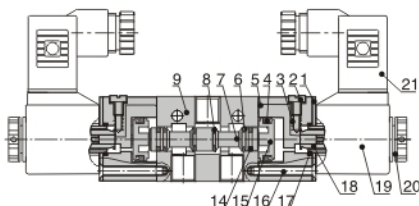
3V100 Series

## Inner structure

3V110



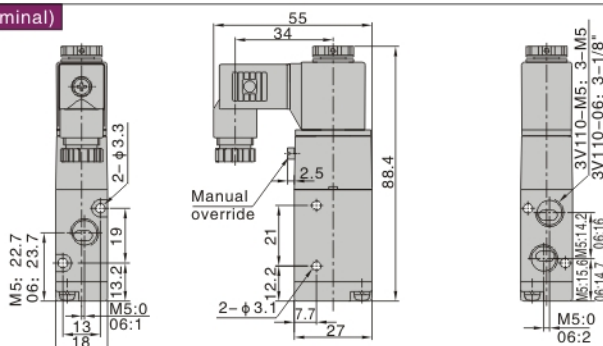
3V120



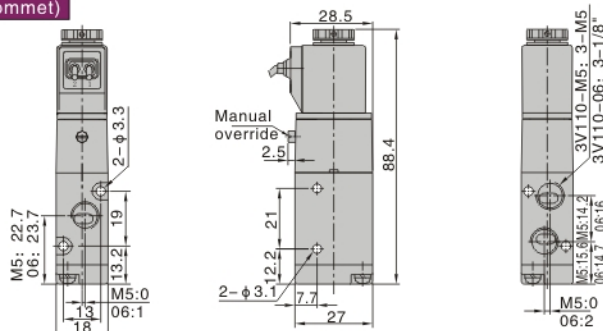
NO.	Item	NO.	Item	NO.	Item
1	Fixed plate	8	O-ring	15	Piston
2	Manual override	9	Body	16	Pilot screw
3	Override spring	10	Spool spring	17	O-ring
4	Piston O-ring	11	Bottom cover gasket	18	Armature
5	Pilot body	12	Bottom cover	19	Coil
6	Spool packing	13	Screw	20	Coil nut
7	Spool	14	Wear ring	21	Connector

## Dimensions

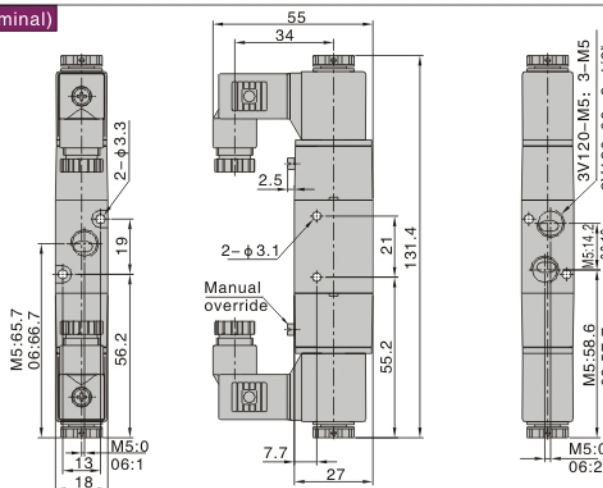
3V110(Terminal)



3V110(Grommet)



3V120(Terminal)



3V120(Grommet)

