

SOLENOID VALVE(3/2 WAY)

3V100 SERIES

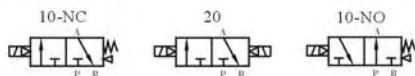


■ Specification

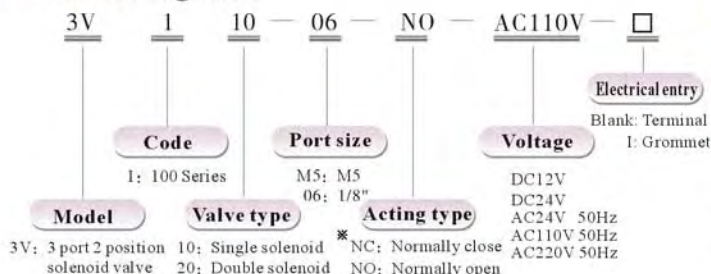
Model	3V110-M5	3V120-M5	3V110-06	3V120-06
Fluid	Air (to be filtered by 40 μ filter element)			
Acting	Internally piloted			
Port size	In=Out=M5		In=Out=1/8"	
Valve type	3 port 2 position			
Temperature	-5~60°C (23~140°F)			
Orifice size	5.5mm ² (Cv=0.31)		12mm ² (Cv=0.67)	
Lubrication	Not required			
Operating pressure	1.5~8.0 bar (0.15~0.8MPa)(21~114Psi)			
Proof pressure	12.0 bar (1.2MPa)(170Psi)			
Power consumption	AC: 2.5VA DC: 2.5W			
Protection	IP65 (DIN40050)			
Connection	DIN Terminal or Grommet			
Material of body	Aluminum alloy			
Max. frequency	5 cycle/sec			
Insulation	B class			
Voltage range	-15%~+10%			
Min. activate time	0.05 sec			

*Note: PT, NPT, BSPP Thread are available.

■ Symbol

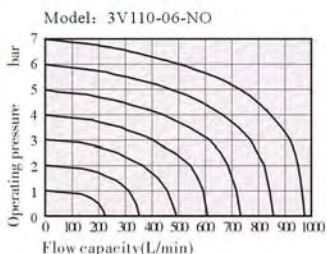


■ Ordering code

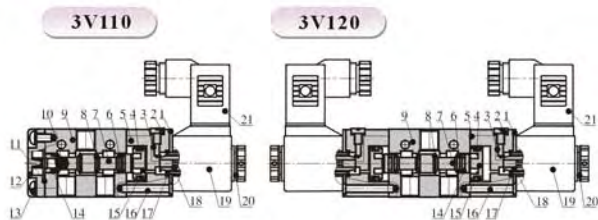


* Only single solenoid type has this specification.

■ Flow chart



■ Inner structure



NO.	Item	NO.	Item	NO.	Item
1	Fixed plate	8	Spool O-ring	15	Piston
2	Manual override	9	Body	16	Pilot screw
3	Override spring	10	Spool spring	17	Armature 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	Wearing ring	21	Connector

■ Material of major parts

Model	3V110	3V120
Body	Aluminum alloy	
Spool	Aluminum alloy	
Override O-ring	NBR	
Connector gasket	NBR	
Spool packing	HNBR	
Bottom cover gasket	NBR	-
Pilot O-ring	NBR	
Pilot body	Plastic	
Piston	POM	
Manual override	Iron	
Fixed plate	Steel with nickel plated	
Coil nut	Plastic	
Bottom cover	Zinc alloy	-
Override spring	Stainless steel	
Spool spring	Stainless steel	
Screw	Carbon steel	
Solenoid lining	Copper	
Armature	Pure iron	
Copper cover	Bronze	
Connector	Plastic	



SOLENOID VALVE(3/2 WAY)

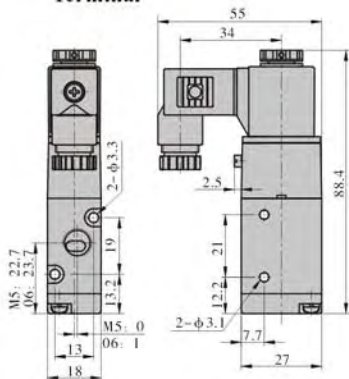
3V100 SERIES

AIRTAC

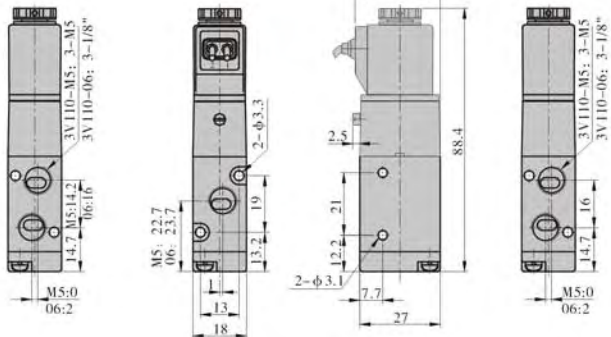
■ Dimensions

3V110

Terminal

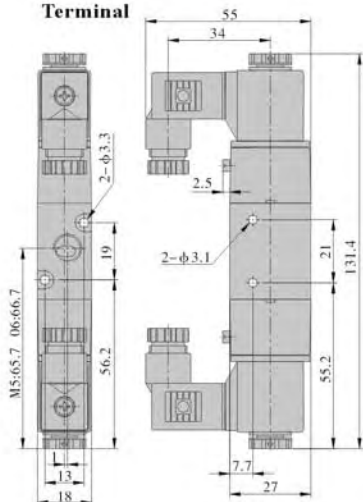


Grommet

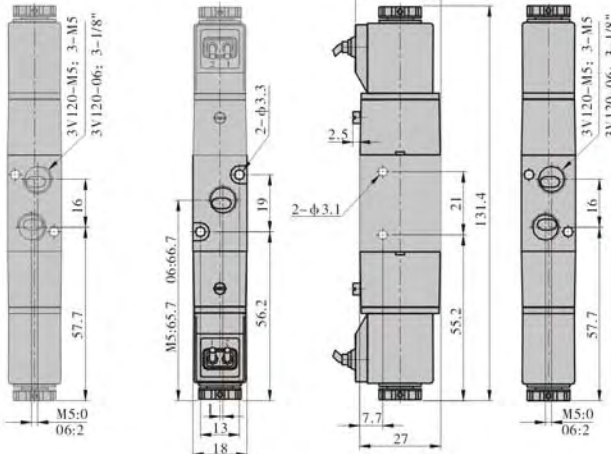


3V120

Terminal



Grommet



SOLENOID VALVE(3/2 WAY)

3V200 SERIES

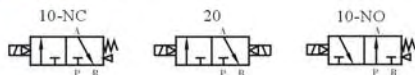


■ Specification

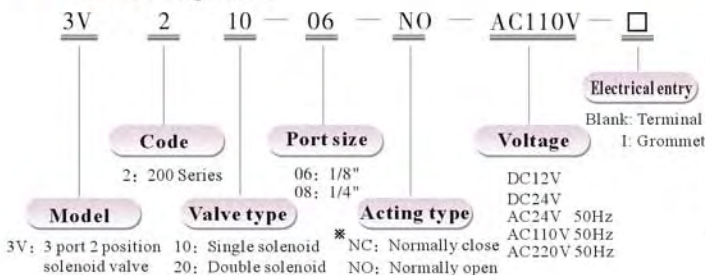
Model	3V210-06	3V220-06	3V210-08	3V220-08
Fluid	Air (to be filtered by 40 μm filter element)			
Acting	Internally piloted			
Port size	In=Out=1/8"		In=Out=1/4"	
Valve type	3 port 2 position			
Temperature	-5~60°C (23~140°F)			
Orifice size	14mm ² (Cv=0.78)		16mm ² (Cv=0.89)	
Lubrication	Not required			
Operating pressure	1.5~8.0 bar (0.15~0.8MPa)(21~114Psi)			
Proof pressure	12.0 bar (1.2MPa)(170Psi)			
Power consumption	AC: 3.5VA DC: 2.5W			
Protection	IP65 (DIN40050)			
Connection	DIN Terminal or Grommet			
Material of body	Aluminum alloy			
Max.frequency	5 cycle/sec			
Insulation	B class			
Voltage range	-15%~+10%			
Min. activate time	0.05 sec			

*Note: PT, NPT, BSPP Thread are available.

■ Symbol



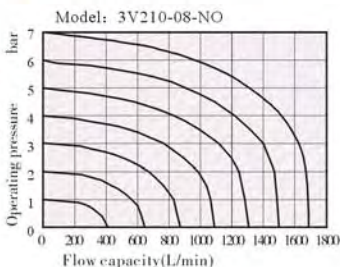
■ Ordering code



3V: 3 port 2 position solenoid valve 10: Single solenoid 20: Double solenoid NO: Normally open

* Only single solenoid type has this specification.

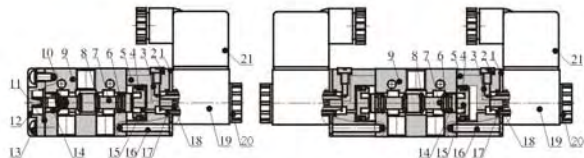
■ Flow chart



■ Inner structure

3V210

3V220



NO.	Item	NO.	Item	NO.	Item
1	Fixed plate	8	Spool O-ring	15	Piston
2	Manual override	9	Body	16	Pilot screw
3	Override spring	10	Spool spring	17	Armature 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	Wearing ring	21	Connector

■ Material of major parts

Model	3V210	3V220
Body	Aluminum alloy	
Spool	Aluminum alloy	
Override O-ring	NBR	
Connector gasket	NBR	
Spool packing	HNBR	
Bottom cover gasket	NBR	-
Pilot O-ring	NBR	
Pilot body	Plastic	
Piston	Plastic	
Manual override	Plastic	
Fixed plate	Steel with nickel plated	
Coil nut	Plastic	
Bottom cover	Zinc alloy	-
Override spring	Stainless steel	
Spool spring	Stainless steel	
Screw	Carbon steel	
Solenoid lining	Copper	
Armature	Pure iron	
Copper cover	Bronze	
Connector	Plastic	



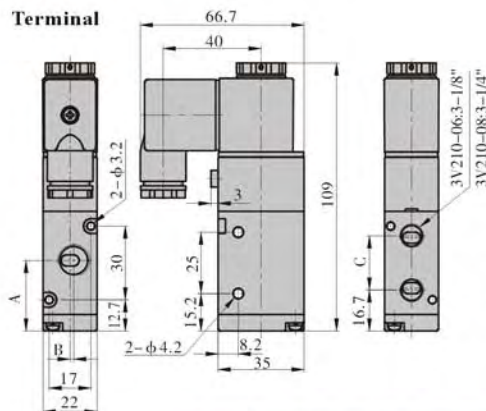
SOLENOID VALVE(3/2 WAY)

3V200 SERIES

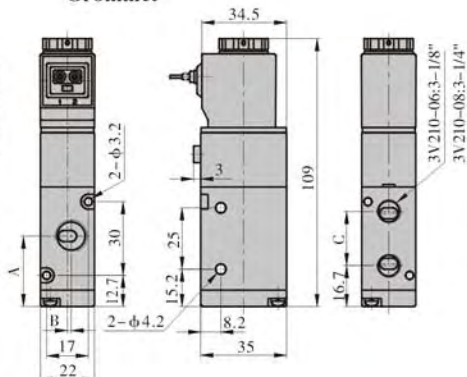
■ Dimensions

3V210

Terminal



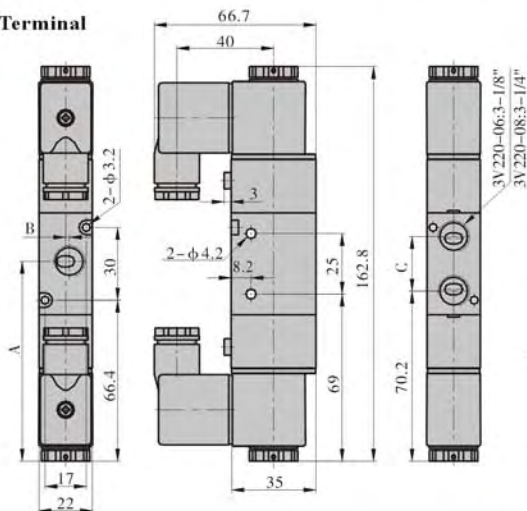
Grommet



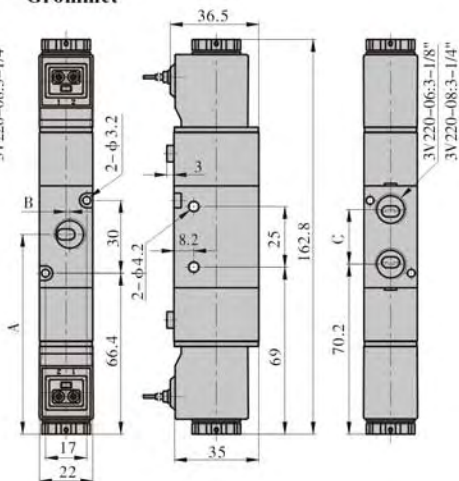
Item\Model	3V210-06	3V210-08
A	27.7	28.7
B	0	1.5
C	22	22.5

3V220

Terminal



Grommet



Item\Model	3V220-06	3V220-08
A	81.4	82.4
B	0	1.5
C	22	22.5

SOLENOID VALVE(3/2 WAY)

3V300 SERIES

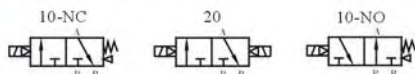


■ Specification

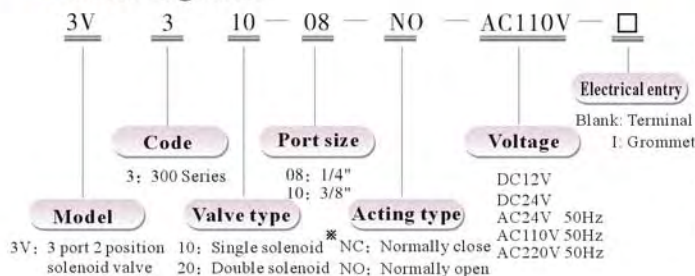
Model	3V310-08	3V320-08	3V310-10	3V320-10
Fluid	Air (to be filtered by 40 μm filter element)			
Acting	Internally piloted			
Port size	In=Out=1/4"		In=Out=3/8"	
Valve type	3 port 2 position			
Temperature	-5~60°C (23~140°F)			
Orifice size	25mm ² (Cv=1.39)		30mm ² (Cv=1.67)	
Lubrication	Not required			
Operating pressure	1.5~8.0 bar (0.15~0.8MPa)(21~114Psi)			
Proof pressure	12.0 bar (1.2MPa)(170Psi)			
Power consumption	AC: 3.5VA DC: 2.5W			
Protection	IP65 (DIN40050)			
Connection	DIN Terminal or Grommet			
Material of body	Aluminum alloy			
Max.frequency	5 cycle/sec			
Insulation	B class			
Voltage range	-15%~+10%			
Min. activate time	0.05 sec			

*Note: PT, NPT, BSPP Thread are available.

■ Symbol

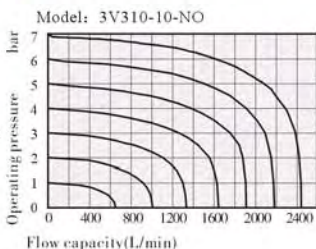


■ Ordering code



* Only single solenoid type has this specification.

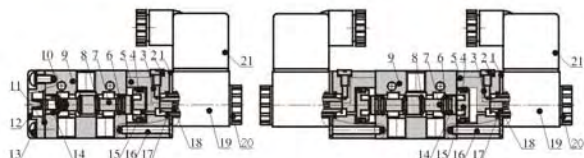
■ Flow chart



■ Inner structure

3V310

3V320



NO.	Item	NO.	Item	NO.	Item
1	Fixed plate	8	Spool O-ring	15	Piston
2	Manual override	9	Body	16	Pilot screw
3	Override spring	10	Spool spring	17	Armature 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	Wearing ring	21	Connector

■ Material of major parts

Model	3V310	3V320
Body	Aluminum alloy	
Spool	Aluminum alloy	
Override O-ring	NBR	
Connector gasket	NBR	
Spool packing	HNBR	
Bottom cover gasket	NBR	-
Pilot O-ring	NBR	
Pilot body	Plastic	
Piston	Plastic	
Manual override	Plastic	
Fixed plate	Steel with nickel plated	
Coil nut	Plastic	
Bottom cover	Zinc alloy	-
Override spring	Stainless steel	
Spool spring	Stainless steel	
Screw	Carbon steel	
Solenoid lining	Copper	
Armature	Pure iron	
Copper cover	Bronze	
Connector	Plastic	



SOLENOID VALVE(3/2 WAY)

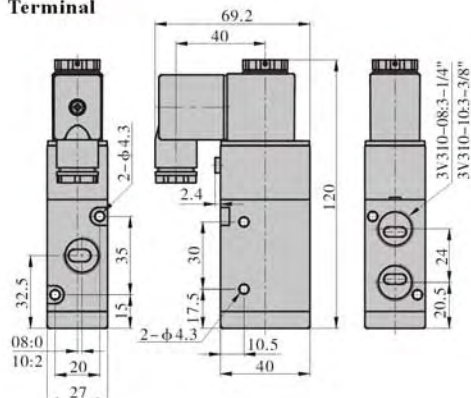
3V300 SERIES

AIRTAC

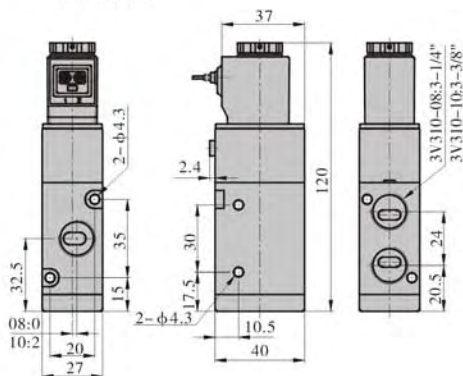
■ Dimensions

3V310

Terminal

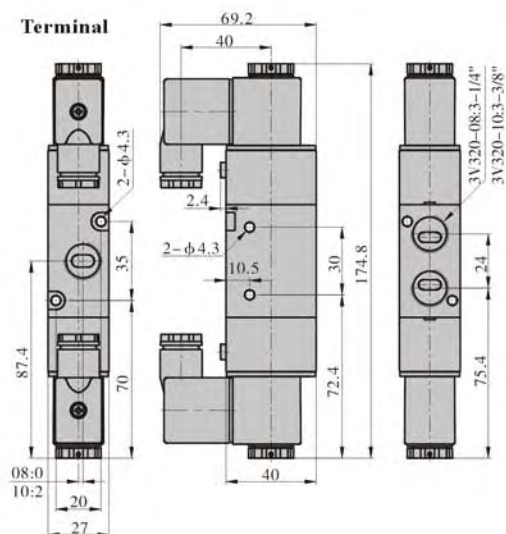


Grommet



3V320

Terminal



Grommet

