



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

Compendium of Solenoid valve

P19	Product feature	Photo	P25	Product feature	Photo
CPV10 Series Solenoid valve	<ul style="list-style-type: none"> ● Can be used monomer or in series ● Plug electrical connector ● Manifold is optional ● 3/2 Way 		CPV15 Series Solenoid valve	<ul style="list-style-type: none"> ● Can be used monomer or in series ● Plug electrical connector ● Manifold is optional ● 3/2 Way 	
P32	Product feature	Photo	P34	Product feature	Photo
3V1 Series Solenoid valve	<ul style="list-style-type: none"> ● Coaxial blanking structure and direct acting(NC) ● Can be used in series ● Affiliated manual devices ● 3/2 Way 		3V2 Series Solenoid valve	<ul style="list-style-type: none"> ● Coaxial blanking structure and direct acting ● NC, NO are optional ● Affiliated manual devices ● 3/2 Way ● Can be used under vacuum condition 	
P36	Product feature	Photo	P38	Product feature	Photo
3V2M Series Solenoid valve	<ul style="list-style-type: none"> ● Coaxial blanking structure and direct acting ● NC, NO are optional ● Affiliated manual devices ● 3/2 Way ● Be used with manifold ● Centralized exhaust and separated exhaust are optional 		3V3 Series Solenoid valve	<ul style="list-style-type: none"> ● Coaxial blanking structure and direct acting ● NC, NO are optional ● Affiliated manual devices ● 3/2 Way ● Can be used under vacuum condition 	
P40	Product feature	Photo	P46	Product feature	Photo
3V100~300 Series Solenoid valve	<ul style="list-style-type: none"> ● Sliding column structure ● Double control and single control are optional ● NO and NC are optional for single control ● Manifold is optional ● 3/2 Way 		6V0500~200 Series Solenoid valve	<ul style="list-style-type: none"> ● Sliding column structure ● Horizontal and vertical insertion can freely switch ● Port threads and push-in fittings options ● Manifold is optional ● 5/2 Way, 5/3 Way 	
P52	Product feature	Photo	P60	Product feature	Photo
7S0500~200 Series Solenoid valve	<ul style="list-style-type: none"> ● Sliding column structure ● Transfer block design ● Port threads and push-in fittings options. ● 5/2 Way, 5/3 Way ● Centralized inlet and exhaust design 		7V0500~200 Series Solenoid valve	<ul style="list-style-type: none"> ● Sliding column structure ● Horizontal and vertical insertion can freely switch ● Port threads and push-in fittings options ● Manifold is optional ● 5/2 Way, 5/3 Way 	
P65	Product feature	Photo	P73	Product feature	Photo
4V100~400 Series Solenoid valve	<ul style="list-style-type: none"> ● Sliding column structure ● Double control and single control are optional ● Closed center, exhaust center and pressure center are available for 5/3 Way ● Manifold is optional ● 5/2 Way, 5/3 Way 		4M100~300 Series Solenoid valve	<ul style="list-style-type: none"> ● Coaxial blanking structure ● 5/2 Way ● Double control and single control are optional ● Closed center, exhaust center and pressure center are available for 5/3 Way 	
P75	Product feature	Photo	P77	Product feature	Photo
Manifold	<ul style="list-style-type: none"> ● Can integrate valves of the same series to form valve group ● Unified air intake and exhaust and unified wiring ● Flexible combination and strong expansion capability 		ESV Series Solenoid valve (ISO Standard)	<ul style="list-style-type: none"> ● Sliding column structure ● Double control and single control are optional ● 5/2 Way, 5/3 Way ● Closed center, exhaust center and pressure center are available for 5/3 Way ● The installation size conforms to ISO5599/1 standard 	

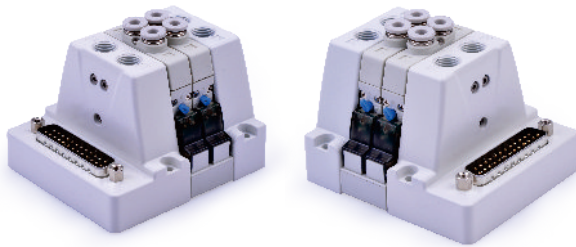
Installation and Application

1. Before installing, be sure the valve hasn't been damaged via transportation.
2. It's suggested to use the medium lubricated by 40 μm 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.



Integrated solenoid valve (3/2 way)

CPV10S Series



Specification

Model		CPV10SB	CPV10SF
Integrated solenoid valve	Fluid	Air(to be filtered by 40 μ m filter element)	
	Acting	Direct acting	
	Number of stations	2~12 stations (Controlling two solenoid valves per station)	
	Electrical entry	Terminal, 25pin D-Sub	
	Port size	P/R: M5 A: Φ3.2/ Φ4(Push in fittings)	
	The type of Inlet and exhaust	Centralized inlet and exhaust	
	Operating pressure	0~0.8MPa(0~114psi)	
	Proof pressure	1.2MPa(175psi)	
Coil	Temperature	-20~70℃	
	Protection	Dustproof	
	Standard voltage	DC24V	DC12V
	Scope of voltage	DC±10%	
	Temperature classification	F Class	
	Power consumption	DC: 0.9W	

Product feature

1. Integrated installation of air inlet/exhaust and power socket(25pin D-Sub) to save space and reduce additional accessories.
2. Equipped with manual override for adjustment and troubleshooting.
3. Low starting voltage and long service life.

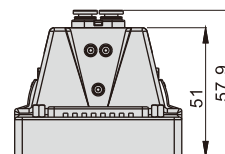
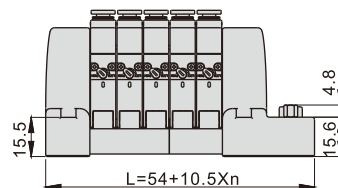
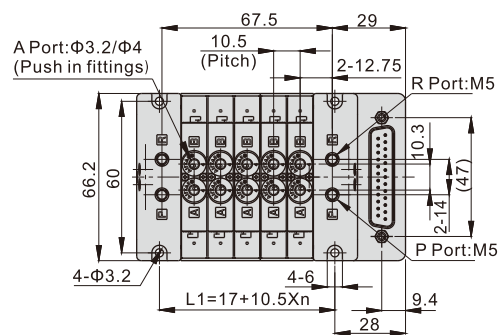
Ordering code

CPV10S J04 B 12F

① ② ③ ④

① Model	② Port size	③ Voltage	④ Number of stations
CPV10S: CPV10S series integrated solenoid valve	J03: Φ3.2mm J04: Φ4.0mm	B: DC24V F: DC12V	2F: 2 stations 3F: 3 stations 4F: 4 stations 12F: 12 stations

Dimensions



Item\Number of stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F
L	75	85.5	96	106.5	117	127.5	138	148.5	159	169.5	180
L1	38	48.5	59	69.5	80	90.5	101	111.5	122	132.5	143

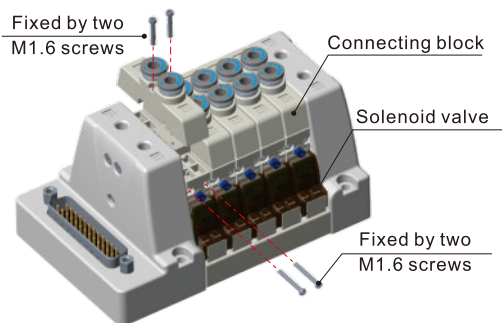
Integrated solenoid valve (3/2 way)

CPV10S Series

Installation and Application

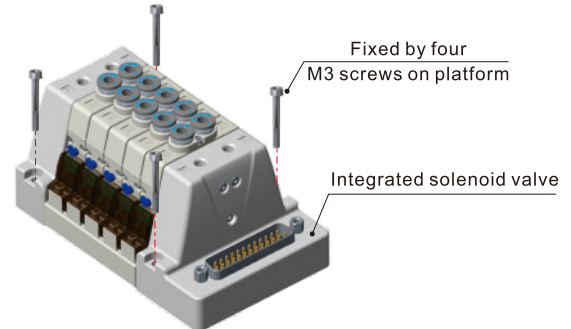
Assembly of connecting block and micro-solenoid valve

Mount micro-solenoid valve and connecting block with torque of 0.1~0.15N.m by two M1.6 screws as following.



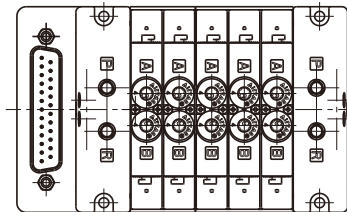
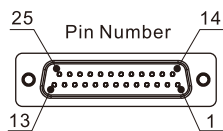
Mounting of integrated solenoid valve

Mount integrated solenoid valve by four M3 screws on platform as following.



Pin Assignment

Definition of stations: 1A 2A 3A.....



Definition of stations: 1B 2B 3B.....

Note: Gauge number of cable connecting to D-Sub pin No.13(COM) must be ≤ 22 AWG

Pin NO.	Polarity		Control target	Pin NO.	Polarity		Control target
	-COM	+COM			-COM	+COM	
1	(+)	(-)	1A	14	(+)	(-)	1B
2	(+)	(-)	2A	15	(+)	(-)	2B
3	(+)	(-)	3A	16	(+)	(-)	3B
4	(+)	(-)	4A	17	(+)	(-)	4B
5	(+)	(-)	5A	18	(+)	(-)	5B
6	(+)	(-)	6A	19	(+)	(-)	6B
7	(+)	(-)	7A	20	(+)	(-)	7B
8	(+)	(-)	8A	21	(+)	(-)	8B
9	(+)	(-)	9A	22	(+)	(-)	9B
10	(+)	(-)	10A	23	(+)	(-)	10B
11	(+)	(-)	11A	24	(+)	(-)	11B
12	(+)	(-)	12A	25	(+)	(-)	12B
13	(-)	(+)	COM				

Micro-solenoid valve(3/2 way)

CPV10 Series



Symbol



Product feature

1. With anti-surge component can avoid the damage of solenoid valve.
2. Multi-direction installation and polarless circuit design.
3. AC voltage models possess a built-in full wave rectifier circuit to reduce the noise effectively.
4. Various of standard voltages: AC220V, AC110V, DC24V, DC12V.
5. Low starting voltage and long service life.
6. Equipped with a push-turn locking manual override for adjustment and troubleshooting.

Specification

Model		CPV10
Fluid		Air(to be filtered by 40 μ m filter element)
Acting		Direct acting
Nominal diameter		Φ0.55mm
Effective area		P to A:0.25mm ² (Cv=0.014); A to R:0.35mm ² (Cv=0.02)
Valve type		3 /2 way
Weight	micro-solenoid valve	15g
	Terminal line	050: 4.6g 200: 21.4g
	Screw(2pcs)	0.46g
Operating pressure		0~0.8MPa(0~114psi)
Proof pressure		1.2MPa(175psi)
Temperature		-20~70℃
Standard voltage		AC220V AC110V DC24V DC12V
Scope of voltage		DC±10%; AC+15%~-10%
Protection		Dustproof
Temperature classification		F Class
Power consumption		DC: 0.9W; AC: 1.5VA
Electrical entry		Terminal
Activating time		on<7ms; off<7ms

Ordering code

Ordering code of valve

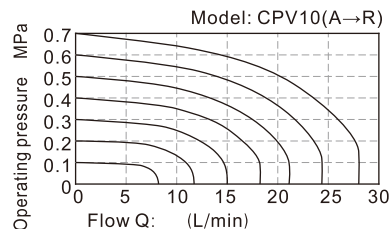
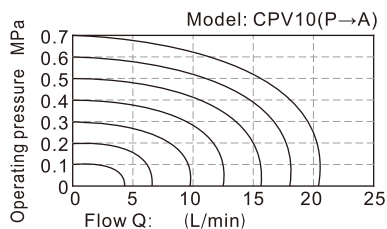
CPV 10 B P-050				
①	②	③	④	⑤
① Model	② Width of body	③ Voltage	④ Code of manual override	⑤ Wire length [Note1]
CPV: CPV series Micro-solenoid valve	10: 10mm	A: AC220V B: DC24V C: AC110V F: DC12V	P: With manual override	050: 0.5m 200: 2.0m

[Note1] Contain two M1.6 screws.

Ordering code of terminal wire

CPV T 050		
①	②	③
① Model	② Terminal wire	③ Wire length
CPV: CPV series Micro-solenoid valve	T: Terminal wire	050: 0.5m 200: 2.0m

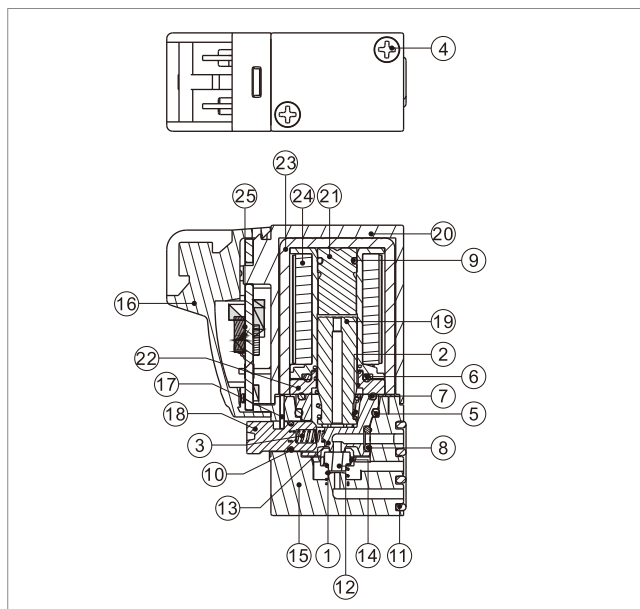
Flow chart



Micro-solenoid valve(3/2 way)

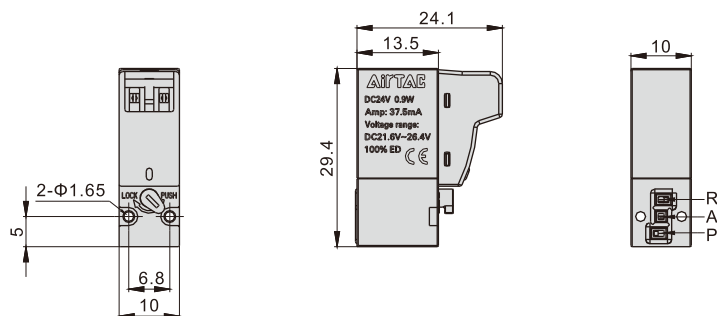
CPV10 Series

Inner structure



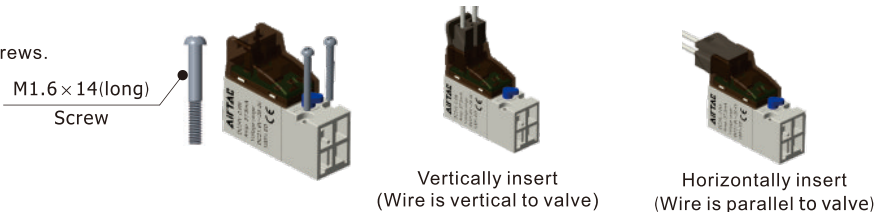
No.	Item	Material	No.	Item	Material
1	Spring	Stainless steel	14	mandril	Resin
2	Spring	Stainless steel	15	Body	Resin
3	Spring	Stainless steel	16	Connector shell	Resin
4	Screw	Carbon steel	17	Manual pin plate	Stainless steel
5	O-ring	NBR	18	Manual pin	Brass
6	O-ring	NBR	19	Movable core	Stainless steel
7	O-ring	NBR	20	Cover	Resin
8	O-ring	NBR	21	Electromagnet	Stainless steel
9	O-ring	NBR	22	Plate	Carbon steel
10	O-ring	NBR	23	U shape bracket	Carbon steel
11	Gasket	NBR	24	Coil	
12	Gasket	NBR	25	PCB assembly	
13	Crater	Resin			

Dimensions



Installation and Application

1. Micro-solenoid valve assembly:
Fastened with torque of 0.1~0.15N.m by two M1.6X14L screws.
2. Wiring instruction:
Multi-direction installation and polar less circuit design.
Note: The terminal wire is non-polarity.
3. Prevent to connect AC coils in series with other devices.



Micro-solenoid valve(3/2 way)

CPV10 Series — Manifold



Specification

Model	CPV10MJ□□2F	CPV10MJ□□3F	CPV10MJ□□20F
Fluid	Air(to be filtered by 40 μm filter element)			
Temperature	-20~70℃			
Port size	P/R: M5 A: Φ3.2 / Φ4(Push in fittings)			
Applicable valves	CPV10 series micro-solenoid valve			

Product feature

1. Integrated installation saves space and reduces additional accessories.
2. Centralized air intake, exhaust, and wiring for quick air circuit checking.
3. Fixible combination and expandability for various applications. Blank plates are optional.

Ordering code

Ordering code of manifold

CPV10M J03 – 20F

① Model	② Port size	③ Number of stations
CPV10M: CPV10 series Manifold	J03: Φ3.2 J04: Φ4	2F: 2 stations 4F: 4 stations 6F: 6 stations 20F: 20 stations

Ordering code of blank plate

P-CPV10M-R2

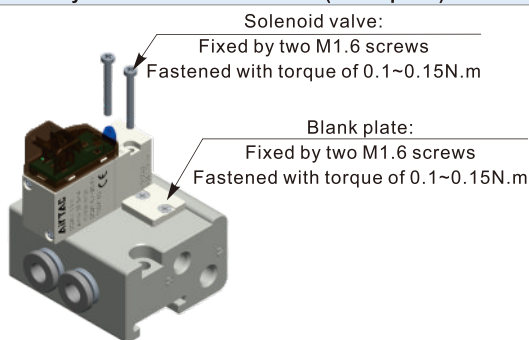
① Model	② Code
CPV10M: CPV10 series Manifold	R2: Blank plate for manifold

[Note] Blank plate kits contains blank plate, gasket and screws.



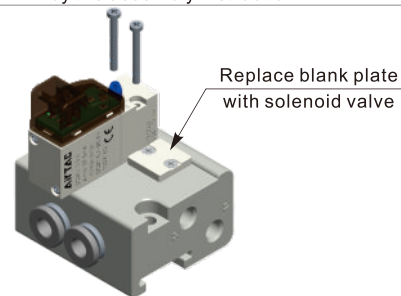
Installation and Application

Assembly of micro-solenoid valve (blank plate) and manifold



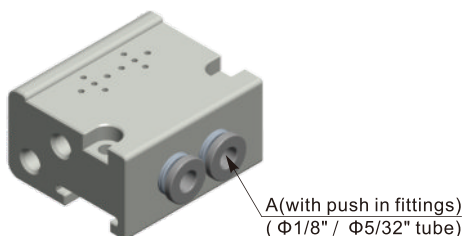
Expansion of micro-solenoid valve

Remove blank plate and install solenoid valve by the assembly instruction.



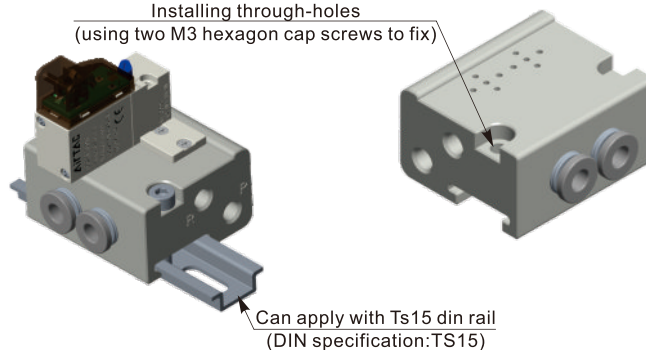
A port tubing

A port is at the side of manifold, port size is "Φ3.2 / Φ4"



Manifold mounting

Installing through-holes
(using two M3 hexagon cap screws to fix)

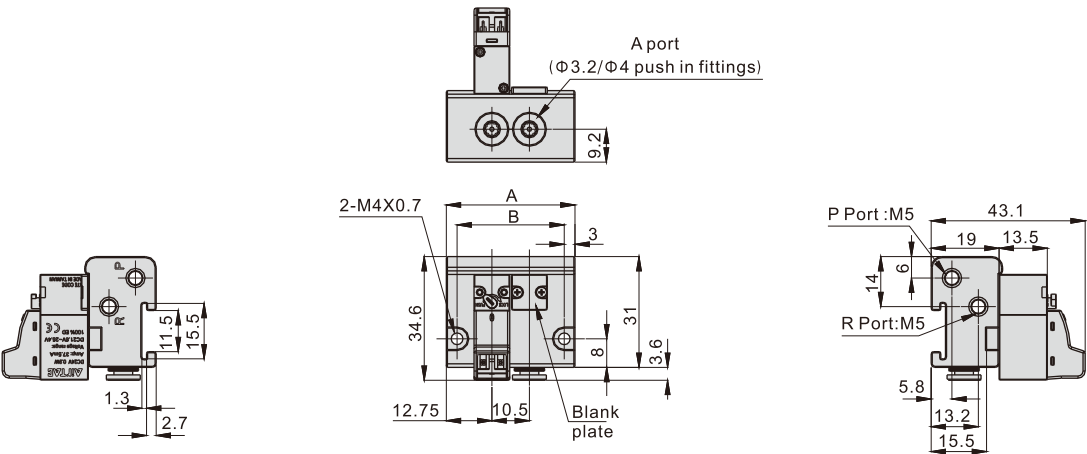


Micro-solenoid valve(3/2 way)



CPV10 Series —— Manifold

Dimensions



Item\Number of stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
A	36	46.5	57	67.5	78	88.5	99	109.5	120	130.5	141	151.5	162	172.5	183	193.5	204	214.5	225
B	30	40.5	51	61.5	72	82.5	93	103.5	114	124.5	135	145.5	156	166.5	177	187.5	198	208.5	219