



Solenoid valve(3/2, 5/2, 5/3 way)

■ Product series

Solenoid valve: 3V1Series 18



Solenoid valve: 3V100 Series 20



Solenoid valve: 3V200 Series 22



Solenoid valve: 3V300 Series 24



Solenoid valve: 4V100 Series 26



Solenoid valve: 4V200 Series 28



Solenoid valve: 4V300 Series 30



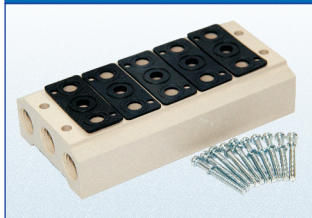
Solenoid valve: 4V400 Series 32



Solenoid valve: 4M(NAMUR) Series 34



Manifold 36



Solenoid valve(ISO standard): ESV Series 38



Solenoid valve: 7V, 7MV Series 49



Solenoid valve

■ Installation and Application

1. Before installing, be sure the valve hasn't been damaged via transportation.
2. It's suggested to use the medium lubricated by 40 μ m filter element. Be aware of the flow direction and port size.
3. Please notice whether the installation condition accords with technical requirements (such as "voltage", "actuation frequency", "working pressure" and "scope of application temperature"), then the equipment can be installed and used.
4. Notice the flow direction of air during installation, P is the air intake, A (B) is the work port and R (S) is the exhaust outlet.
5. Take measure to avoid vibration and frozen.
6. Before using the fittings and tubes make sure they are clean. When connecting to fittings, be sure the PTFE Thread Seal Tape is used correctly.
7. To keep the dust away, please use the silencer for the exhaust ports. Never forget to install dirt-proof boot in air intake and outlet during dismounting.
8. After installing, please use the manual override to test valve first.



Solenoid valve(3/2 way)

AIRTAC

3V1 Series



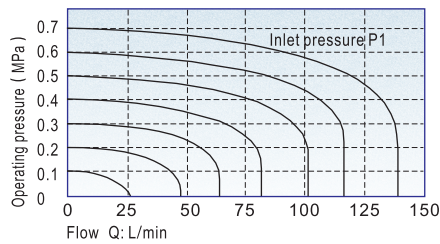
Symbol



Product feature

1. Direct acting type and normally closed mode, flexible in direction change.
2. No need to add oil for lubrication.
3. Several valves can be installed integrately to save installation space.
4. Affiliated manual devices are equipped to facilitate installation and debugging.
5. Several standard voltage grades are optional.

Flow chart



Ordering code

3V 1 06 A □ P □			
Model		Valve's code	
3V: Solenoid valve (3/2 way)		Blank: Use for series D: Use for single	
Code		Thread type	
1: 1 Series		Port size Thread type	
Port size		1/8" P: PT T: NPT G: G M5 Not this code	
Voltage		Electrical entry	
A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V		Blank: Terminal I: Grommet	

Specification

Model	3V1-M5	3V1-06
Fluid	Air(to be filtered by 40 μm filter element)	
Acting	Direct acting	
Port size ①	M5	1/8"
Valve type	3 port 2 position	
Lubrication	Not required	
Operating pressure	0~0.8MPa(0~114psi)	
Proof pressure	1.5MPa(215psi)	
Temperature °C	-20~70	
Orifice size	Φ1.2mm	
Material of body	Aluminum alloy	

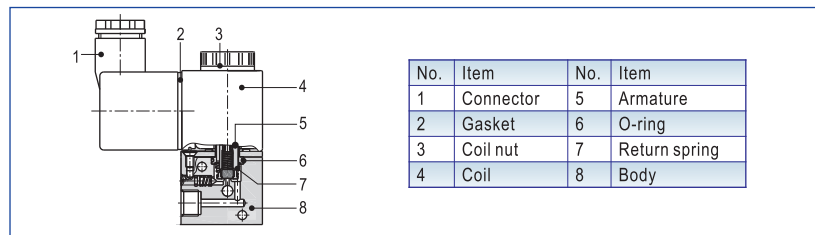
① PT thread, NPT thread and G thread are available.

Coil specification

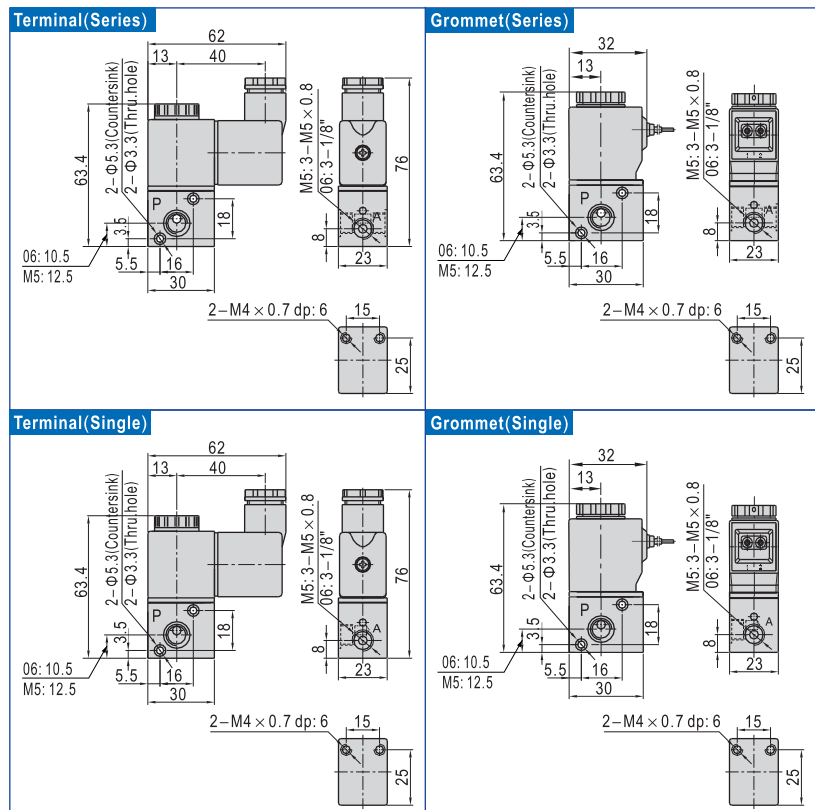
Item	Specification
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ±15% DC: ±10%
Power consumption	AC:3.5VA DC:3.0W
Protection	IP65(DIN40050)
Temperature classification	B Class
Electrical entry	Terminal, Grommet
Activating time	0.05 sec and below
Max. frequency ①	10 cycle/sec

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

Inner structure



Dimensions

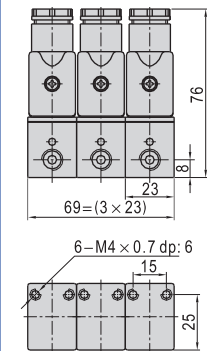


Solenoid valve(3/2 way)
3V1 Series

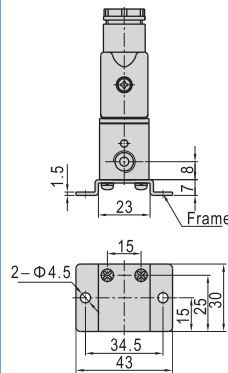


Series connection

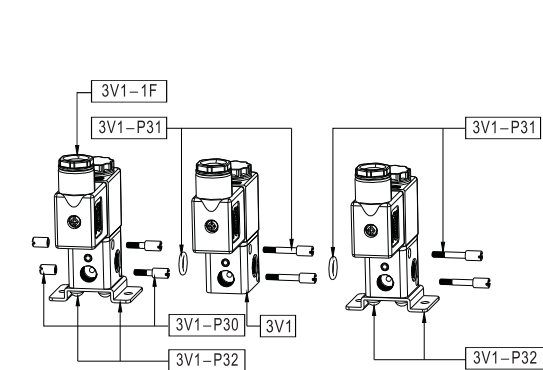
Dimensions(3F)



Dimensions(1F)



How to joint



Product structure

Connection Amount\Q.TY	3V1	3V1-P30	3V1-P31	3V1-P32
3V1-□-□-1F	1	0	0	1
3V1-□-□-2F	2	1	1	1
.....		1		
3V1-□-□- nF	n	1	n-1	2

Note: n is the number of junction valve, and $n \geq 3$

Ordering code for series

3V1 06 A □ 3F P

Model
3V: Solenoid valve(3/2 way)

Port size
M5: M6
06: 1/8"

Voltage
A: AC220V
B: DC24V
C: AC110V
E: AC24V
F: DC12V

Electrical entry
Blank: Terminal
I: Grommet

Thread type
Port size Thread type
1/8" P: PT
T: NPT
G: G
M5 Not this code

Number of stations
1F: 1 Station
2F: 2 Station
3F: 3 Station
.....
20F: 20 Station

The above codes have included the series accessories, so it is unnecessary to order the accessories specially. But if you like, you could order as follows.

Code of accessories	Accessory name	Part code	Part name	Quantity
3V1-P30	Coupling screw assembly	F-3V1002N	Coupling screw(S)	2
		F-3V1003N	Coupling screw(M)	2
3V1-P31	Coupling screw assembly	GOR20008N75	O-Ring	1
		F-3V1004N	Coupling screw(L)	2
3V1-P32	Bracket assembly	F-3V1001N	Fixed mounting	1
		GSDA04008WA	Cross round head screw	2



3V1

Solenoid valve(3/2 way)

AIRTAC

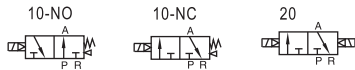
3V100 Series



3V100



Symbol

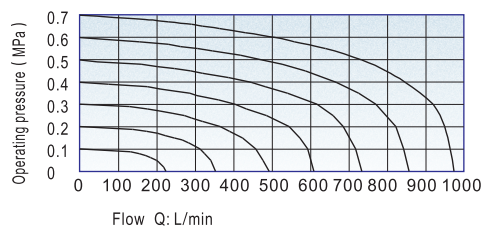


Product feature

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

Model: 3V110-06-NO



Specification

Model	3V110-M5	3V120-M5	3V110-06	3V120-06
Fluid	Air(to be filltered by 40 μ m filter element)			
Acting	Piloted			
Port size ①	M5		1/8"	
Orifice size	5.5mm ² (Cv=0.31)		12.0mm ² (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 °C	-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

3V 1 10 06 NO A □ P			
Model	3V: Solenoid valve(3/2 way)	Thread type	Port size Thread type
Code	1: 100 Series		1/8" P: PT
Valve type	10: Single solenoid		T: NPT
	20: Double solenoid		G: G
Port size	M5: M6		M5 Not this code
	06: 1/8"	Electrical entry	Blank: Terminal
Acting type	Valve type Acting type		I: Grommet
	10 NC: Normally closed	Voltage	A: AC220V
	NO: Normally opened		B: DC24V
	20 Not code		C: AC110V
			E: AC24V
			F: DC12V

Please refer to 36 for manifold specification and the order way.



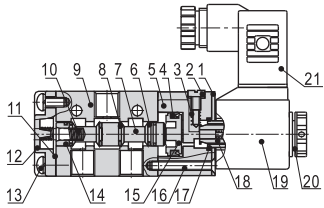
Solenoid valve(3/2 way)



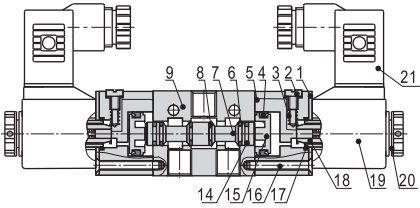
3V100 Series

Inner structure

3V110



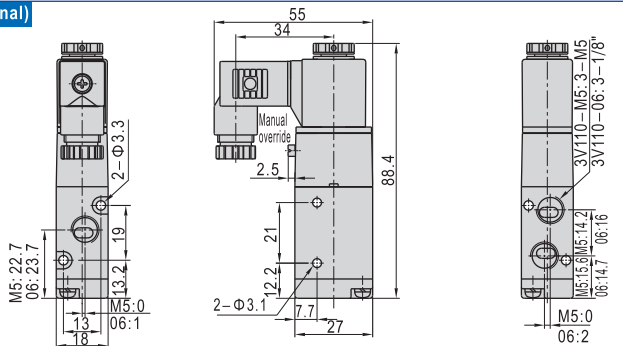
3V110



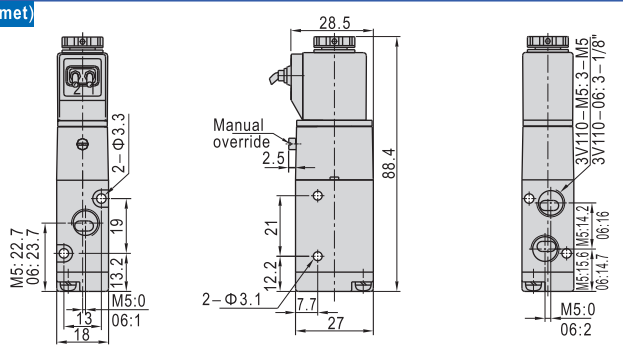
No.	Item	No.	Item	No.	Item
1	Fixed plate	8	O-ring	15	Piston
2	Manual override	9	Body	16	Pilot screw
3	Override spring	10	Spool spring	17	O-ring
4	Piston O-ring	11	Bottom cover gasket	18	Armature
5	Pilot body	12	Bottom cover	19	Coil
6	Spool packing	13	Screw	20	Coil net
7	Spool	14	Wear ring	21	Connector

Dimensions

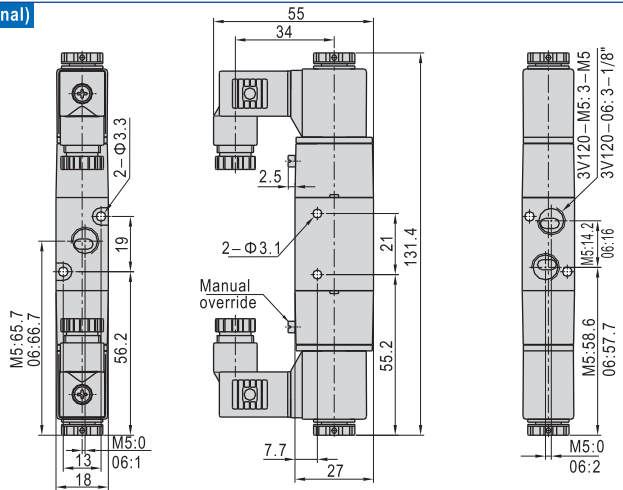
3V110(Terminal)



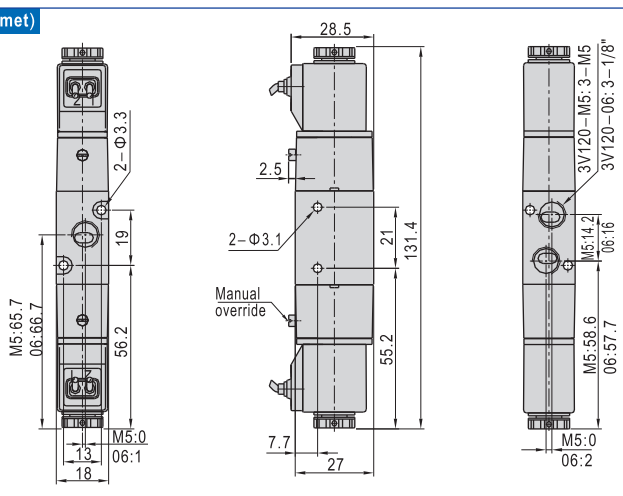
3V110(Grommet)



3V120(Terminal)



3V120(Grommet)





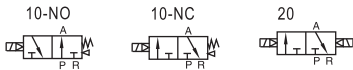
3V100



Solenoid valve(3/2 way)
3V200 Series



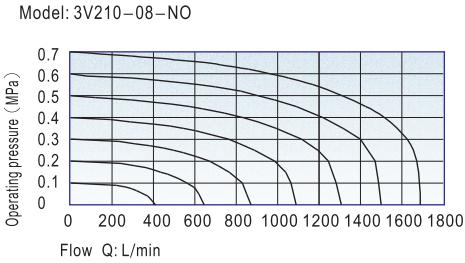
Symbol



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	3V210-06	3V220-06	3V210-08	3V220-08
Fluid	Air(to be filtered by 40 μ m filter element)			
Acting	Piloted			
Port size ①	In=Out=1/8"		In=Out=1/4"	
Orifice size	14.0mm ² (Cv=0.78)		16.0mm ² (Cv=0.89)	
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:3.5VA DC:3.0W
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

3V 2 10 08 NO A □ P

Model

3V: Solenoid valve(3/2 way)

Code

2: 200 Series

Valve type

10: Single solenoid

20: Double solenoid

Port size

06: 1/8"

08: 1/4"

Acting type

Valve type	Acting type
10	NC: Normally closed
	NO: Normally opened
20	Not code

Thread type

P: PT

T: NPT

G: G

Electrical entry

Blank: Terminal

I: Grommet

Voltage

A: AC220V

B: DC24V

C: AC110V

E: AC24V

F: DC12V

Please refer to 36 for manifold specification and the order way.



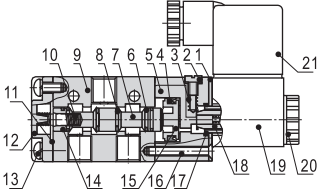
Solenoid valve(3/2 way)



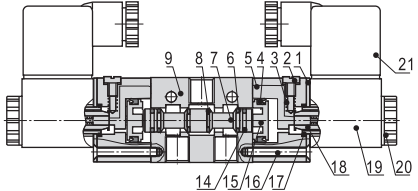
3V200 Series

Inner structure

3V210



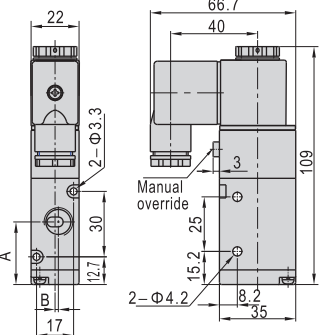
3V220



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 net
7	Spool	14	Wear ring	21	Connector

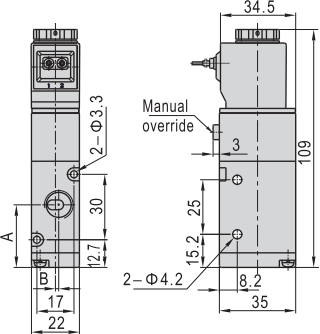
Dimensions

3V210(Terminal)



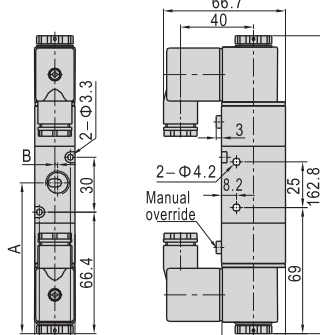
Item\Model	3V210-06	3V210-08
A	27.7	28.7
B	0	1.5
C	22	22.5
D	16.7	16.45

3V210(Grommet)



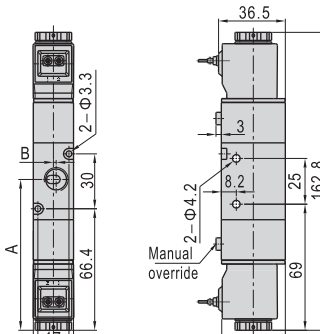
Item\Model	3V210-06	3V210-08
A	27.7	28.7
B	0	1.5
C	22	22.5
D	16.7	16.45

3V220(Terminal)



Item\Model	3V210-06	3V210-08
A	81.4	82.4
B	0	1.5
C	22	22.5
D	70.4	70.15

3V220(Grommet)



Item\Mod	3V210-	3V210-
A	81.4	82.4
B	0	1.5
C	22	22.5
D	70.4	70.15



3V200



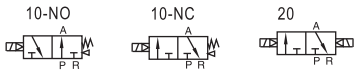
Solenoid valve(3/2 way)



3V300 Series



Symbol

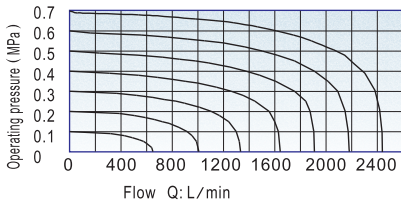


Product feature

- 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

Model: 3V310-10-NO



Specification

Model	3V310-08	3V320-08	3V310-10	3V320-10
Fluid	Air(to be filtered by 40 μ m filter element)			
Acting	Piloted			
Port size ①	In=Out=1/4"		In=Out=3/8"	
Orifice size	25.0mm ² (Cv=1.39)		30.0mm ² (Cv=1.67)	
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:3.5VA DC:3.0W
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

3V 3 10 10 NO A □ P

Model

3V: Solenoid valve(3/2 way)

Code

3: 300 Series

Valve type

10: Single solenoid
20: Double solenoid

Port size

08: 1/4"
10: 3/8"

Acting type

Valve type	Acting type
10	NC: Normally closed NO: Normally opened
20	Not code

Thread type

P: PT
T: NPT
G: G

Electrical entry

Blank: Terminal
I: Grommet

Voltage

A: AC220V
B: DC24V
C: AC110V
E: AC24V
F: DC12V

Please refer to 36 for manifold specification and the order way.



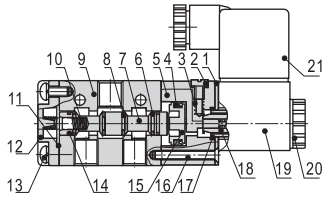
Solenoid valve(3/2 way)



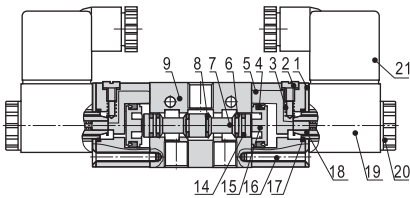
3V300 Series

Inner structure

3V310



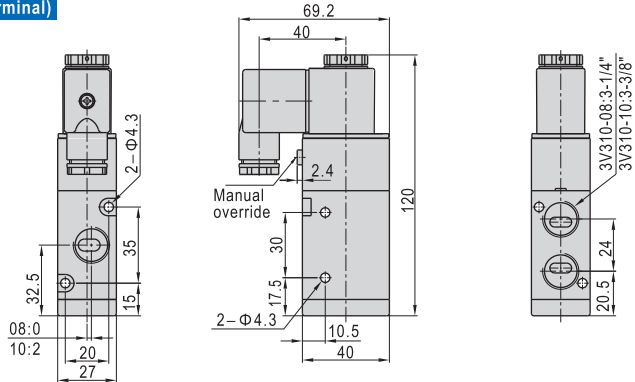
3V320



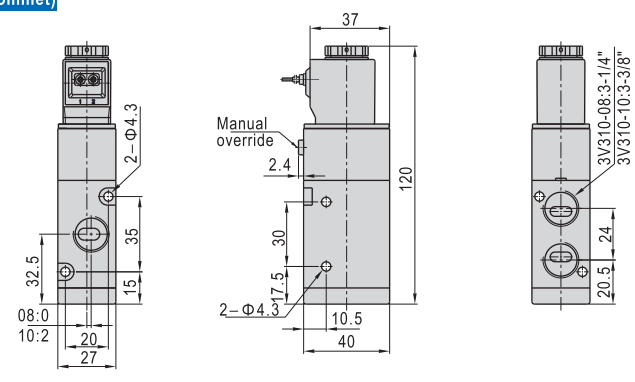
No.	Item	No.	Item	No.	Item
1	Fixed plate	8	O-ring	15	Piston
2	Manual override	9	Body	16	Pilot screw
3	Override spring	10	Spool spring	17	O-ring
4	Piston O-ring	11	Bottom cover gasket	18	Armature
5	Pilot body	12	Bottom cover	19	Coil
6	Spool packing	13	Screw	20	Coil net
7	Spool	14	Wear ring	21	Connector

Dimensions

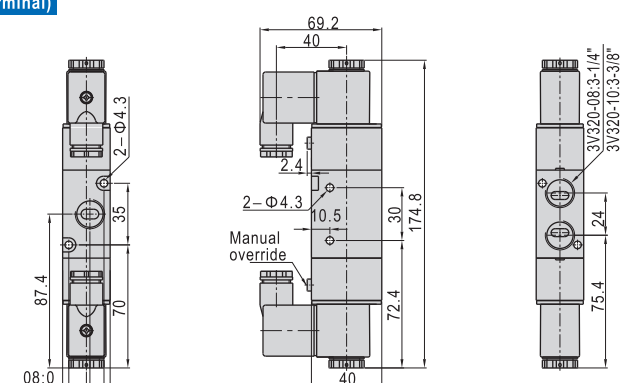
3V310(Terminal)



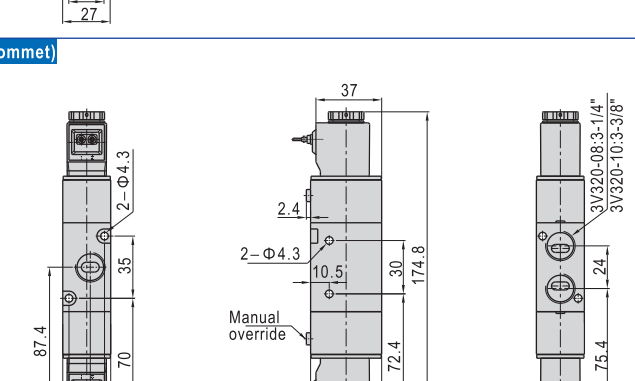
3V310(Grommet)



3V320(Terminal)



3V320(Grommet)





3V300



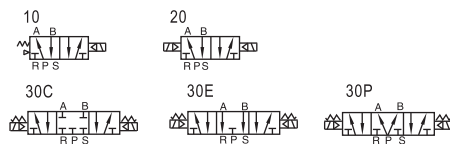
Solenoid valve(5/2 , 5/3 way)

AIRTAC

4V100 Series



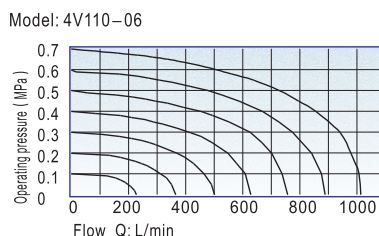
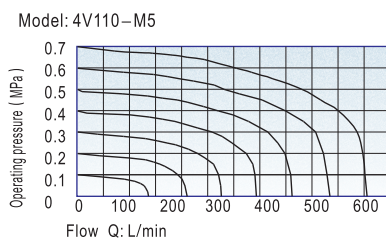
Symbol



Product feature

1. Pilot-oriented mode: optional for internal or external.
2. Structure in sliding column mode: good tightness and sensitive reaction.
3. Three position solenoid valves have three kinds of central function for your choice.
4. Double control solenoid valves have memory function.
5. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
6. No need to add oil for lubrication.
7. It is available to form integrated valve group with the base to save installation space.
8. Affiliated manual devices are equipped to facilitate installation and debugging.
9. Several standard voltage grades are optional.

Flow chart



Specification

Model	4V110-M5 4V120-M5	4V130C-M5 4V130E-M5 4V130P-M5	4V110-06 4V120-06	4V130C-06 4V130E-06 4V130P-06
Fluid	Air(to be filtered by 40 μ m filter element)			
Acting	Piloted			
Port size ①	In=Out=M5		In=Out=1/8"	
Orifice size	5.5mm ² (Cv=0.31)	5.0mm ² (Cv=0.28)	12.0mm ² (Cv=0.67)	9.0mm ² (Cv=0.50)
Valve type	5 port 3 position	5 port 2 position	5 port 3 position	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	3 cycle/sec	5 cycle/sec	3 cycle/sec
Weight	4V110-M5:120g 4V120-M5:175g	200g	4V110-06:120g 4V120-06:175g	200g

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.

③ The maximum actuation frequency is in the no-load state.

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

Ordering code

4V 1 10 06 A □ P	
Model	Thread type
4V: Solenoid valve(5/2, 5/3 way)	Port size Thread type
Code	P: PT
1: 100 Series	1/8" T: NPT
Valve type	G: G
10: Single solenoid 5/2 way	M5 Not this code
20: Double solenoid 5/2 way	Electrical entry
30C: Double solenoid 5/3 way closed center	Blank: Terminal
30E: Double solenoid 5/3 way exhaust center	I: Grommet
30P: Double solenoid 5/3 way pressure center	Voltage
Port size	A: AC220V
M5: M6	B: DC24V
06: 1/8"	C: AC110V
	E: AC24V
	F: DC12V

Please refer to 37 for manifold specification and the order way.



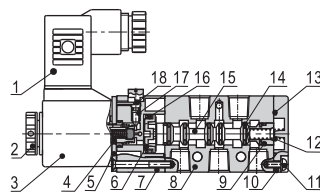
Solenoid valve(5/2 , 5/3 way)

AirTAC

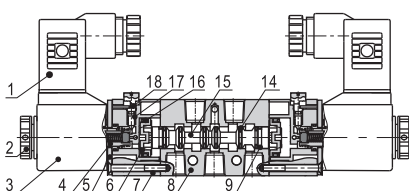
4V100 Series

Inner structure

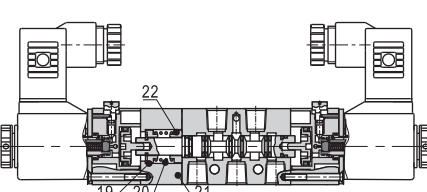
4V110



4V120



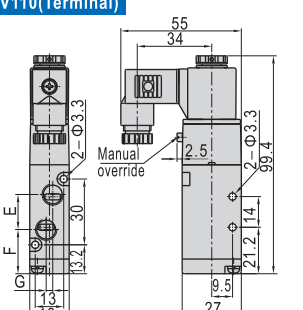
4V130C



No.	Item	No.	Item	N0.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit	15	Spool		
8	Body	16	Piston O-ring		

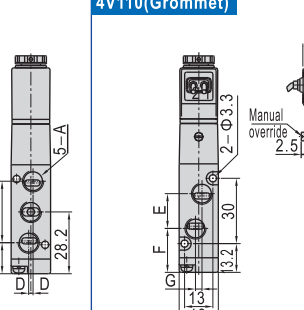
Dimensions

4V110(Terminal)



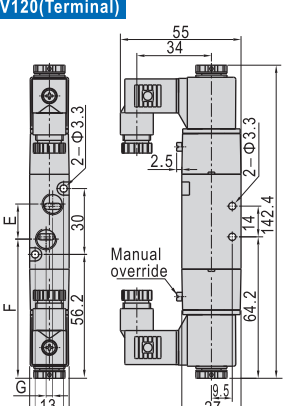
Model\Item	A	B	C	D	E	F	G
4V110-M5	M5x0.8	27	14.7	0	14	21.2	0
4V110-06	1/8"	28	14.2	1	16	20.2	3

4V110(Grommet)



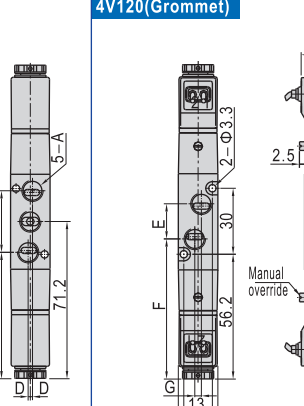
Model\Item	A	B	C	D	E	F	G
4V110-M5	M5x0.8	27	14.7	0	14	21.2	0
4V110-06	1/8"	28	14.2	1	16	20.2	3

4V120(Terminal)



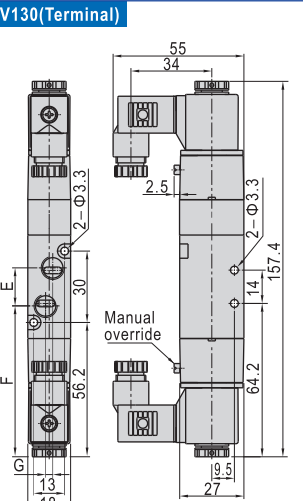
Model\Item	A	B	C	D	E	F	G
4V120-M5	M5x0.8	27	57.7	0	14	64.3	0
4V120-06	1/8"	28	57.2	1	16	63.2	3

4V120(Grommet)



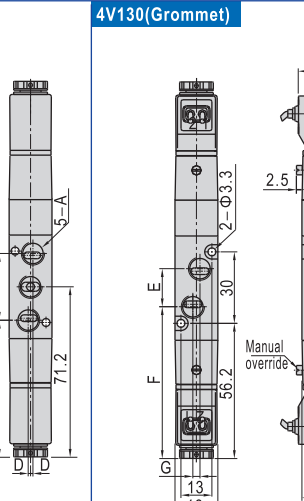
Model\Item	A	B	C	D	E	F	G
4V120-M5	M5x0.8	27	57.7	0	14	64.3	0
4V120-06	1/8"	28	57.2	1	16	63.2	3

4V130(Terminal)



Model\Item	A	B	C	D	E	F	G
4V130-M5	M5x0.8	27	57.7	0	14	64.3	0
4V130-06	1/8"	28	57.2	1	16	63.2	3

4V130(Grommet)



Model\Item	A	B	C	D	E	F	G
4V130-M5	M5x0.8	27	57.7	0	14	64.3	0
4V130-06	1/8"	28	57.2	1	16	63.2	3



4V100



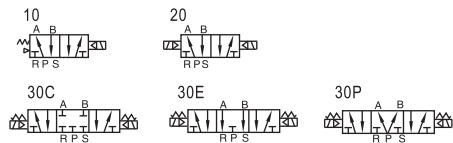
Solenoid valve(5/2 , 5/3 way)



4V200 Series



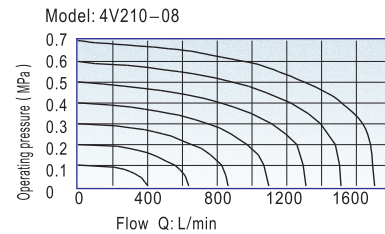
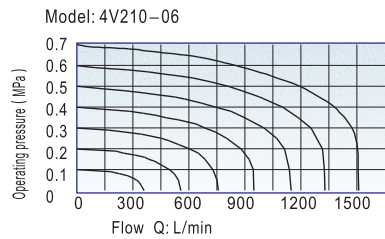
Symbol



Product feature

- 1. Pilot-oriented mode: optional for internal or external.
- 2. Structure in sliding column mode: good tightness and sensitive reaction.
- 3. Three position solenoid valves have three kinds of central function for your choice.
- 4. Double control solenoid valves have memory function.
- 5. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
- 6. No need to add oil for lubrication.
- 7. It is available to form integrated valve group with the base to save installation space.
- 8. Affiliated manual devices are equipped to facilitate installation and debugging.
- 9. Several standard voltage grades are optional.

Flow chart



Specification

Model	4V210-06 4V220-06	4V230C-06 4V230E-06 4V230P-06	4V210-08 4V220-08	4V230C-08 4V230E-08 4V230P-08
Fluid	Air(to be filtered by 40 μm filter element)			
Acting	Piloted			
Port size ①	In=Out=Exhaust=1/8"		In=Out=1/4" Exhaust=1/8"	
Orifice size	14.0mm ² (Cv=0.78)	12.0mm ² (Cv=0.67)	16.0mm ² (Cv=0.89)	12.0mm ² (Cv=0.67)
Valve type	5 port 3 position	5 port 2 position	5 port 3 position	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	3 cycle/sec	5 cycle/sec	3 cycle/sec
Weight	4V210-06:220g 4V220-06:320g	360g	4V210-08:220g 4V220-08:320g	360g

- 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.
- ③ The maximum actuation frequency is in the no-load state.

Coil specification

Item	Specification
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ± 15% DC: ± 10%
Power consumption	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

4V 2 10 08 A □ P			
Model	Code	Valve type	Thread type
4V: Solenoid valve(5/2, 5/3 way)	2: 200 Series	10: Single solenoid 5/2 way 20: Double solenoid 5/2 way 30C: Double solenoid 5/3 way closed center 30E: Double solenoid 5/3 way exhaust center 30P: Double solenoid 5/3 way pressure center	P: PT T: NPT G: G
			Electrical entry
			Blank: Terminal I: Grommet
			Voltage
			A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V
		Port size	
		06: 1/8" 08: 1/4"	

Please refer to 37 for manifold specification and the order way.



Solenoid valve(5/2 , 5/3 way)

4V200 Series



4V200

Inner structure

4V210

4V220

4V230C

No.	Item	No.	Item	No.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit	15	Spool		
8	Body	16	Piston O-ring		

Dimensions

4V210(Terminal)

4V210(Grommet)

Model\Item	A	B	C	D	E
4V210-06	1/8"	1/8"	18	22.7	0
4V210-08	1/8"	1/4"	21	21.2	3

4V220(Terminal)

4V220(Grommet)

Model\Item	A	B	C	D	E
4V220-06	1/8"	1/8"	18	76.4	0
4V220-08	1/8"	1/4"	21	74.9	3

4V230(Terminal)

4V230(Grommet)

Model\Item	A	B	C	D	E
4V230-06	1/8"	1/8"	18	76.4	0
4V230-08	1/8"	1/4"	21	74.9	3



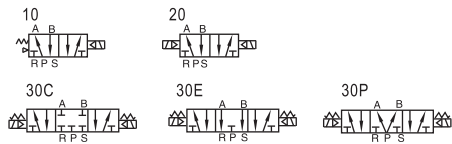
Solenoid valve(5/2 , 5/3 way)



4V300 Series



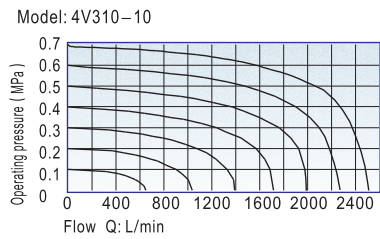
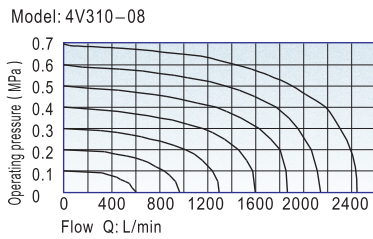
Symbol



Product feature

1. Pilot-oriented mode: optional for internal or external.
2. Structure in sliding column mode: good tightness and sensitive reaction.
3. Three position solenoid valves have three kinds of central function for your choice.
4. Double control solenoid valves have memory function.
5. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
6. No need to add oil for lubrication.
7. It is available to form integrated valve group with the base to save installation space.
8. Affiliated manual devices are equipped to facilitate installation and debugging.
9. Several standard voltage grades are optional.

Flow chart



Specification

Model	4V310-08 4V320-08	4V330C-08 4V330E-08 4V330P-08	4V310-10 4V320-10	4V330C-10 4V330E-10 4V330P-10
Fluid	Air(to be filtered by 40 μ m filter element)			
Acting	Piloted			
Port size ①	In=Out=Exhaust=1/4"		In=Out=3/8" Exhaust=1/4"	
Orifice size	25.0mm ² (Cv=1.40)	18.0mm ² (Cv=1.00)	30.0mm ² (Cv=1.68)	18.0mm ² (Cv=1.00)
Valve type	5 port 3 position	5 port 2 position	5 port 3 position	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	4 cycle/sec	3 cycle/sec	4 cycle/sec	3 cycle/sec
Weight	4V310-08:310g 4V320-08:400g	450g	4V310-10:310g 4V320-10:400g	450g

- 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.
③ The maximum actuation frequency is in the no-load state.

Coil specification

Item	Specitification
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ± 15% DC: ± 10%
Power consumption	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

4V 3 10 10 A □ P			
Model	4V: Solenoid valve(5/2, 5/3 way)	Thread type	P: PT T: NPT G: G
Code	3: 300 Series	Electrical entry	Blank: Terminal I: Grommet
Valve type	10: Single solenoid 5/2 way 20: Double solenoid 5/2 way 30C: Double solenoid 5/3 way closed center 30E: Double solenoid 5/3 way exhaust center 30P: Double solenoid 5/3 way pressure center	Voltage	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V
Port size	08: 1/4" 10: 3/8"		

Please refer to 37 for manifold specification and the order way.



Solenoid valve(5/2 , 5/3 way)

4V300 Series



4V300

Inner structure

4V310

4V320

4V330C

No.	Item	No.	Item	No.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit	15	Spool		
8	Body	16	Piston O-ring		

Dimensions

4V310(Terminal)

4V310(Grommet)

Model\Item	A	B	C	D	E
4V310-08	1/4"	1/4"	22	29	0
4V310-10	1/4"	3/8"	24	28	4

4V320(Terminal)

4V320(Grommet)

Model\Item	A	B	C	D	E
4V320-08	1/4"	1/4"	22	83.9	0
4V320-10	1/4"	3/8"	24	82.9	4

4V330(Terminal)

4V330(Grommet)

Model\Item	A	B	C	D	E
4V330-08	1/4"	1/4"	22	83.9	0
4V330-10	1/4"	3/8"	24	82.9	4



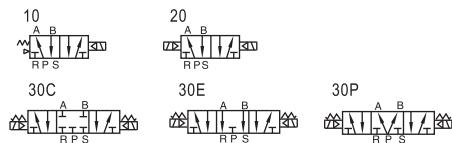
Solenoid valve(5/2 , 5/3 way)

AIRTAC

4V400 Series



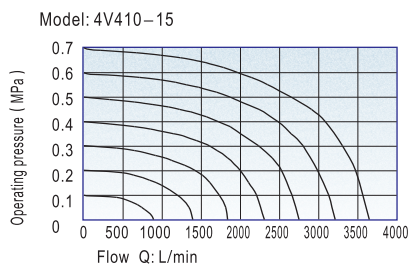
Symbol



Product feature

1. Pilot-oriented mode: optional for internal or external.
2. Structure in sliding column mode: good tightness and sensitive reaction.
3. Three position solenoid valves have three kinds of central function for your choice.
4. Double control solenoid valves have memory function.
5. Internal hole adopts special processing technology which has little attrition friction, low start pressure and long service life.
6. No need to add oil for lubrication.
7. It is available to form integrated valve group with the base to save installation space.
8. Affiliated manual devices are equipped to facilitate installation and debugging.
9. Several standard voltage grades are optional.

Flow chart



Specification

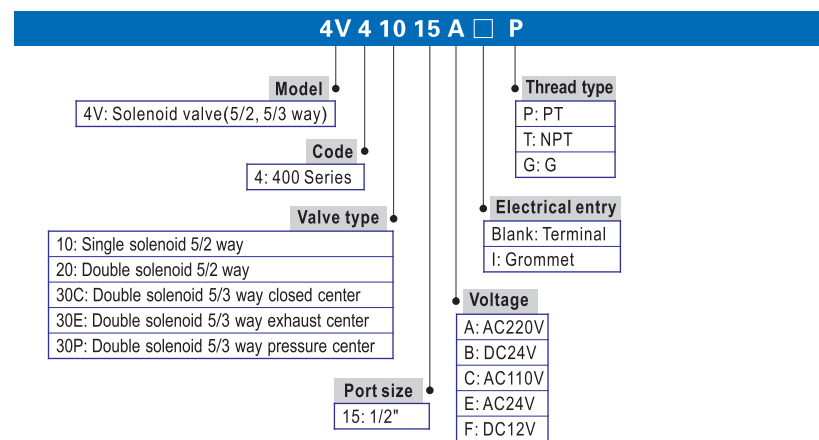
Model	4V410-15	4V420-15	4V430C-15	4V430E-15	4V430P-15
Fluid	Air(to be filtered by 40 μ m filter element)				
Acting	Piloted				
Port size ①	In=Out=Exhaust=1/2"				
Orifice size	50.0mm ² (Cv=2.79)		30.0mm ² (Cv=1.68)		
Valve type	5 port 2 position		5 port 3 position		
Operating pressure	0.15~0.8MPa(21~114psi)				
Proof pressure	1.5MPa(215psi)				
Temperature °C	-20~70				
Material of body	Aluminum alloy				
Lubrication ②	Not required				
Max. frequency ③	3 cycle/sec				
Weight	590g	7200g	770g		

- 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.
 ③ The maximum actuation frequency is in the no-load state.

Coil specification

Item	Specification
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V
Scope of voltage	AC: ± 15% DC: ± 10%
Power consumption	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



Please refer to 37 for manifold specification and the order way.



Solenoid valve(5/2 , 5/3 way)

4V400 Series



4V400

Inner structure

4V410

4V420

4V430C

No.	Item	No.	Item	N0.	Item
1	Connector	9	Wear ring	17	Override spring
2	Coil net	10	Bottom cover	18	Manual override
3	Coil	11	Fixed screw	19	Spring holder
4	Armature	12	Spool spring	20	Return spring
5	Fixed plate	13	Bottom cover gasket	21	Side cover
6	Piston	14	Spool O-ring	22	Spring holder
7	Pilot kit	15	Spool		
8	Body	16	Piston O-ring		

Dimensions

4V410(Terminal)

4V410(Grommet)

4V420(Terminal)

4V420(Grommet)

4V430(Terminal)

4V430(Grommet)



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

③ The maximum actuation frequency is in the no-load state.

Coil specification

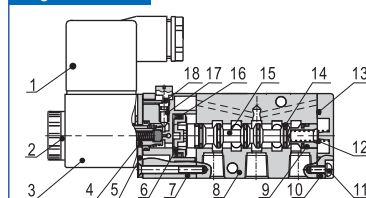
Item	4M110 4M120	4M210 4M220 4M310 4M320
Standard voltage	AC220V, AC110V, AC24V, DC24V, DC12V	
Scope of voltage	AC: ± 15% DC: ± 10%	
Power consumption	AC:2.5VA DC:2.5W	AC:3.5VA DC:3.0W
Protection	IP65(DIN40050)	
Temperature classification	B Class	
Electrical entry	Terminal, Grommet	
Activating time	0.05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

Ordering code

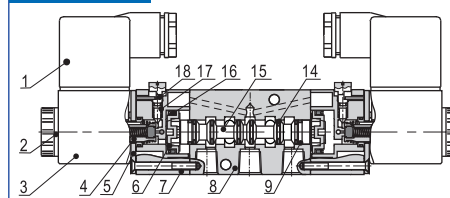
4M 3 10 10 A □ P			
Model 4M: Solenoid valve (5/2 way NAMUR type)	Code 1: 100 Series 2: 200 Series 3: 300 Series	Valve type 10: Single solenoid 20: Double solenoid	Thread type
			Port size Thread type
			1/8" P: PT
			1/4" T: NPT
Port size M5: M5 06: 1/8" 08: 1/4" 10: 3/8"	Voltage A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V	Electrical entry Blank: Terminal I: Grommet	3/8" G: G
			M5 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	Override spring
9	Wear ring	18	Manual override

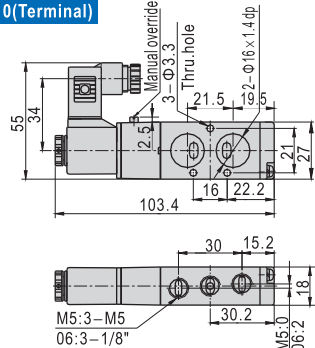
Solenoid valve(5/2 way)

4M(NAMUR) Series

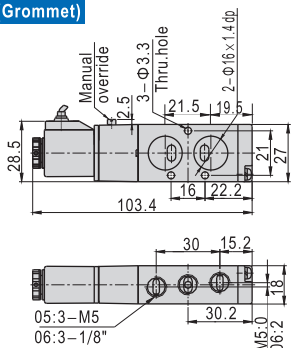
AirTAC

■ Dimensions

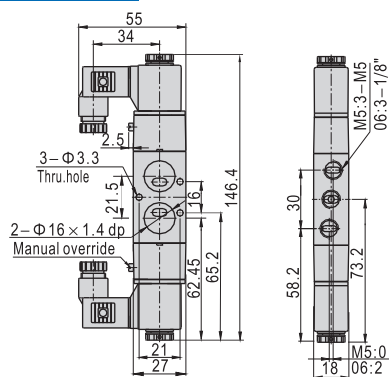
4M110(Terminal)



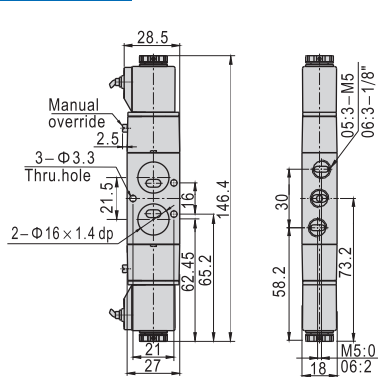
4M110(Grommet)



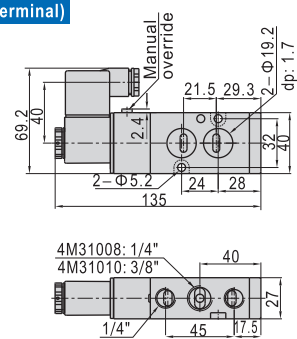
4M120(Terminal)



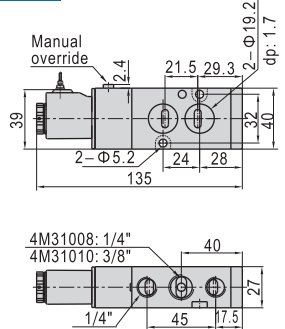
4M120(Grommet)



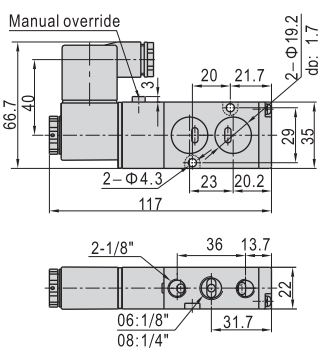
4M310(Terminal)



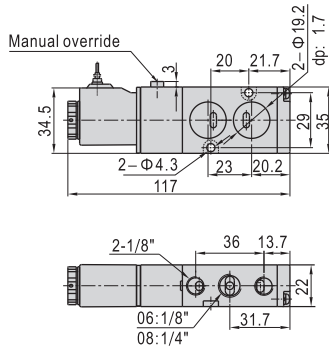
4M310(Grommet)



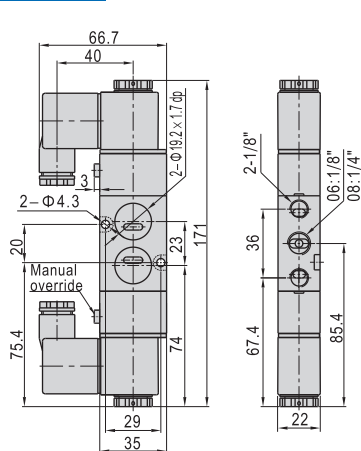
4M210(Terminal)



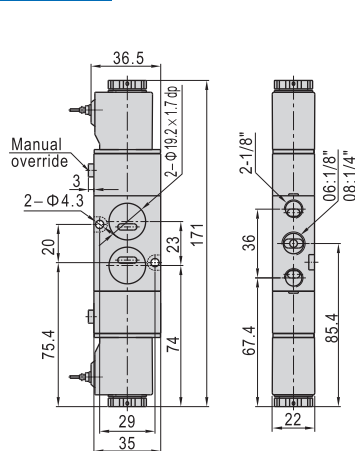
4M210(Grommet)



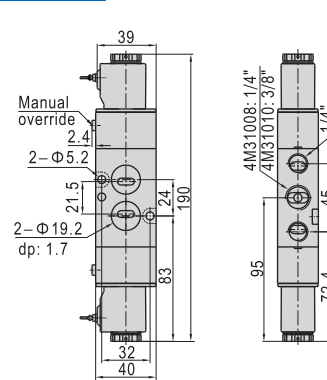
4M220(Terminal)



4M220(Grommet)



4M320(Grommet)



4M

Solenoid valve(Accessories)

Manifold



Product feature

1. It is available to integrate the direction control valves of the same series to form value group to save space and cost.
2. It is easy to examine when there are faults owing to the unified air intake and exhaust and unified wiring.
3. Flexible combination and strong expansion capability can make any combination or expansion of the numbers of direction control valves that are connected.

Specification

Item\Manifold Model	100M	200M	300M
Fluid	Air(to be filtered by 40 μm filter element)		
Temperature °C	-20~70		
Adaptable valve's series	3V100 Series	3V200 Series	3V300 Series

Ordering code

Ordering code contains the two parts of the manifold's and the blank plate's.

1 Ordering code for manifold

3V100M 5F P		
Model		Thread type
3V100M: 100 Series manifold		P: PT
3V200M: 200 Series manifold		T: NPT
3V300M: 300 Series manifold		G: G
	Number of stations	
	1F: 1 Station	
	2F: 2 Station	
		
	16F: 16 Station	

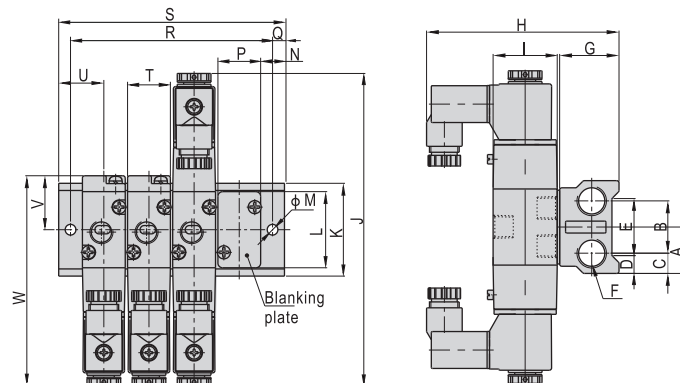
2 Ordering code for blank plate

P-3V100M R2	
Model	Code
3V100M: 100 Series manifold	R2: Blank plate for manifold
3V200M: 200 Series manifold	
3V300M: 300 Series manifold	

Remark: 1. Manifold kits contains manifold, seal and screw.
2. Blank plate kits contains blank plate and screw.

Dimensions

With 3V solenoid valve



Model\Item	A	B	C	D	E	F	G	H	I	J	K	L	M	N	P	Q	T	U	V	W
3V100M	19.5	22	8.5	7.5	24	1/4"	25	81	27	131.4	39	32	4.5	10	18	5	18	19	22.7	88.4
3V200M	22.5	25	10	8	29	1/4"	25	92.7	35	162.4	45	40	4.5	12	22	6	22	23	27.7	109.1
3V300M	26	28	12	8	36	3/8"	29	99.2	40	174.8	52	47	4.5	13.5	27	6	27	27	32.5	119.9

Model\Item	R															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
3V100M	28	47	66	85	104	123	142	161	180	199	218	237	256	275	294	313
3V200M	34	57	80	103	126	149	172	195	218	241	264	287	310	333	356	379
3V300M	42	70	98	126	154	182	210	238	266	294	322	350	378	406	434	462

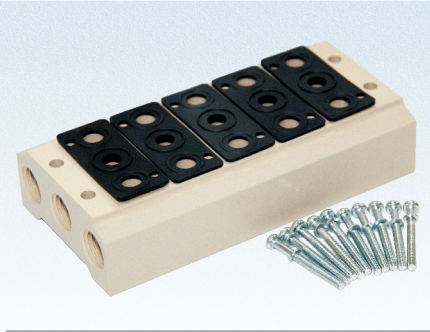
Model\Item	S															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
3V100M	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323
3V200M	46	69	92	115	138	161	184	207	230	253	276	299	322	345	368	391
3V300M	54	82	110	138	166	194	222	250	278	306	334	362	390	418	446	474



Solenoid valve(Accessories)

AirTAC

Manifold



Product feature

1. It is available to integrate the direction control valves of the same series to form value group to save space and cost.
2. It is easy to examine when there are faults owing to the unified air intake and exhaust and unified wiring.
3. Flexible combination and strong expansion capability can make any combination or expansion of the numbers of direction control valves that are connected.

Specification

Item\Manifold Model	100M	200M	300M	400M
Fluid	Air(to be filtered by 40 μm filter element)			
Temperature °C	-20~70			
Adaptable valve's series	4V100 Series	4V200 Series	4V300 Series	4V400 Series

Ordering code

Ordering code contains the two parts of the manifold's and the blank plate's.

1 Ordering code for manifold

100M 5F P

Model	Thread type
100M: 100 Series manifold	P: PT
200M: 200 Series manifold	T: NPT
300M: 300 Series manifold	G: G
400M: 400 Series manifold	

① Number of stations

1F: 1 Station
2F: 2 Station
.....
16F: 16 Station

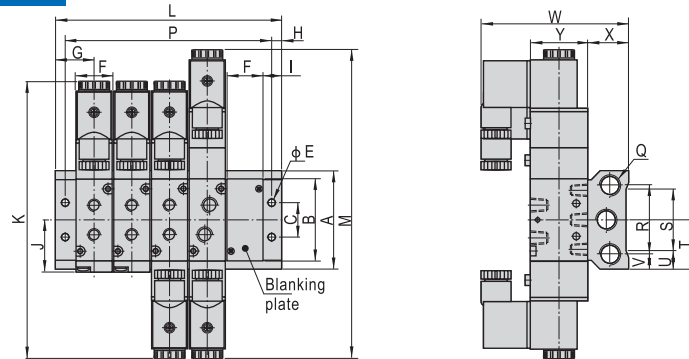
2 Ordering code for blank plate

P-100M R2	
Model	Code
100M: 100 Series manifold	R2: Blank plate for manifold
200M: 200 Series manifold	
300M: 300 Series manifold	
400M: 400 Series manifold	

① 100M, 200M series have a maximum of 16 stations ; 300M series have a maximum of 12 stations; 400M series have a maximum of 8 stations.

Dimensions

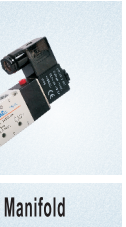
With 4V solenoid valve



Model\Item	A	B	C	E	F	G	H	I	J	K	M	Q	R	S	T	U	V	W	X	Y
100M□F	58	43.2	20	4.5	18.3	19	5	10	28.2	139.4	154.5	1/4"	40	30	29	14	9	79	25	27
200M□F	61	50.7	21	4.5	22.4	23	6	12	31.7	170	189	1/4"	43	32	30.5	14.5	9	93	27	35
300M□F	75	64.8	26	4.5	27.3	27	6	13.5	40	188.8	208	3/8"	53	48	37.5	13.5	11	99.5	30	40
400M□F	104	94.5	32	5.5	34.3	31.5	7	14.5	57	221.8	243	1/2"	68	63	52	18.5	18	112.5	38	50

Model\Item	L															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
100M□F	38	57	76	95	114	133	152	171	190	209	228	247	266	285	304	323
200M□F	46	69	92	115	138	161	184	207	230	253	276	299	322	345	368	391
300M□F	54	82	110	138	166	194	222	250	278	306	334	362	-	-	-	-
400M□F	63	98	133	168	203	238	273	308	-	-	-	-	-	-	-	-

Model\Item	P															
	1F	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F
100M□F	28	47	66	85	104	123	142	161	180	199	218	237	256	275	294	313
200M□F	34	57	80	103	126	149	172	195	218	241	264	287	310	333	356	379
300M□F	42	70	98	126	154	182	210	238	266	294	322	350	-	-	-	-
400M□F	49	84	119	154	189	224	259	294	-	-	-	-	-	-	-	-



Manifold

