

#### **CPV15S Series**



#### **Product feature**

- 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.

#### **Specification**

Model				CPV15SB	CPV15SF	
	Fluid			Air(to be filtered by 40 µ m filter element)		
	Acting			Direct	acting	
	Number	of statio	ns	2 stations ~: only available i		
	Electrical	entry		Terminal, 2	5pin D-Sub	
l 4 4 1		Р	/R ports	1/8"	[Note1]	
Integrated solenoid valve	Port size		PT thtread	Φ4mm(Push in fittings)		
solellold valve	Portsize	A Port	G thtread	Φ4mm(Push in fittings)		
			NPT thtread	Φ5/32"(Push in fittings)		
	The type of Inlet and exhaust			Centralized inlet and exhaust		
	Operating	g pressi	ure	0.15~0.8MPa(21~114psi)		
	Proof pre	ssure		1.2MPa(175psi)		
	Temperat	ure		-20~70℃		
	Protectio	n		Dust	proof	
	Standard	voltage	)	DC24V DC12V		
Coil	Scope of	voltage		DC±10%		
	Temperat	ure cla	ssification	F Class		
	Power co	nsumpt	ion	DC: 1	.6W	

[Note1] PT thread, G thread and NPT thread are available.

#### Ordering code

# CPV15S B 20F □ 1 2 3 4 1 2 3 Number of stations 4 Thread type CPV15S: CPV15S series integrated solenoid valve B: DC24V F: DC12V B: DC24V F: DC12V Blank: PT G: G G: G T: NPT 20F: 20stations T: NPT

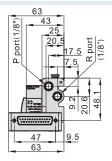
#### **Installation and Application**

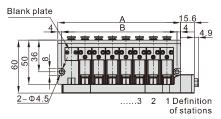
Assembly of micro-solenoid valve (blank plate) and manifold	Expansion of micro-solenoid valve			
Mount micro-solenoid valve and manifold by two M2.5 screws as following . Mount blank plate and manifold by two M2.5 countersunk screws as following .	Remove blank plate and install solenoid valve by the assembly instruction.			
Solenoid valve: Fixed by two M2.5 screws  Manifold: Fixed by two M2.5 screws	replace blank plate with solenoid valve			
A port tubing	Manifold mounting			
A port is at the side of manifold with push in fittings.	Both sides of manifold attach two installing through-holes, using two M4 hexagon cap screws to fix.			
A port is at the side of mainfold with push in fittings.	hexagon cap screws to fix.			

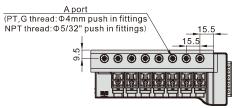


#### **CPV15S Series**

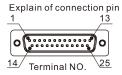
#### **Dimensions**







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



Terminal	Pola	arity	Control	Terminal	Pol	arity	Control
no.	-COM	+COM	object	no.	-COM	+COM	object
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				

[Note] The D-sub cable of the corresponding Pin no. 13 (COM) should be ess than or equal to 22AWG.

20



#### CPV15S Series——Manifold, solenoid valve and blank plate



#### **Specification**

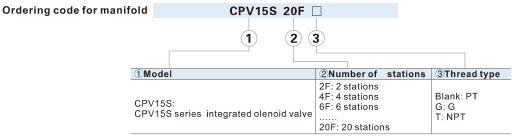
Model			CPV15S		
Fluid			Air(to be filtered by 40 μ m filter element)		
Number of stations			2 stations ~20 stations, only available in even stations		
Electric	al entry		Terminal, 25pin D-Sub		
	P/R	ports	1/8" [Note1]		
Port		PT thtread	Φ4mm(Push in fittings)		
size	A Port	G thtread	Φ4mm(Push in fittings)		
		NPT thtread Φ5/32"(Push in fitting			
The typ	e of Inlet and ex	haust	Centralized inlet and exhaust		
Operati	ing pressure		0.15~0.8MPa(21~114psi)		
Proof p	of pressure 1.2MPa(		1.2MPa(175psi)		
Temper	Temperature		-20~70℃		
	Integrated valve of 2 stations		158.5g(not include CPV15 valve)		
Weight	Increase when	add 2 satations	+97.65g		
-	Blank plate kits	3	0.65g		

[Note1] PT thread, G thread and NPT thread are available.

#### **Product feature**

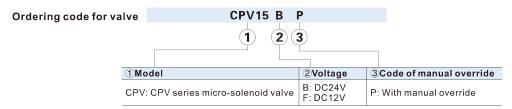
- Integrated installation centralizes air inlet, exhaust and power (25pin D-Sub)to save space and reduce additional accessories.
- Flexible combination and expandability for various applications. Blank plates are optional.

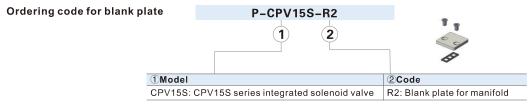
#### Ordering code



[Note] 1. Ordering code contains solenoid valve, manifold, and blank plate.

2. Maximum station up to 20 stations.





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

#### Installation and Application

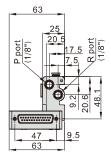
Please refer to the "Installation and Application" instruction of Integrated solenoid valve.

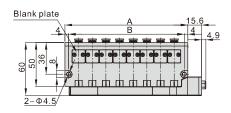


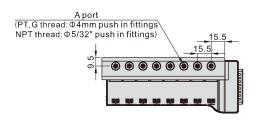


#### CPV15S Series——Manifold, solenoid valve and blank plate

#### **Dimensions**







Item\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
В	38.5	69.5	100.5	131.5	162.5	193.5	224.5	255.5	286.5	317.5

4

### AITAC

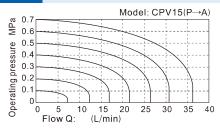
#### **CPV15 Series**

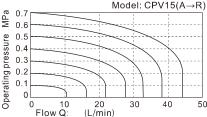


## Product feature PR

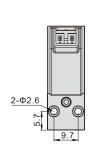
- None polarity design of DC circuit, the direction(vertical or horizontal) of wiring can be adjusted freely according to the installation demand.
- 2. Low starting voltage and long service life.
- 3. There is no buzzing by the usage of AC power supply.
- 4. With surge device can avoid the damage of solenoid valve by surge voltage.

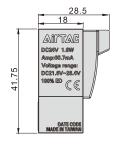
#### Flow chart

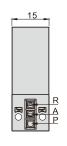




#### **Dimensions**





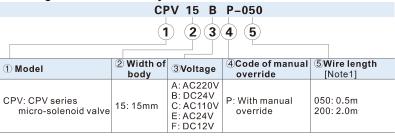


#### **Specification**

Model		CPV15				
Fluid		Air(to be filtered by 40 μ m filter element)				
Acting		Direct acting				
Orifice	size	Ф0.8mm				
Valid ar	ea or section	0.44mm <sup>2</sup> (Cv=0.024); 0.55mm <sup>2</sup> (Cv=0.03)				
Valve ty	/pe	3 port 2 position				
	micro-solenoid valve	33.2g				
Weight	Wire	050: 4.6g 200: 21.4g				
	Screw(2pcs)	1.45g				
Operati	ng pressure	0.15~0.8MPa(21~114psi)				
Proof p	ressure	1.2MPa(175psi)				
Temper	ature	-20~70℃				
Standa	rd 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				
Electric	al entry	Terminal				
Activati	ng time	on<10ms; off<10ms				

#### Ordering code

#### Ordering code of valve's body



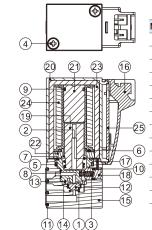
[Note1] Attach the two M2.5 screws.

#### Ordering code of wire

	1 2 3	$\neg$	
① Model	2Wire	3Wire length	
CPV: CPV series	T: Wire	050: 0.5m	300: 3.0m
micro-solenoid valve	i. wire	200: 2.0m	500: 5.0m

**CPV T 050** 

#### Inner structure



Item	Material	Nο.	Item	Material
Spring	Stainless steel	14	mandril	Resin
Spring	Stainless steel	15	Body	Resin
Spring	Stainless steel	16	Connector shell	Resin
Screw	Carbon steel	17	Manual pin plate	Stainless steel
O-ring	NBR	18	Manual pin	Brass
O-ring	NBR	19	Movable core	Stainless steel
O-ring	NBR	20	Cover	Resin
O-ring	NBR	21	Electromagnet	Stainless steel
O-ring	NBR	22	Plate	Carbon steel
O-ring	NBR	23	U shape bracket	Carbon steel
Gasket	NBR	24	Coil	
Gasket	NBR	25	PCB assembly	
Crater	Resin			
	Spring Spring Spring Screw O-ring O-ring O-ring O-ring O-ring Gasket Gasket	Spring Stainless steel Spring Stainless steel Spring Stainless steel Screw Carbon steel O-ring NBR G-ring NBR O-ring NBR O-ring NBR O-ring NBR O-ring NBR O-ring NBR	Spring         Stainless steel         14           Spring         Stainless steel         15           Spring         Stainless steel         16           Screw         Carbon steel         17           O-ring         NBR         18           O-ring         NBR         19           O-ring         NBR         20           O-ring         NBR         21           O-ring         NBR         22           O-ring         NBR         23           Gasket         NBR         24           Gasket         NBR         25	Spring Stainless steel 14 mandril Spring Stainless steel 15 Body Spring Stainless steel 16 Connector shell Screw Carbon steel 17 Manual pin plate O-ring NBR 18 Manual pin O-ring NBR 19 Movable core O-ring NBR 20 Cover O-ring NBR 21 Electromagnet O-ring NBR 22 Plate O-ring NBR 23 U shape bracket Gasket NBR 24 Coil Gasket NBR 25 PCB assembly

#### **Installation and Application**

1. Valve body installation:
Use two M2.5 X 19 screws to mount the valve by 0.4~0.45N.

2. Wiring instruction:

Vertical and horizontal insertion share the same terminal port for different practical applications.

Note: There is no polarity for terminal wire.

3. AC coil is forbidden to connect with other devices.









Horizontally insert (Wire and body is horizontal)



#### CPV15 Series — Manifold





#### **Specification**

Model		CPV15M2F	CPV15M3F	CPV15M4F		CPV15M20F			
Fluid			Air(to be filtered by 40 µ m filter element)				t)		
Temperature				-20~70℃					
P/R ports		1/8"[Note1]							
Port		PT thread		Ф4т	m(Push in fit	tings)			
size	A port	G thread	G thread $\Phi$ 4mm(Push in fittings)						
NPT thread			Φ5/32"(Push in fittings)						
Applicable valves		oplicable valves CPV15 series micro-solenoid valve							

[Note1] PT thread, G thread and NPT thread are available.

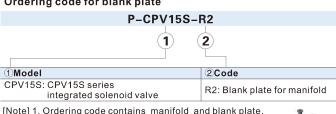
#### **Product feature**

- 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.

#### Ordering code



#### Ordering code for blank plate



- [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



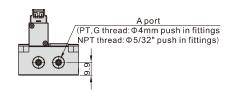
#### **Installation and Application**

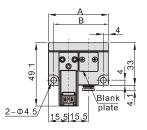
Assembly of micro-solenoid valve (blank plate) and manifold	Expansion of micro-solenoid valve
Mount micro-solenoid valve and manifold by two $$ M2.5 screws as following . Mount blank plate and manifold by two M2.5 countersunk screws as following .	Remove blank plate and install solenoid valve by the assembly instruction.
Solenoid valve: Fixed by two M2.5 screws  Manifold: Fixed by two M2.5 screws	replace blank plate with solenoid valve

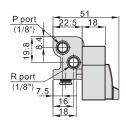
A port tubing	Manifold mounting		
A port is at the side of manifold with push in fittings	Both sides of manifold attach two installing through-holes, using two hexagon cap screws to fix.		
A(with push in fittings) (PT, G thread: Φ4mm NPT thread: Φ5/32" tube)	Installing through-holes (using two M4 hexagon cap screws to fix)		



#### **Dimensions**







Item\Number of stations	2F	3F	4F	5F	6F	7F	8F	9F	10F	11F	12F	13F	14F	15F	16F	17F	18F	19F	20F
Α	46.5	62	77.5	93	108.5	124	139.5	155	170.5	186	201.5	217	232.5	248	263.5	279	294.5	310	325.5
В	38.5	54	69.5	85	100.5	116	131.5	147	162.5	178	193.5	209	224.5	240	255.5	271	286.5	302	317.5