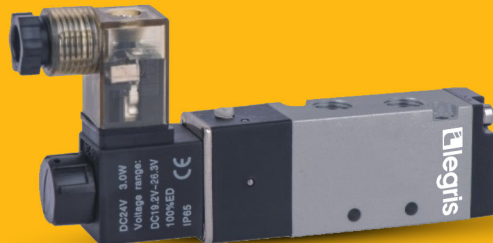


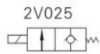
SOLENOID VALVES



2/2 way Direct acting solenoid valve



Symbol

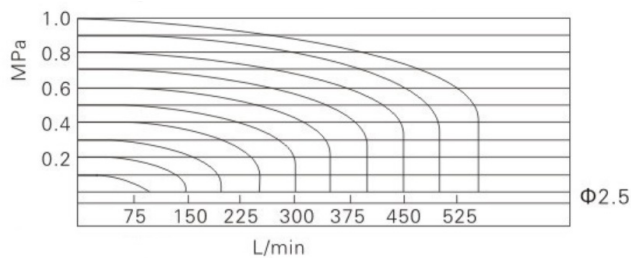


4B14 10 13

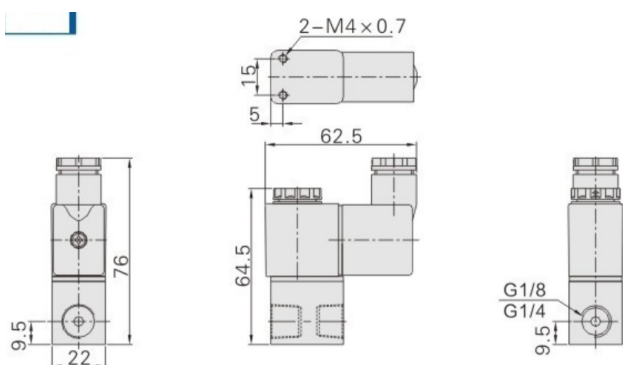
For selecting the coil, please add suffix as below :

- 04 for 220VAC

Fluid characteristics



DIN type



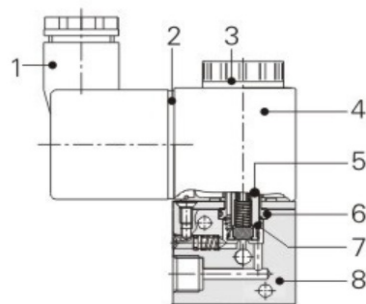
Specific ations

Working Medium	Air Water oil
Acting Type	Direct acting
Original Status	NC
Orific (mm)	2.5
Valve	0.23
Port Size	G 1/4"
Viscosity of Fluid	Less 20STI
Working Pressure	0~1.0MPa (0~145psi)
Guaranteed Pressure Resistance	1.5 MPa (215psi)
Valve Body Material	Aluminum Alloy
Sealing	VITON
Activate Time	Less 0.05

Coil specifications

Model	Volt- age	Frequen- cy	Voltage tolerance	power supply type	Insula- tion	Temperature rise
2V025	AC	50	+15%	DIN type	5.0VA	35
	DC	60	+10%	Flying Lead type	4.8W	45

Inner structure



No.	Base	No.	Base
1	Connector	5	Arnature
2	Connector washer	6	Plate
3	Fixed nut	7	Diephragm
4	Coil	8	Body

3/2 way directing type solenoid valve



Symbol

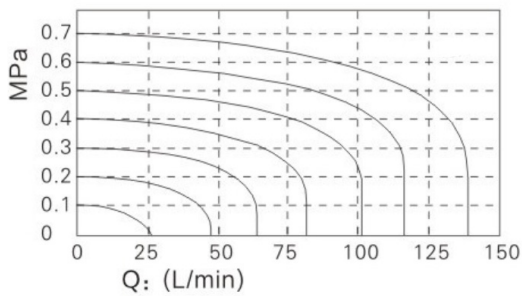


4B13 11 10 (NC)

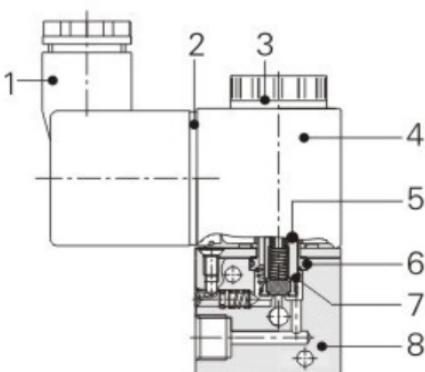
For selecting the coil, please add suffix as below :

- 04 for 220VAC
- 11 for 24VDC
- 03 for 110VAC
- 01 for 24VAC
- 05 for 12VDC

Fluid characteristics



DIN type



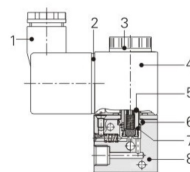
Specific ations

Model	4B13 11 10 (NC)
Working medium	
Acting type	
Port Size	G1/8
Position Number	3/2
Lubrication	No
Pressure range	0~8.MPa(0~114psi)
Guaranteed pressure resistance	1.5MPa(215psi)
Working temperture	-20-70
Fluid size	1.2mm
Body material	Alumium Alloy

Electrical Performance parameter

model	
Voltage	AC22V, AC110V, AC24V, DC24V, DC12V
Working Voltage range	AC: + 15% DC: + 10%
Power consumption	AC: 4.0VA DC: 4.0W
Protection	IP65 (DIN40050)
Heat resistant grades	B
Power supply type	DIN type flying leads type
Activate time	<0.05r
Max. operating frequency	10

Inner structure



No.	Base	No	Base
1	Power corner	5	Armatore
2	Corner washer	6	O ring
3	Fixed out	7	Return spring
4	Coil	8	Body

1/8" , 3/2 way pilot operated solenoid valve



part no.

4B10 10 10 (NO)

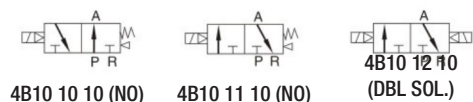
4B10 11 10 (NC)

4B10 12 10 (DOU)

For selecting the coil, please add suffix as below :

- 04 for 220VAC
- 11 for 24VDC
- 03 for 110VAC
- 01 for 24VAC
- 05 for 12VDC

Symbol



4B10 10 10 (NO)

4B10 11 10 (NO)

4B10 12 10
(DBL SOL.)

Specific ations

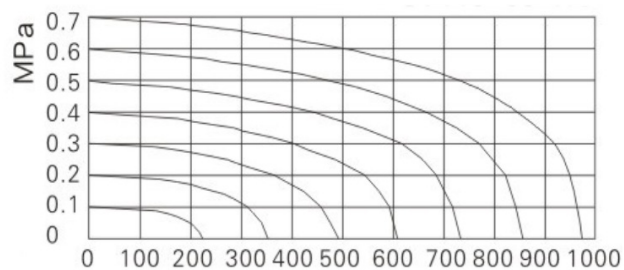
MODEL	4B10 10 10 (NO), 4B10 11 10 (NC) 4B10 12 10 (DBL. SOL)
Working Medium	Air
Acting Type	Internal Pilot
Port Size	1/8" BSP
Effective Cross-sectional Area	12.0 mm ²
Position Number	3/2 Way
Lubrication	No
Working Pressure Range	Less 20STI
Pressure Resistance	0~1.0MPa (0~145psi)
Working Temperature	1.5 MPa (215psi)
Body	Aluminum Alloy

Coil specifications

Working Voltage Range	AC: ± 15% DC: ± 10%				
Power Consumption	4.5VA	4.5VA	4.5VA	3W	3W
Protection Class	IP65 (DIN40050)				
Heat Resisting Grade	II				
Power Supply Type	DIN type and remove Flying lead type				
Activate Time	0.05s				
Max. Operating Frequency	5				

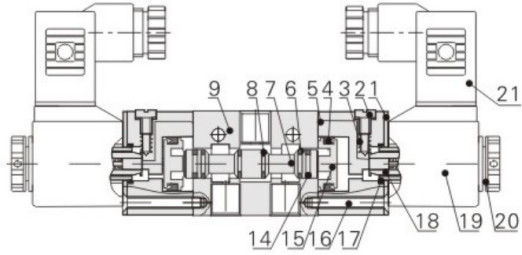
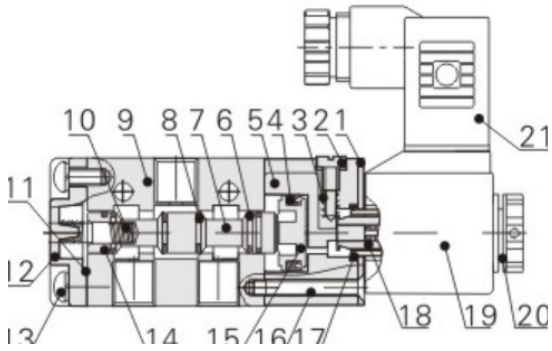
Fluid characteristics

4B10 10 10 NO, 4B10 11 10 NC and 4B10 12 10 DBL SOL

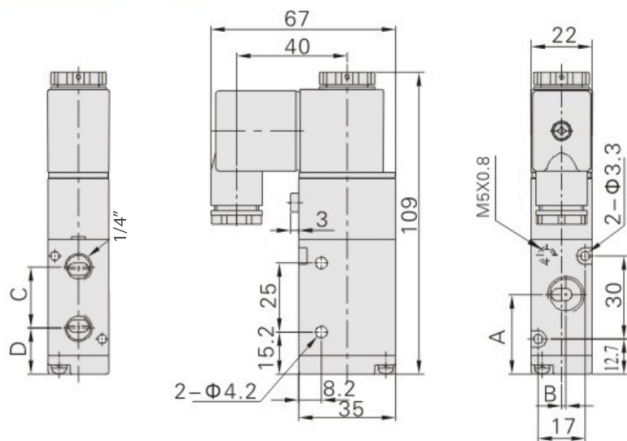


Inner structure

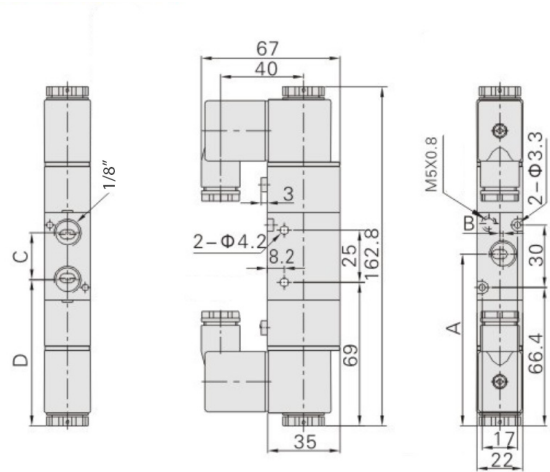
1	Fixed Sheets	8	O ring	15	Piston
2	Manual pin	9	Body	16	Counter sunk screw
3	Spring	10	Spring	17	O ring
4	Special O ring	11	antidiarrheal pad	18	Armature
5	Guide body	12	bottom cover	19	Armature
6	Special O ring	13	Round Screw	20	Fixed nut
7	Axie core	14	Vear ring	21	onner



4B10 10 10 1 and 4B10 11 10



4B10 12 10



1/4" 3/2 way pilot operated solenoid valve



part no.

4B10 10 13 (NO)

4B10 11 13 (NC), 4B10 12 13 (DBL SOL)

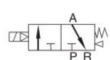
For selecting the coil, please add suffix as below :

- 04 for 220VAC
- 11 for 24VDC
- 03 for 110VAC
- 01 for 24VAC
- 05 for 12VDC

Symbol



4B10 10 13
(NO)



4B10 11 13
(NC)



4B10 12 13
(DBL SOL)

Specific ations

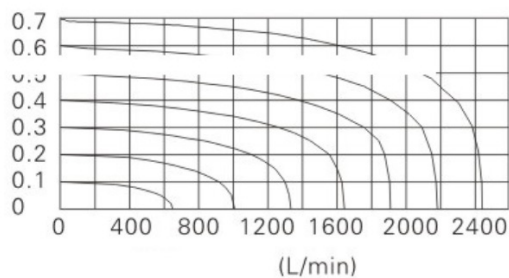
Model	4B10 10 13 (NO), 4B10 11 13 (NC) 4B10 12 13 (DBL SOL)
Working Medium	Air
Acting Type	Internal guidance or external guidance
Port Size	Inlet=outlet=G1/4
Effective Cross-sectional Area	16.0mm ² (Cv=0.89)
Position Number	2/3
Lubrication	No
Working	0.15~0.8MPa(21~114psi)
Guaranteed Pressure Resistance	1.2MPa(175psi)
Working Temperature	-20~70
Body Materia	Aluminum Alloy

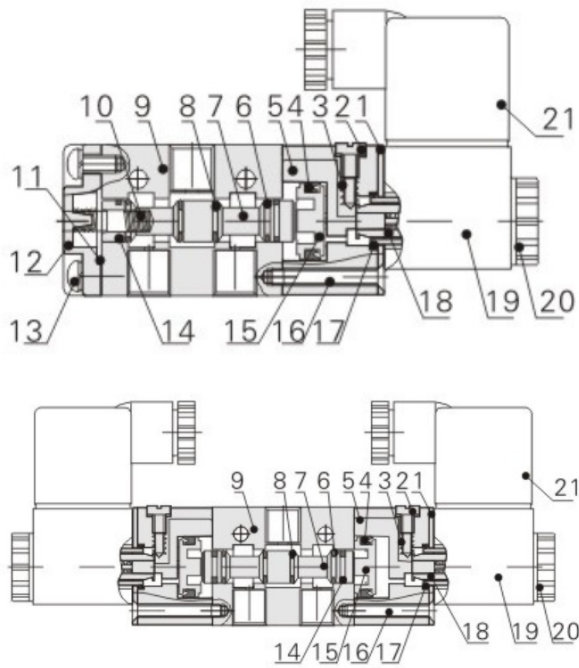
Coil specifications

Voltage	AC220V	AC110V	AC24V	DC24V	DC12V
Working	AC: ± 15% DC: ± 10%				
Power Consumption	4.5VA	4.5VA	5.0VA	3.0W	3.0W
Protection Class	IP65(DIN40050)				
Heat Resisting Grade:	B				
Power Supply Type	Din Type				
Activate Time	<0.05s				
Max. Operating Frequency	5				

Flow Characteristics

4B10 10 13(NO), 4B10 11 13 (NC) and 4B10 12 13 (DBL SOL)

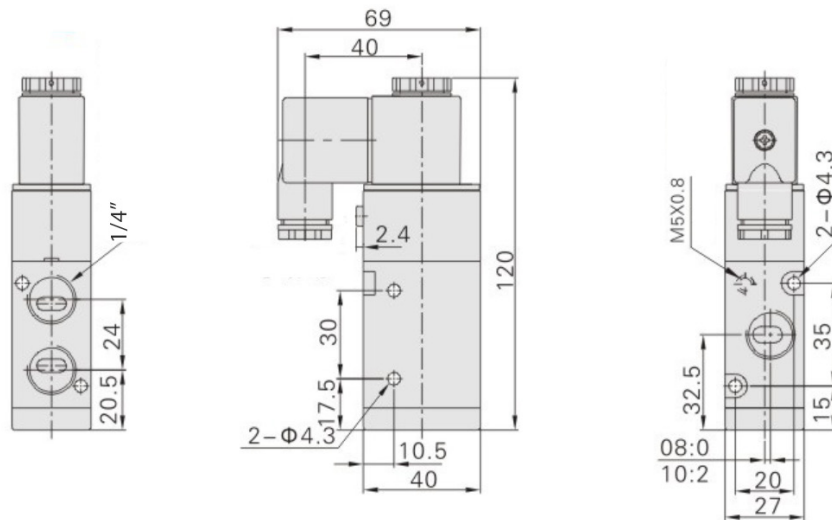




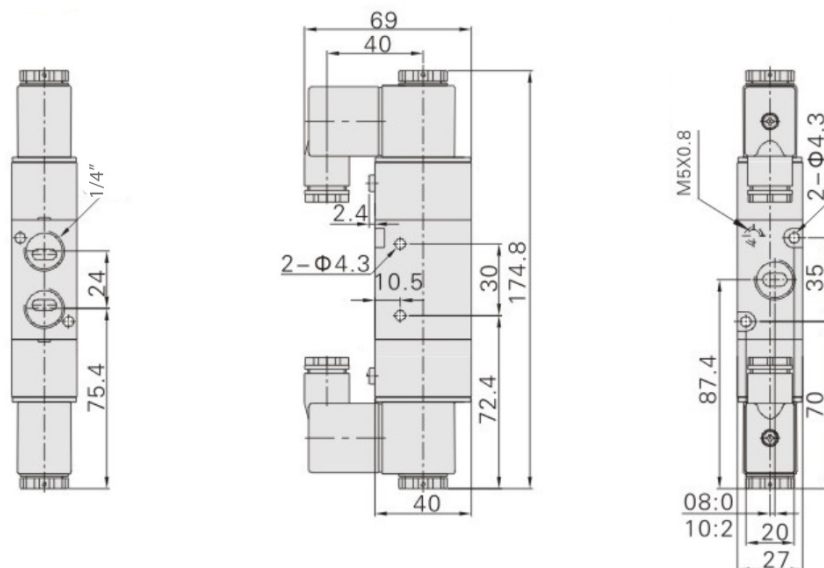
Inner structure

1	Fixed Sheets	8	O ring	15	Piston
2	Manual pin	9	Body	16	Counter sunk screw
3	Spring	10	Spring	17	O ring
4	Special O ring	11	antidiarrheal pad	18	Armature
5	Guide body	12	bottom cover	19	Armature
6	Special O ring	13	Round Screw	20	Fixed nut
7	Axie core	14	Wear ring	21	Corner

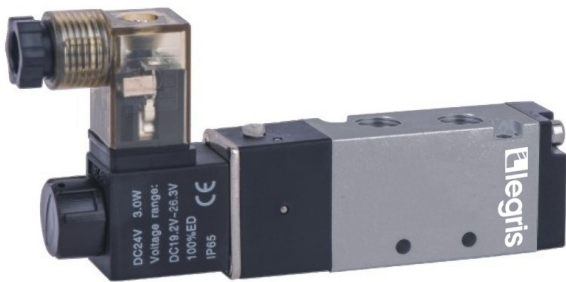
4B10 10 13 (NO) and 4B10 11 13 (NC)



4B10 12 13 (DBL SOL)



5/2 and 5/3 way solenoid valve spool type 1/8"



part no.

4B06 01 10, 4B06 02 10

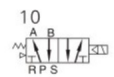
4B07 02 10C, 4B07 02 10E, 4B07 02 10P

For selecting the coil, please add suffix as below :

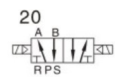
- 04 for 220VAC
- 11 for 24VDC
- 03 for 110VAC
- 01 for 24VAC
- 05 for 12VDC

Symbol

4B06 01 10



4B06 02 10



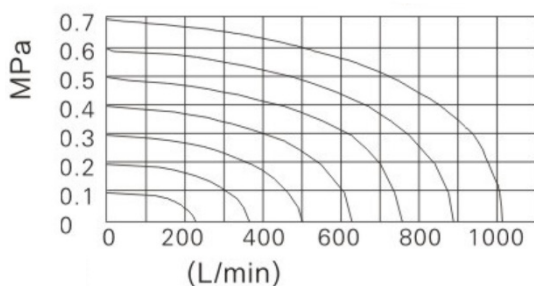
4B07 02 10C

4B07 02 10E

4B07 02 10P

Fluid characteristics

4B06 01 10, 4B06 02 10, 4B07 02 10C, 4B07 02 10E, 4B07 02 10P



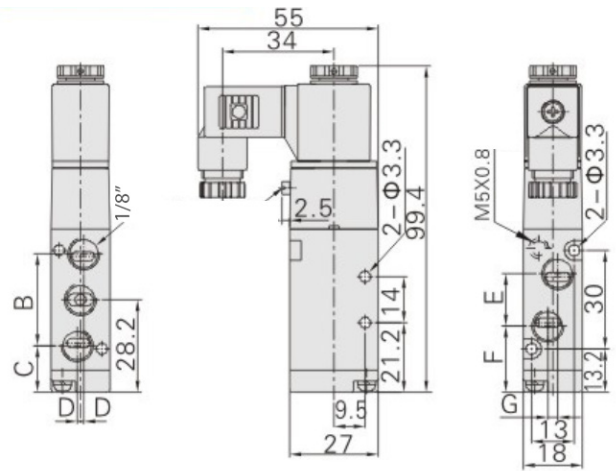
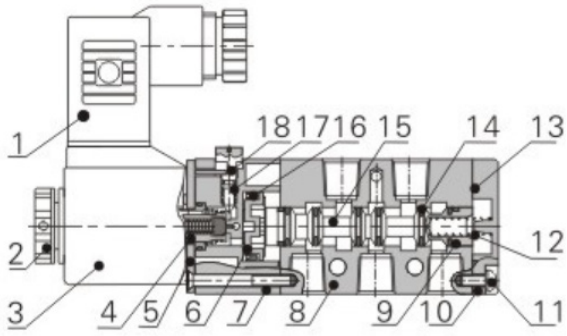
Specific ations

Model	4B06 01 10, 4B06 02 10 4B07 02 10C, 4B07 02 10E, 4B07 02 10P			
Working Medium	Air			
Acting type	Internal Guidance Or External Guidance			
Port size	Inlet=outlet=G1/8			
Effective cross-sectional area	12.0mm ² (Cv=0.67)			
Position number	5/2		5/3	
Working	0.15~0.8MPa(21~114psi)			
Guaranteed pressure resistance	1.2MPa(175psi)			
Working temperature	-20~70			
Body materia	Aluminum Alloy			
MAX. Operating Frequency	5		3	
Weight	4B06 01 10:120	200	4B06 01 10S:120	200
	4B06 02 10:175		4B06 02 10S:175	

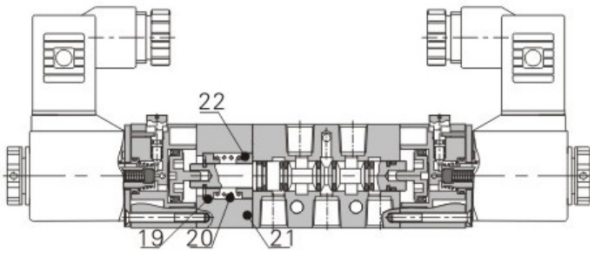
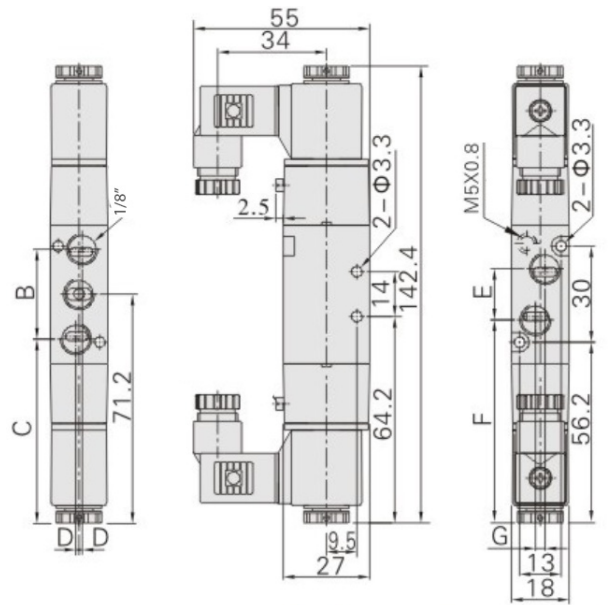
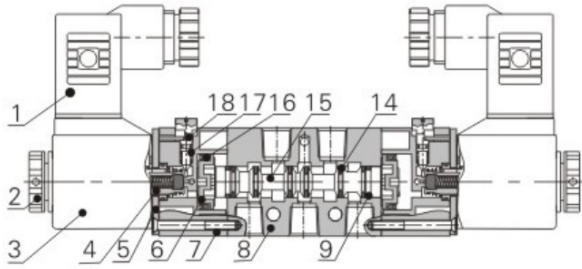
Coil specifications

Voltage	AC220V	AC110V	AC24V	DC24V
Working Pressure range	AC: ± 15%		DC: ± 10%	
Power consumption	3.5VA	3.5VA	4.0VA	3.0W
Protection class	IP65(DIN40050)			
Heat resisting grade	N			
Power supply type	Din Type			
Activate time	<0.05s			

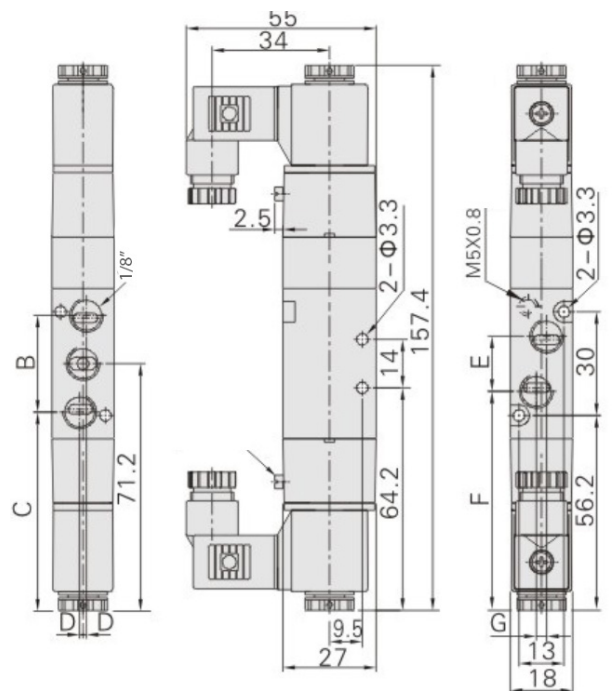
4B06 01 10



4B06 02 10



4B07 02 10



Inner structure

1	Corner	9	Wear ring	17	Spring
2	Fixed nut	10	bottom cover	18	Manual DIN
3	Coil	11	Screw	19	reset
4	Arrature	12	Spring	20	Spring
5	Fixed sheets	13	Antidiarr head pad	21	Side cover
6	Piston	14	O ring	22	reset
7	Guide body	15	axis coro		
8	Body	16	Special O ring		

1/4" 5/2 way and 5/3 way pilot operated solenoid valve



part no.

4B06 01 13, 4B06 02 13

4B07 02 13C, 4B07 02 13E, 4B07 02 13P

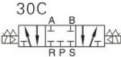
For selecting the coil, please add suffix as below :

- 04 for 220VAC
- 11 for 24VDC
- 03 for 110VAC
- 01 for 24VAC
- 05 for 12VDC

Symbol

4B06 01 13

4B06 02 13



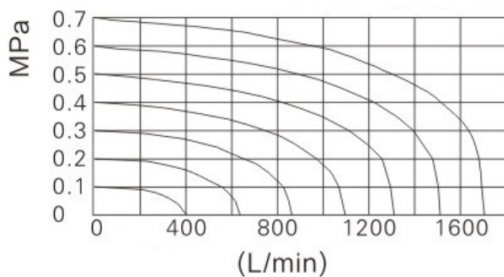
4B07 02 13C

4B07 02 10E

4B07 02 13P

Fluid characteristics

4B06 01 13, 4B06 02 13, 4B07 02 13C, 4B07 02 13E, 4B07 02 13P



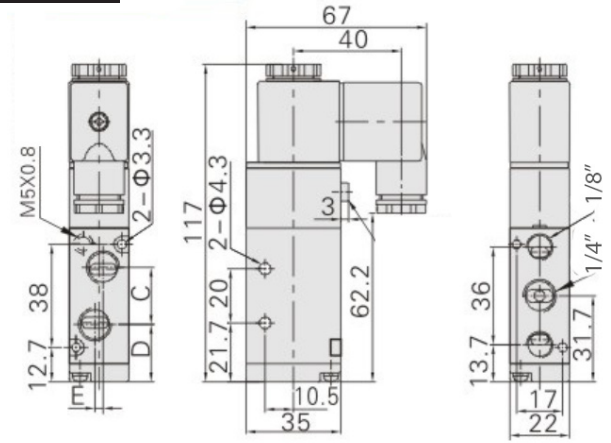
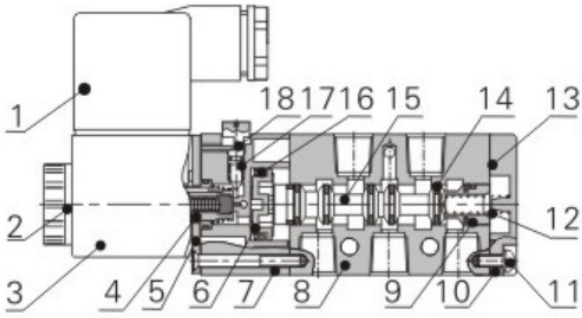
Specific ations

Model	4B06 01 13, 4B06 02 13 4B07 02 13C, 4B07 02 13E, 4B07 02 13P	
Working Medium	Air	
Acting type	Internal Guidance Or External Guidance	
Port size	Inlet and Out let : 1/4" and exhaust port : 1/8"	
Effective cross-sectional area	16.0mm ² (Cv=0.89)	
Position number	5/2	5/3
Working	0.15~0.8MPa(21~114psi)	
Guaranteed pressure resistance	1.2MPa(175psi)	
Working temperature	-20~70	
Body materia	Aluminum Alloy	
MAX. Operating Fre-quency	5	3
Max frequency	4B01 13	4B07 02 13C, 4B07 02 13E, 4B07 02 13P

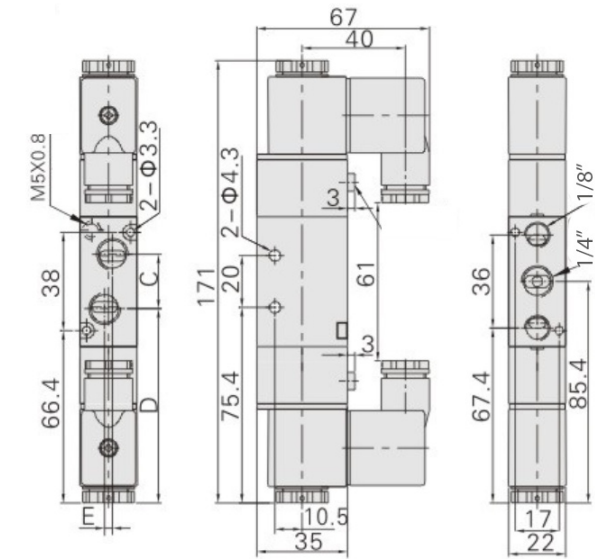
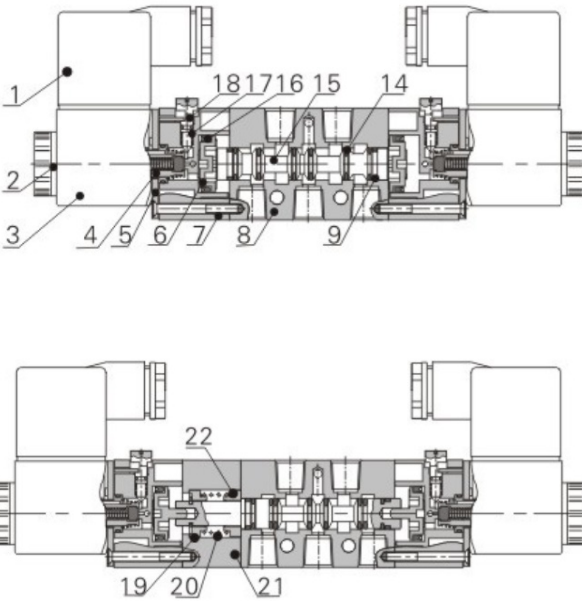
Coil specifications

Voltage	AC220V	AC110V	AC24V	DC24V	DC12V
Working Pressure range	AC: ± 15% DC: ± 10%				
Power consumption	4.5VA	4.5VA	5.0VA	3.0W	3.0W
Protection class	IP65(DIN40050)				
Heat resisting grade	B				
Power supply type	Din Type				
Activate time	<0.05s				

4B06 01 13



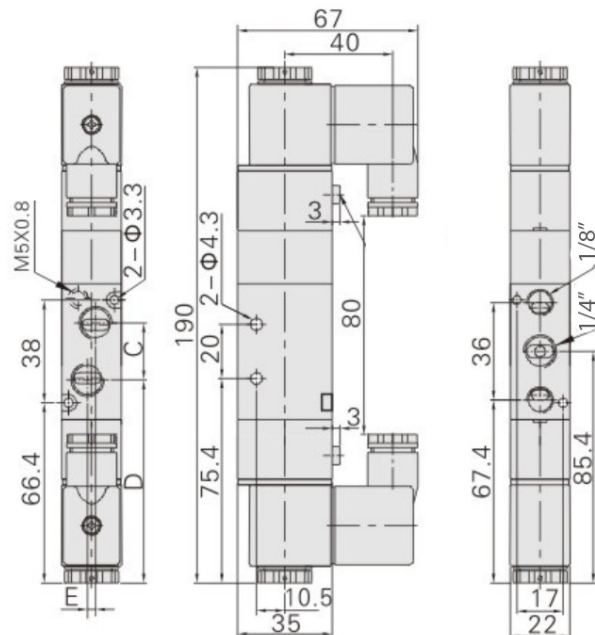
4B06 02 13



Inner structure

1	Corner	9	Wear ring	17	Spring
2	Fixed nut	10	bottom cover	18	Manual DIN
3	Coil	11	Screw	19	reset
4	Arrature	12	Spring	20	Spring
5	Fixed sheets	13	Antidiarr head pad	21	Side cover
6	Piston	14	O ring	22	reset
7	Guide body	15	axis coro		
8	Body	16	Special O ring		

4B07 02 13(C) (E) and (P)



3/8" 5/2 way and 5/3 way pilot operated solenoid valves



part no.

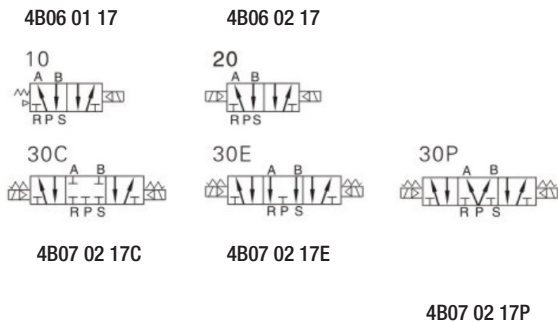
4B06 01 17, 4B07 02 14

4B07 02 17C, 4B07 02 17E, 4B07 02 17P

For selecting the coil, please add suffix as below :

- 04 for 220VAC
- 11 for 24VDC
- 03 for 110VAC
- 01 for 24VAC
- 05 for 12VDC

Symbol



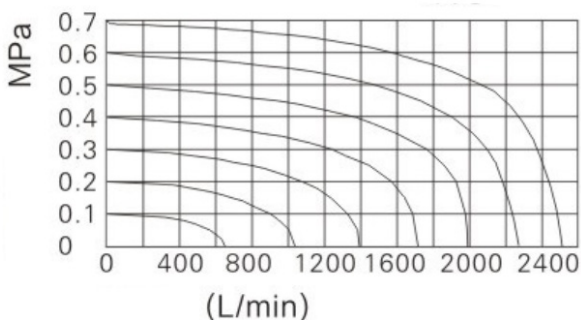
Specific ations

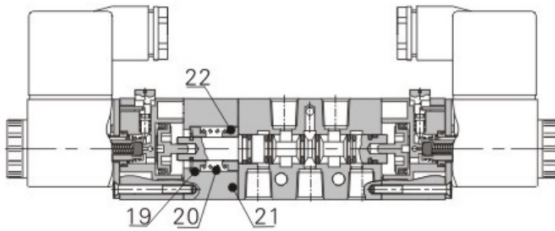
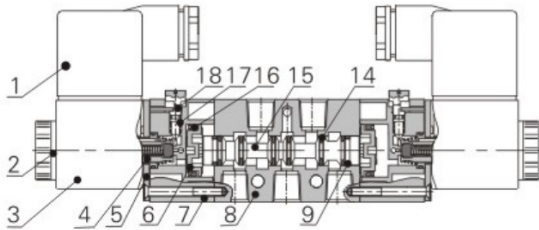
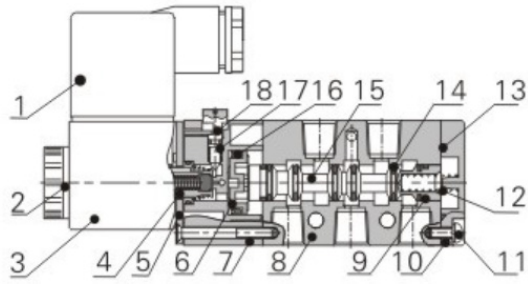
Model	4B06 01 17, 4B07 02 14 4B07 02 17C, 4B07 02 17E, 4B07 02 17P			
Working Medium	Air			
Acting type	Internal Guidance Or External Guidance			
Port size	Inlet out port = 3/8			
Effective cross-sectional area	30.0mm ² (Cv=1.68) 18.0mm ² (Cv=1.00)			
Position number	5/2		5/3	
Working	0.15~0.8MPa(21~114psi)			
Guaranteed pressure resistance	1.2MPa(175psi)			
Working temperature	-20~70			
Body materia	Aluminum Alloy			
MAX. Operating Frequency	4	3	4	3
Weight	4B06 01 17 4B02 17		E07 01 17 C 4B07 02 17E, 4B07 02 17P	

Electrical performance parameter

Voltage	AC220V	AC110V	AC24V	DC24V	DC12V
Working Pressure range	AC: ± 15%		DC: ± 10%		
Power consumption	4.5VA	4.5VA	5.0VA	3.0W	3.0W
Protection class	IP65(DIN40050)				
Heat resisting grade	B				
Power supply type	Din Type				
Activate time	<0.05s				

Fluid characteristics

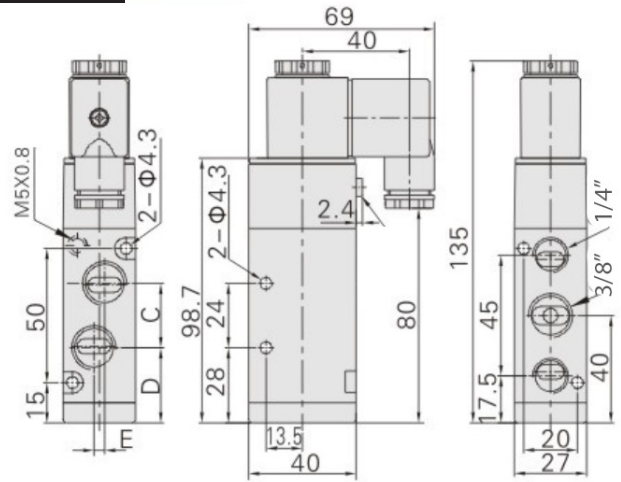




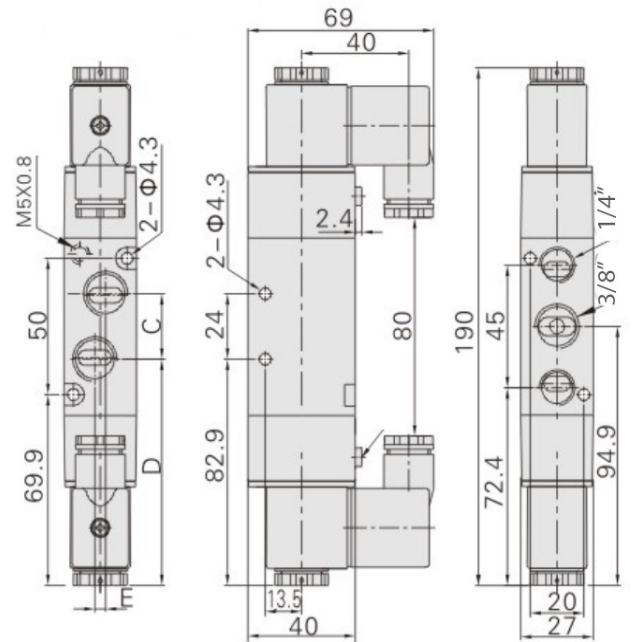
Inner structure

1	Corner	9	Wear ring	17	Spring
2	Fixed nut	10	bottom cover	18	Manual DIN
3	Coil	11	Screw	19	reset
4	Arrature	12	Spring	20	Spring
5	Fixed sheets	13	Antidiarr head pad	21	Side cover
6	Piston	14	O ring	22	reset
7	Guide body	15	axis coro		
8	Body	16	Special O ring		

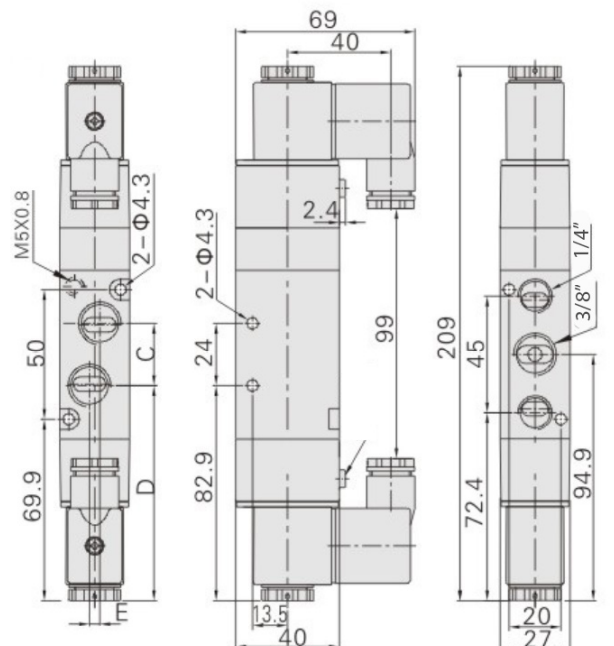
4B06 01 17



4B06 02 17



4B07 02 17 (C) (P) and (E)



1/2" 5/2 way and 5/3 way pilot operated solenoid valves



part no.

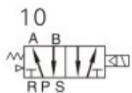
4B06 01 21, 4B06 02 21, 4B07 02 21C,
4B07 02 21E, 4B07 02 21P

For selecting the coil, please add suffix as below :

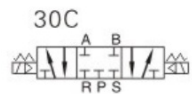
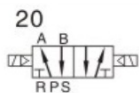
- 04 for 220VAC
- 11 for 24VDC
- 03 for 110VAC
- 01 for 24VAC
- 05 for 12VDC

Symbol

4B06 01 21



4B06 02 21



4B07 02 21C



4B07 02 21E



4B07 02 21P

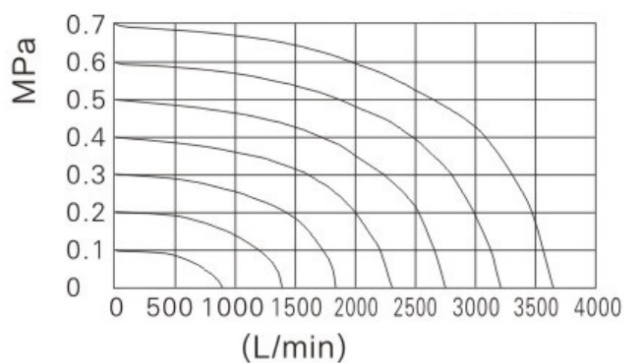
Specific ations

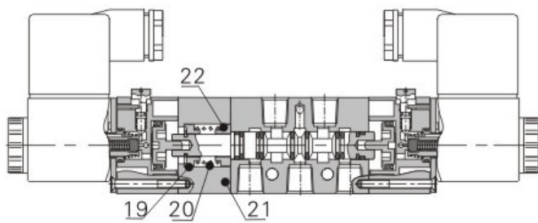
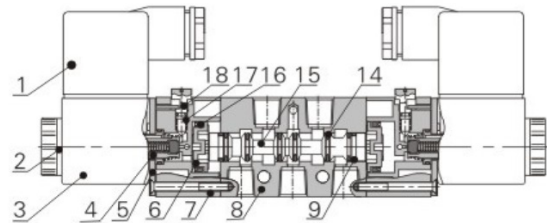
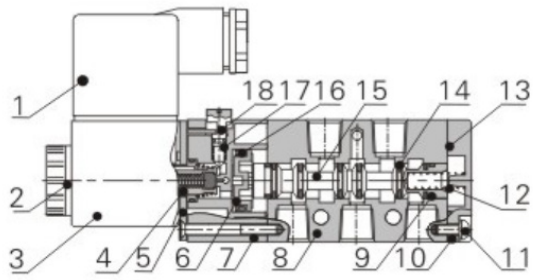
Model	4B06 01 21 ,4B06 02 21 , 4B07 02 21C, 4B07 02 21E, 4B07 02 21P	
Working Medium	Air	
Acting type	Internal Guidance Or External Guidance	
Port size	Inlet , out and exhaust = 1/2"	
Effective cross-sectional area	50.0mm ² (Cv=2.79)	
Position number	5/2	5/3
Working	0.15~0.8MPa(21~114psi)	
Guaranteed pressure resistance	1.2MPa(175psi)	
Working temperature	-20~70	
Body materia	Aluminum Alloy	
MAX. Operating Fre- quency	3	

Electrical performance parameter

Voltage	AC220V	AC110V	AC24V	DC24V	DC12V
Working Pressure range	AC: ± 15%		DC: ± 10%		
Power consumption	4.5VA	4.5VA	5.0VA	3.0W	3.0W
Protection class	IP65(DIN40050)				
Heat resisting grade	B				
Power supply type	Din Type				
Activate time	<0.05s				

Fluid characteristics

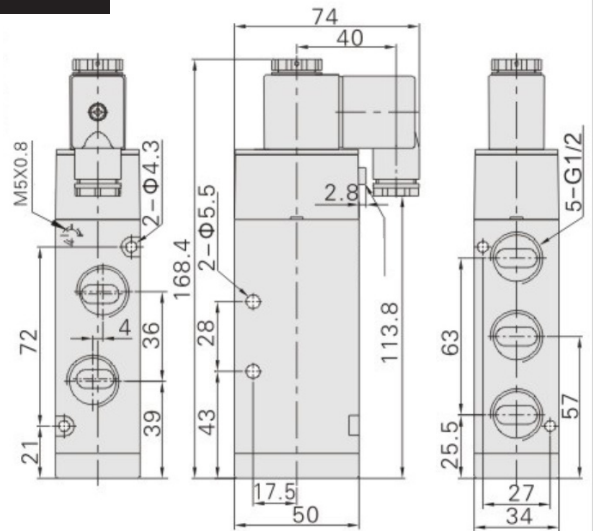




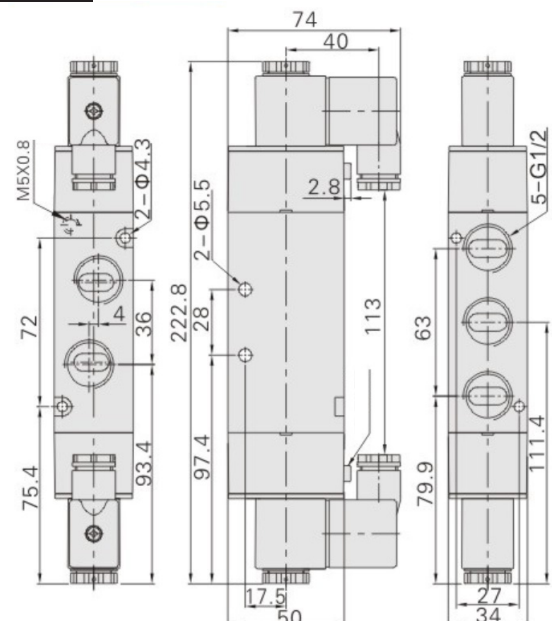
Inner structure

1	Corner	9	Wear ring	17	Spring
2	Fixed nut	10	bottom cover	18	Manual DIN
3	Coil	11	Screw	19	reset
4	Arrature	12	Spring	20	Spring
5	Fixed sheets	13	Antidiarr head pad	21	Side cover
6	Piston	14	O ring	22	reset
7	Guide body	15	axis coro		
8	Body	16	Special O ring		

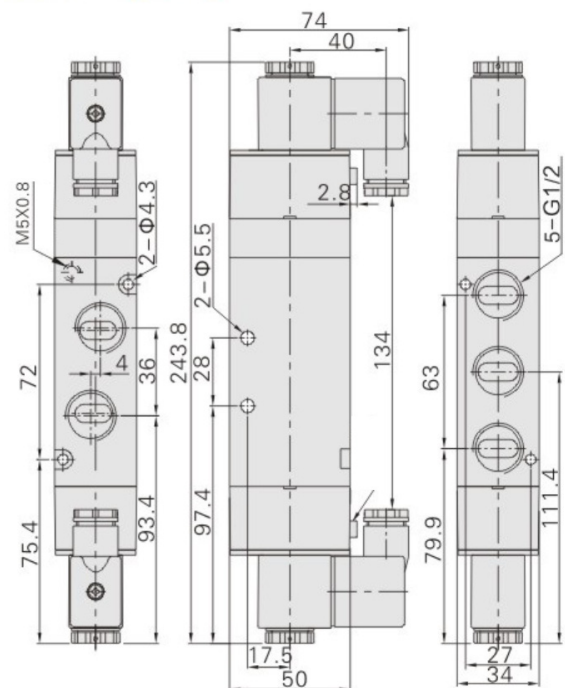
4B06 01 21



4B06 02 21



4B07 02 21 (C) (P) and (E)



5/2 way Namar mounting type solenoid valve spool type 1/4, 3/8, 1/2



Single Solenoid

1/4 - 4B120113, 3/8 - 4B120117, 1/2 - 4B120127

Double Solenoid

1/4 - 4B120213, 3/8 - 4B120217, 1/2 - 4B120221

For selecting the coil, please add suffix as below :

- 04 for 220VAC
- 11 for 24VDC
- 03 for 110VAC
- 01 for 24VAC
- 05 for 12VDC

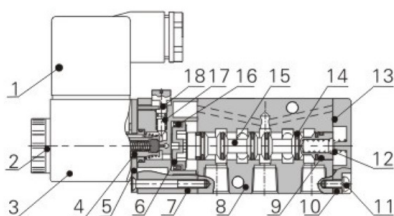
Symbol



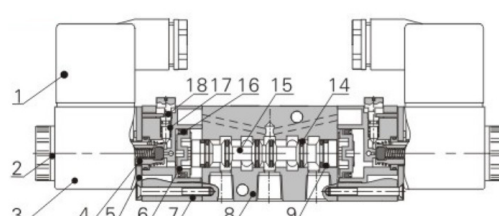
4B12 01 13, 4B12 01 17, 4B12 01 21
4B12 02 13, 4B12 02 17, 4B12 02 21

Inner structure

single solenoid valve



double solenoid valve



1	Corner	6	Piston	11	Scree	16	Special O ring
2	Fixed nut	7	Guide body	12	Spring	17	Spring
3	Coil	8	Body	13	Antidiarrheal pad	18	Manual pin
4	Atsature	9	Wear ring	14	O ring		
5	Fixed sheets	10	Bottom cover	15	Axis core		

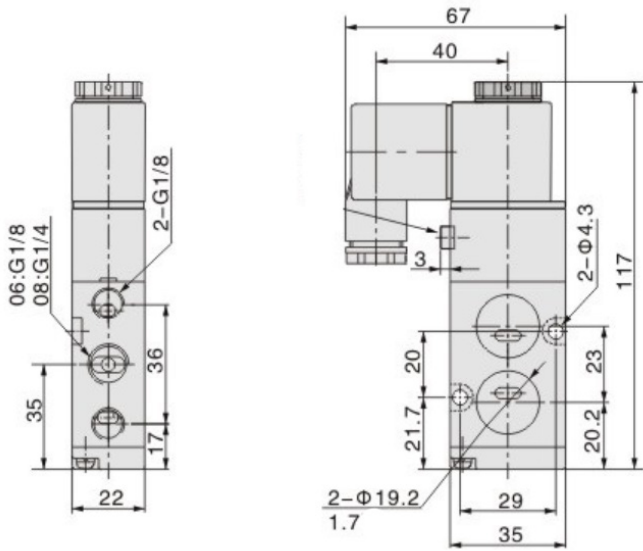
Specific ations

Working Medium	Air		
Acting type	Internal Pilot		
Port size	Inlet 1/4"exhaust 1/8" inlet 3/8"exhaust 1/4" inlet 1/2" exhaust 1/2'		
Effective cross-sectional area	25.0 mm ² 30.00mm ² 50.0mm ²		
Position number	5/2		
Working pressure range	0.15~0.8MPa(21~114psi)		
Pressure resistance	1.2MPa(175psi)		
Working temperature	-20~70		
Body materia	Aluminum Alloy		
MAX. Operating Frequency	5	4	3
Weight	4B12 01 13 4B12 02 13	4B12 01 17 4B12 02 17	4B12 01 12 4B12 02 21

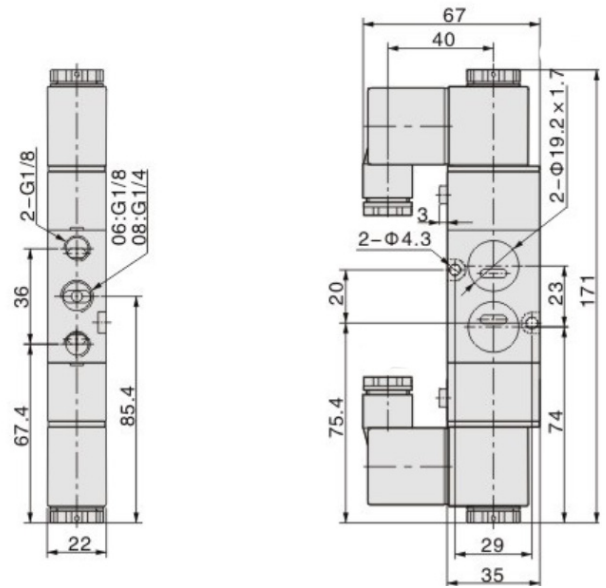
Electrical performance parameter

Voltage	AC220V	AC110V	AC24V	DC24V	DC12V
Working Pressure range	AC: ± 15% DC: ± 10%				
Power consumption	AC:3.5VA DC:3.0W		AC:4.5VA DC:3.0W		
Protection class	IP65(DIN40050)				
Heat resisting grade	B				
Power supply type	Din Type				
Activate time	<0.05s				

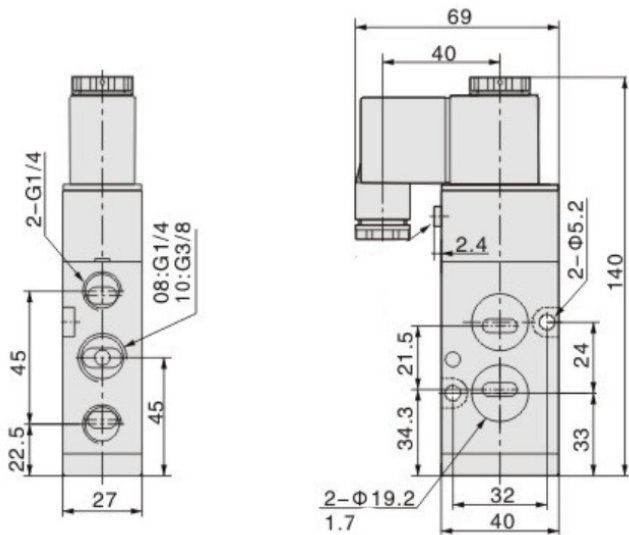
4B120113



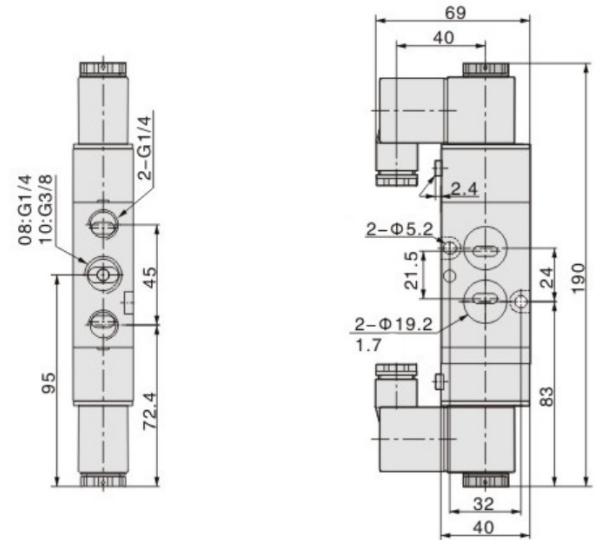
4B12 02 13



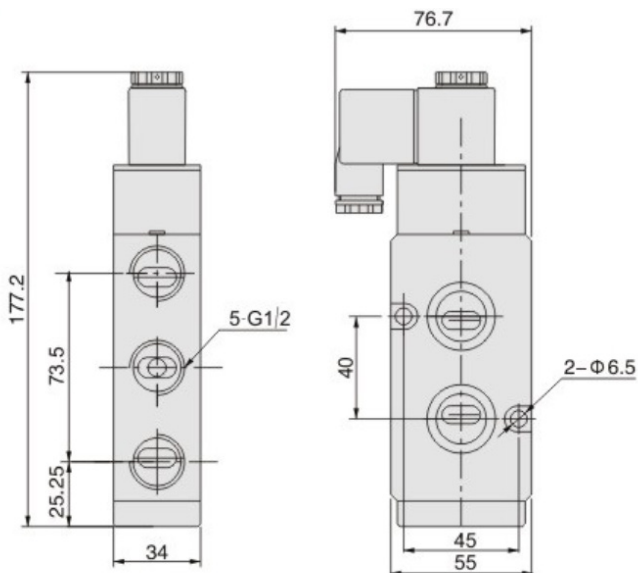
4B120117



4B12 02 17



4B120121



4B12 02 21

