

Ordering code

**CPV15S B 20F T**



① **Model**  
CPV15S: CPV15S series integrated solenoid valve

② **Voltage**  
B: DC24V  
F: DC12V

③ **Number of stations**  
2F: 2 stations  
3F: 3 stations  
4F: 4 stations  
.....  
20F: 20 stations

④ **Thread type**  
T: NPT

Specification

Model		CPV15SB	CPV15SF
Integrated solenoid valve	Fluid	Air(to be filtered by 40µm filter element)	
	Acting	Direct acting	
	Number of stations	2~20 stations	
	Electrical entry	Terminal	
	Port size	P/R: NPT1/8	A: Φ5/32"(Push in fittings)
	The type of Inlet and exhaust	Centralized inlet and exhaust	
	Operating pressure	0~114psi(0~0.8MPa)	
	Proof pressure	175psi(1.2MPa)	
Coil	Temperature	-10~50°C	
	Protection	Dustproof	
	Standard voltage	DC24V	DC12V
	Scope of voltage	DC±10%	
	Power consumption	DC· 1.6W	

Product feature

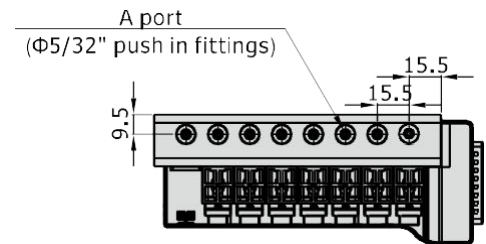
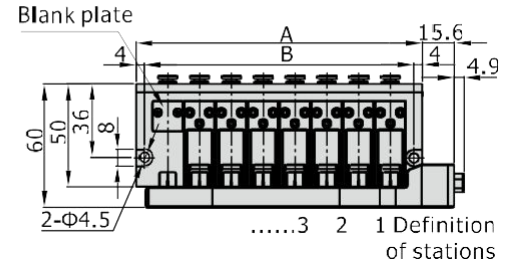
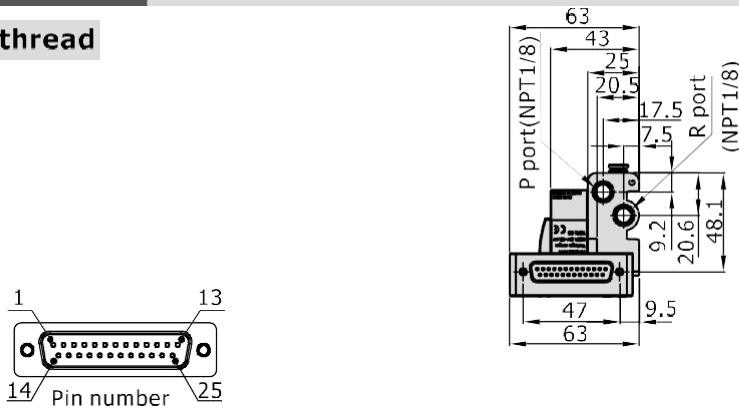
1. Integrated installation centralizes air intake, exhaust and power(25pin D-Sub)to save space and reduce additional accessories.
2. Flexible combination and expandability for various applications. Blank plates are optional.
3. Equipped with manual override for quick air circuit checking.
4. Low starting voltage and long service life.

# Integrated solenoid valve (3/2 way)

## CPV15S Series(NPT)

### Dimensions

#### NPT thread



[Unit: mm]

Terminal no.	Polarity		Control object	Terminal no.	Polarity		Control object
	-COM	+COM			-COM	+COM	
1	(+)	(-)	13 station	14	(+)	(-)	1 station
2	(+)	(-)	14 station	15	(+)	(-)	2 station
3	(+)	(-)	15 station	16	(+)	(-)	3 station
4	(+)	(-)	16 station	17	(+)	(-)	4 station
5	(+)	(-)	17 station	18	(+)	(-)	5 station
6	(+)	(-)	18 station	19	(+)	(-)	6 station
7	(+)	(-)	19 station	20	(+)	(-)	7 station
8	(+)	(-)	20 station	21	(+)	(-)	8 station
9			Void	22	(+)	(-)	9 station
10			Void	23	(+)	(-)	10 station
11			Void	24	(+)	(-)	11 station
12			Void	25	(+)	(-)	12 station
13	(-)	(+)	COM				

Dim.\Number of stations	2F	4F	6F	8F	10F
A	46.5	77.5	108.5	139.5	170.5
B	38.5	69.5	100.5	131.5	162.5

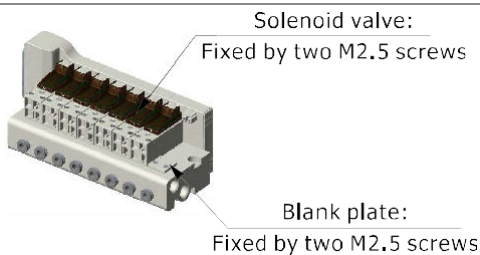
Dim.\Number of stations	12F	14F	16F	18F	20F
A	201.5	232.5	263.5	294.5	325.5
B	193.5	224.5	255.5	286.5	317.5

[Note] Gauge number of cable connecting to D-Sub pin No. 13 (COM) must be  $\leq 22$ AWG.

### Installation and Application

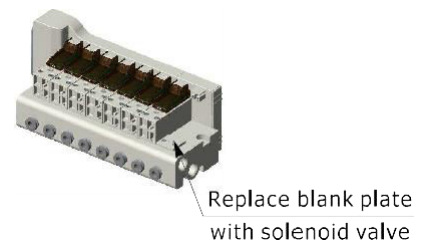
#### Assembly of micro-solenoid valve (blank plate) and manifold

Mount micro-solenoid valve and manifold by two M2.5 screws as following  
Mount blank plate and manifold by two M2.5 countersunk screws as following



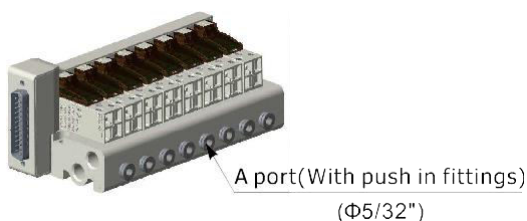
#### Expansion of micro-solenoid valve

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



#### A port tubing

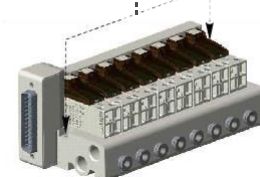
A port is at the side of manifold, port size is "Φ5/32"



#### Manifold mounting

Both sides of manifold attach two installing through-holes, using two M4 hexagon cap screws to fix.

Installing through-holes (using two M4 hexagon cap screws to fix)



# Integrated solenoid valve (3/2 way)

## CPV15S Series (NPT)— Manifold, solenoid valve and blank plate



### Ordering code

#### Ordering code of manifold



**CPV15S 20F T**

① ② ③

#### ① Model

CPV15S: CPV15S series integrated solenoid valve

#### ② Number of stations

2F: 2 stations  
4F: 4 stations  
6F: 6 stations  
.....  
20F: 20 stations

#### ③ Thread type

T: NPT

#### Ordering code of valve



**CPV15 B P**

① ② ③

#### ① Model

CPV: CPV series micro-solenoid valve

#### ② Voltage

B: DC24V  
F: DC12V

#### ③ Code of manual override

P: With manual override

#### Ordering code of blank plate



**P-CPV15S-R2**

① ②

#### ① Model

CPV15S: CPV15S series integrated solenoid valve

#### ② Code

R2: Blank plate for manifold

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

[Note] 1. Ordering code contains solenoid valve, manifold, and blank plate.  
2. Maximum station up to 20 stations.

# Integrated solenoid valve (3/2 way)

## CPV15S Series (NPT)— Manifold, solenoid valve and blank plate

### Specification

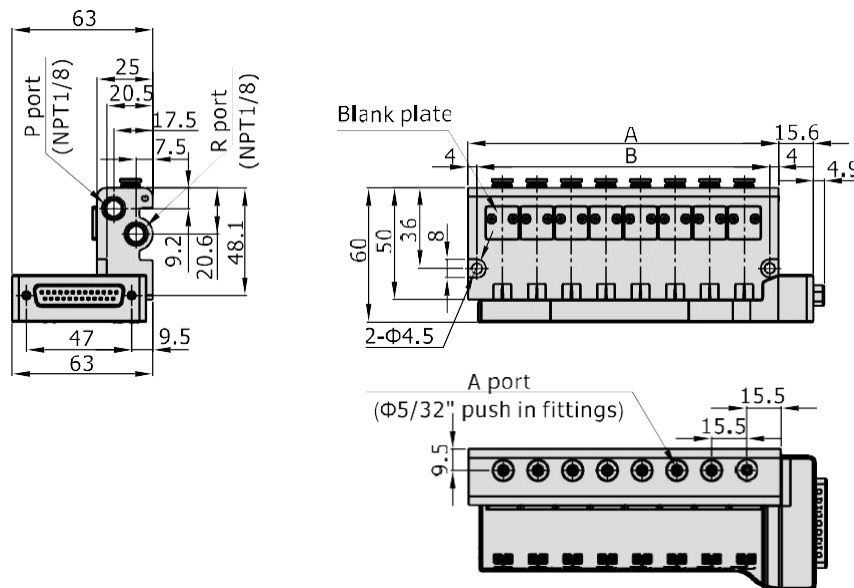
Model		CPV15S
Fluid		Air (to be filtered by 40µm filter element)
Number of stations		2 stations ~20 stations, only available in even stations
Electrical entry		Terminal, 25pin D-Sub
Port size		P/R: NPT1/8 A: $\Phi 5/32$ " (Push in fittings)
The type of Inlet and exhaust		Centralized inlet and exhaust
Operating pressure		21~114psi (0.15~0.8MPa)
Proof pressure		175psi (1.2MPa)
Temperature		-10~50°C
Weight	Integrated valve of 2 stations	158.5g (not include CPV15 valve)
	Increase when add 2 stations	+97.65g
	Blank plate kits	0.65g

### Product feature

1. Integrated installation centralizes air inlet, exhaust and power (25pin D-Sub) to save space and reduce additional accessories.
2. Flexible combination and expandability for various applications. Blank plates are optional.

### Dimensions

#### NPT thread



[Unit: mm]

Dim.\Number of stations	2F	4F	6F	8F	10F	12F	14F	16F	18F	20F
A	46.5	77.5	108.5	139.5	170.5	201.5	232.5	263.5	294.5	325.5
B	38.5	69.5	100.5	131.5	162.5	193.5	224.5	255.5	286.5	317.5

### Installation and Application

Please refer to the "Installation and Application" instruction of Integrated solenoid valve (NPT thread).

# Micro-solenoid valve(3/2 way)

## CPV15 Series



### Ordering code

#### Ordering code of valve



**CPV 15 B P-050**

① ② ③ ④ ⑤

① Model	② Width of body	③ Voltage
CPV: CPV series Micro-solenoid valve	15: 15mm	A: AC220V B: DC24V C: AC110V E: AC24V F: DC12V
④ Code of manual pin	⑤ Wire length [Note1]	
P: With manual override	050: 0.5m 200: 2.0m	

[Note1] Contain the two M2.5 screws.

#### Ordering code of terminal wire



**CPV T 050**

① ② ③

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

### Specification

Model	CPV15	
Fluid	Air(to be filtered by 40μm filter element)	
Acting		
Nominal diameter	Φ0.8mm	
Effective area	P to A:0.44mm <sup>2</sup> (Cv=0.024) ; A to R:0.55mm <sup>2</sup> (Cv=0.03)	
Valve type	3/2 way	
Weight	micro-solenoid valve	33.2g
	Terminal line	050: 4.6g 200: 21.4g
	Screw(2pcs)	1.45g
Operating pressure	21~114psi(0.15~0.8MPa)	
Proof pressure	175psi(1.2MPa)	
Temperature	-10~50°C	
Standard voltage	AC220V AC110V AC24V DC24V DC12V	
Scope of voltage	DC±10%; AC+15%~-10%	
Protection	Dustproof	
Temperature classification	F Class	
Power consumption	DC·1.6W; AC·2.0VA	
Electrical entry	Terminal	
Activating time	on<10ms; off<10ms	

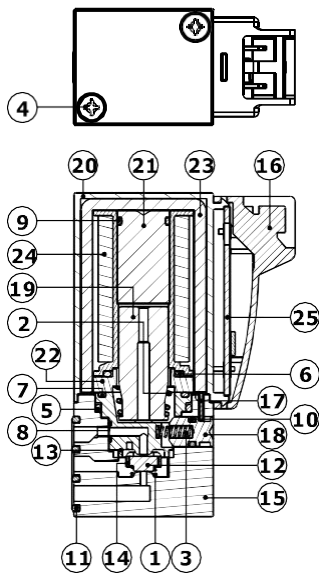
# Micro-solenoid valve(3/2 way)

## CPV15 Series

### Product feature

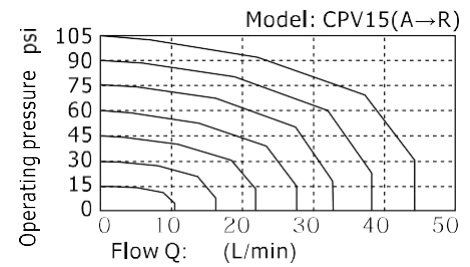
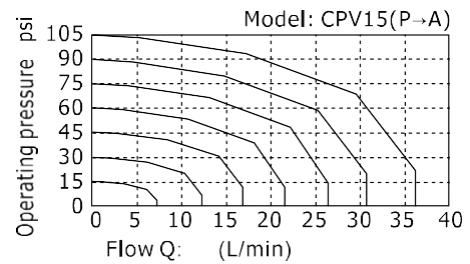
1. Multi-direction installation and polarless circuit design.
2. Low starting voltage and long service life.
3. AC voltage models possess a built-in full wave rectifier circuit to reduce the noise effectively.
4. With anti-surge component can avoid the damage of solenoid valve.

### Inner structure



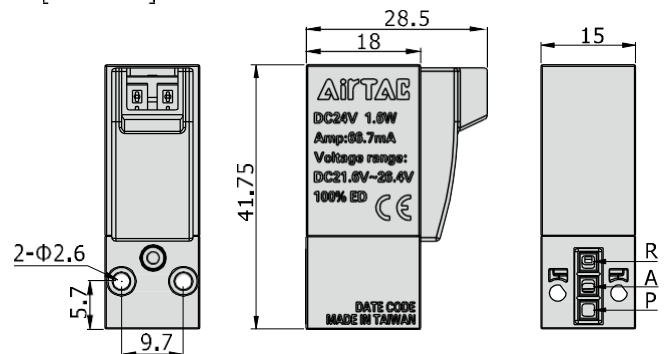
No.	Item	No.	Item
1	Spring	14	mandril
2	Spring	15	Body
3	Spring	16	Connector shell
4	Screw	17	Manual pin plate
5	O-ring	18	Manual pin
6	O-ring	19	Armature
7	O-ring	20	Cover
8	O-ring	21	Electromagnet
9	O-ring	22	Plate
10	O-ring	23	U shape bracket
11	Gasket	24	Coil
12	Gasket	25	PCB assembly
13	Crater		

### Flow chart



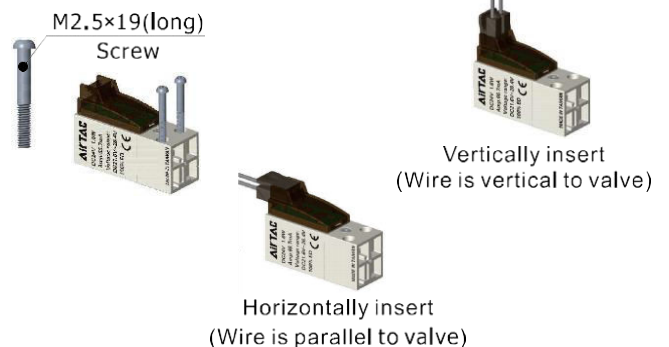
### Dimensions

[Unit: mm]



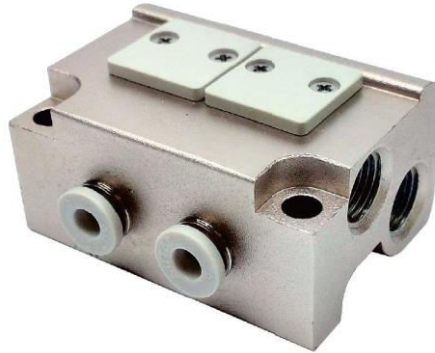
### Installation and Application

1. Micro-solenoid valve assembly  
Fastened with torque of 0.4~0.45N.m by two M2.5X19L screws.
2. Wiring instruction  
Multi-direction installation and polarless 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)

## CPV15 Series —— Manifold (NPT)



### Ordering code

#### Ordering code of manifold

**CPV15M 20F T**

① ② ③

#### ① Model

CPV15M: CPV15 series manifold

#### ② Number of stations

2F: 2 station  
3F: 3 station  
4F: 4 station  
.....  
20F: 20 station

#### ③ Thread type

T: NPT

#### Ordering code of blank plate



**P-CPV15S-R2**

① ②

#### ① Model

CPV15S: CPV15S series integrated solenoid valve

#### ② Code

R2: Blank plate for manifold

- [Note] 1. Ordering code contains manifold and blank plate.  
2. Maximum station up to 20 stations.  
3. Blank plate kits contain blank plate, gasket and screw.

### Specification

Model	CPV15M2F	CPV15M3F	CPV15M4F	.....	CPV15M20F
Fluid	Air(to be filtered by 40μm filter element)				
Temperature	-10~50°C				
Port size	P/R: NPT1/8		A: Φ5/32"(Push in fittings)		
Applicable valves	CPV15 series micro-solenoid valve				

### Product feature

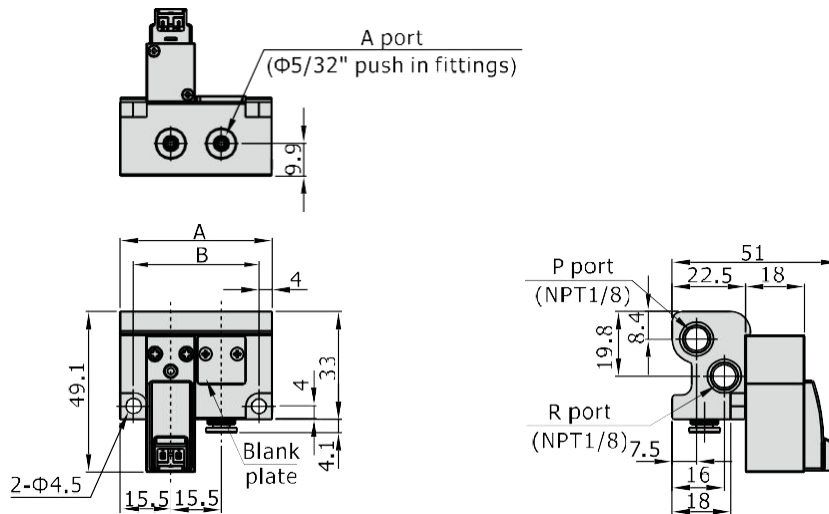
1. Integrated installation saves space and reduces additional accessories.
2. Centralized air intake, exhaust, and wiring for quick air circuit checking.
3. Flexible combination and expandability for various applications.  
Blank plates are optional.

# Micro-solenoid valve(3/2 way)

## CPV15 Series — Manifold (NPT)

### Dimensions

#### NPT thread



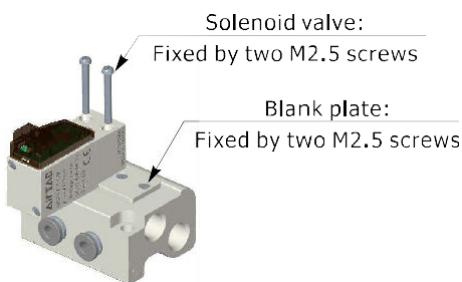
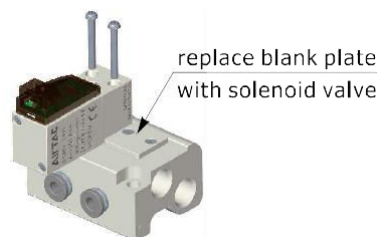
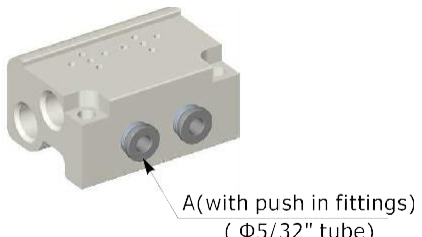
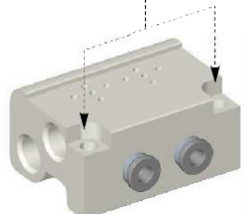
[Unit: mm]

Item\Number of stations	2F	3F	4F	5F	6F	7F	8F	9F	10F
A	46.5	62	77.5	93	108.5	124	139.5	155	170.5
B	38.5	54	69.5	85	100.5	116	131.5	147	162.5

Item\Number of stations	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
A	186	201.5	217	232.5	248	263.5	279	294.5	310	325.5
B	178	193.5	209	224.5	240	255.5	271	286.5	302	317.5

### Installation and Application

Assembly of micro-solenoid valve (blank plate) and manifold	Expansion of micro-solenoid valve
<p>Mount micro-solenoid valve and manifold by two M2.5 screws as following . Mount blank plate and manifold by two M2.5 countersunk screws as following</p> 	<p>Remove blank plate and install solenoid valve by the assembly instruction.</p> 
A port tubing	Manifold mounting
<p>A port is at the side of manifold, port size is "Φ5/32"</p> 	<p>Both sides of manifold attach two installing through-holes, using two M4 hexagon cap screws to fix.</p> <p>Installing through-holes (using two M4 hexagon cap screws to fix)</p> 

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