

CPV15S Series(NPT)



Ordering code



①Model

CPV15S: CPV15S series integrated solenoid valve

2 3

②Voltage B: DC24V F: DC12V **3Number of stations**

2F: 2 stations 3F: 3 stations 4F: 4 stations

20F: 20 stations

4 Thread type T: NPT

Specification

| Model | | CPV15SB CPV15SF | | | | |
|---------------------------|-------------------------------|----------------------------------------------|--------------------------|--|--|--|
| | Fluid | Air(to be filtered by 40 µ m filter element) | | | | |
| | Acting | Dire | ct acting | | | |
| | Number of stations | 2~20 |) stations | | | |
| T. 1 1 1 | Electrical entry | Terminal | , 25pin D-Sub | | | |
| Integrated solenoid valve | Port size | P/R: NPT1/8 A: | Φ5/32"(Push in fittings) | | | |
| solellold valve | The type of Inlet and exhaust | Centralized inlet and exhaust | | | | |
| | Operating pressure | 0~114psi(0~0.8MPa) | | | | |
| | Proof pressure | 175psi(1.2MPa) | | | | |
| | Temperature | -20~70℃ | | | | |
| | Protection | Du | stproof | | | |
| | Standard voltage | DC24V | DC12V | | | |
| Coil | Scope of voltage | DC±10% | | | | |
| | Temperature classification | F Class | | | | |
| | 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.

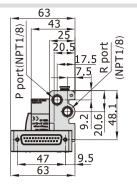


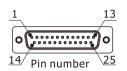


CPV15S Series(NPT)

Dimensions

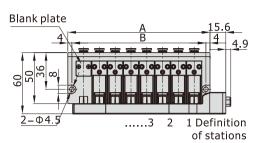
NPT thread

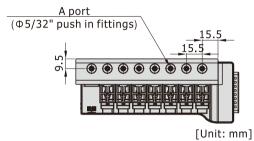




| Terminal | Polarity | | Control | Terminal | Pola | arity | Control |
|----------|----------|------|------------|----------|------|-------|------------|
| no. | -COM | +COM | object | no. | -COM | +COM | object |
| 1 | (+) | (-) | 13 station | 14 | (+) | (-) | 1 station |
| 2 | (+) | (-) | 14 station | 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 | | Voic | d | 22 | (+) | (-) | 9 station |
| 10 | | Voic | d | 23 | (+) | (-) | 10 station |
| 11 | | Voic | d | 24 | (+) | (-) | 11 station |
| 12 | | Voic | d | 25 | (+) | (-) | 12 station |
| 13 | (-) | (+) | COM | | | | |

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





| Dim.\Number of stations | 2F | 4F | 6F | 8F | 10F |
|-------------------------|------|------|-------|-------|-------|
| Α | 46.5 | 77.5 | 108.5 | 139.5 | 170.5 |
| В | 38.5 | 69.5 | 100.5 | 131.5 | 162.5 |

| D | im.\Number of stations | 12F | 14F | 16F | 18F | 20F |
|---|------------------------|-------|-------|-------|-------|-------|
| | Α | 201.5 | 232.5 | 263.5 | 294.5 | 325.5 |
| | В | 193.5 | 224.5 | 255.5 | 286.5 | 317.5 |

| 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: xed by two M2.5 screws | | | | | |
| Blank plate: | Replace blank plate | | | | |
| Fixed by two M2.5 screws | with solenoid valve | | | | |
| A port tubing | Manifold mounting | | | | |
| A port is at the side of manifold, port size is " $\Phi 5/32$ " | Both sides of manifold attach two installing through-holes using two M4 hexagon cap screws to fix. | | | | |
| $\frac{t(With push in fittings)}{(\Phi 5/32")}$ | Installing through-holes (using two M4 hexagon cap screws to fix) | | | | |



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



Ordering code

Ordering code of manifold



CPV15S 20F T

1 2 3

1Model

CPV15S: CPV15S series integrated solenoid valve

2 Number of stations

3Thread type

T: NPT

2F: 2 stations 4F: 4 stations 6F: 6 stations

20F: 20 stations

Ordering code of valve



CPV15 B P



①Model

②Voltage

CPV: CPV series micro-solenoid valve

B: DC24V F: DC12V

3Code of manual override

P: With manual override

Ordering code of blank plate



P-CPV15S-R2

1

2

1Model

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.





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

Specification

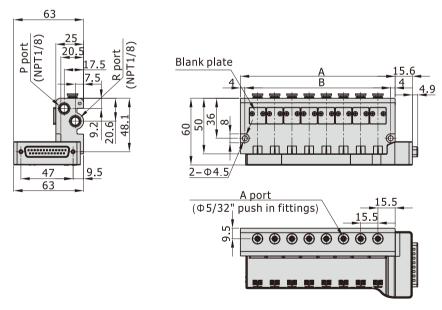
| Model | | CPV15S | | | | |
|-----------|--------------------------------|----------------------------------------------------------|-------------------------------|--|--|--|
| Fluid | | Air(to be filte | red by 40 µ m filter element) | | | |
| Number | of stations | 2 stations ~20 stations, only available in even stations | | | | |
| Electrica | ıl entry | Terr | minal, 25pin D-Sub | | | |
| Port size | | P/R: NPT1/8 A: Φ5/32"(Push in fitting: | | | | |
| The type | e of Inlet and exhaust | Centralized inlet and exhaust | | | | |
| Operatir | ng pressure | 0~114psi(0~0.8MPa) | | | | |
| Proof pr | essure | 175psi(1.2MPa) | | | | |
| Tempera | iture | | -20~70℃ | | | |
| | Integrated valve of 2 stations | 158.5g(n | ot include CPV15 valve) | | | |
| Weight | Increase when add 2 satations | +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 |
|-------------------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| 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 |

Installation and Application

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





CPV15 Series

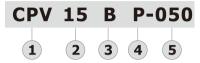






Ordering code of valve





1 Model

2 Width of body

③Voltage

CPV: CPV series Micro-solenoid valve

15: 15mm

A: AC220V

4 Code of manual pin

5Wire length [Note1]

B: DC24V C: AC110V

P: With manual override

050: 0.5m

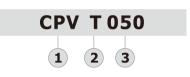
200: 2.0m

E: AC24V F: DC12V

[Note1] Contain the two M2.5 screws.

Ordering code of terminal wire





1 Model

CPV: CPV series Micro-solenoid valve

3Wire length

050: 0.5m

200: 2.0m

2 Terminal wire

T: Terminal wire

Specification

| Model | | CPV15 | | | | | |
|-----------|----------------------|-----------------------------------------------------------------------------|--|--|--|--|--|
| Fluid | | Air(to be filtered by 40 μ m filter element) | | | | | |
| Acting | | Direct acting | | | | | |
| Nominal | diameter | Φ0 . 8mm | | | | | |
| Effective | e area | P to A:0.44mm ² (Cv=0.024); A to R:0.55mm ² (Cv=0.03) | | | | | |
| Valve ty | ре | 3 /2 way | | | | | |
| | micro-solenoid valve | 33.2g | | | | | |
| Weight | Terminal line | 050: 4.6g 200: 21.4g | | | | | |
| | Screw(2pcs) | 1.45g | | | | | |
| Operatir | ng pressure | 0~114psi(0~0.8MPa) | | | | | |
| Proof pr | essure | 175psi(1.2MPa) | | | | | |
| Tempera | iture | -20~70 ℃ | | | | | |
| Standar | d voltage | AC220V AC110V AC24V DC24V DC12V | | | | | |
| Scope of | f voltage | Dc±10%; AC+15%~-10% | | | | | |
| Protecti | on | Dustproof | | | | | |
| Tempera | ture classification | F Class | | | | | |
| Power co | onsumption | DC: 1.6W; AC: 2.0VA | | | | | |
| Electrica | al entry | Terminal | | | | | |
| Activatir | ng time | on<10ms; off<10ms | | | | | |

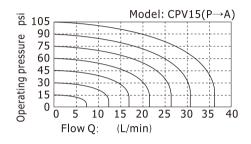


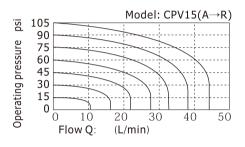
CPV15 Series

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.

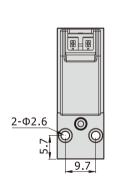
Flow chart

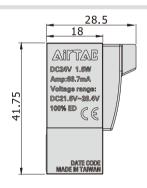


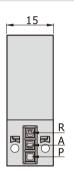


Dimensions

[Unit: mm]

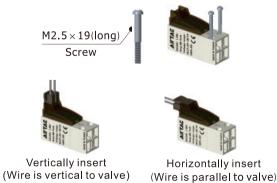






Installation and Application

- 1. Micro-solenoid valve assembly
 - Fastened with torque of 0.4~o.45N.m by two M2.5X19L screws.
- 2. Wiring instruction
 - Multi-direction installation and polarless circuit design.
 - Note: The terminal wore is non-polarity.
- 3. Prevent to connect AC coils in series with other devices.



Micro-solenoid valve(3/2 way)

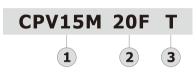


CPV15 Series — Manifold (NPT)



Ordering code

Ordering code of manifold



① Model

CPV15M: CPV15 series manifold

2 Number of stations

2F: 2 station 3F: 3 station 4F: 4 station

20F: 20 station

3Thread type T: NPT

Ordering code of blank plate







${\bf 1} {\bf Model}$

CPV15S: CPV15S series integrated solenoid valve

②Code

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 | Ai | Air(to be filtered by 40 μ m filter element) | | | | | | | | |
| Temperature | | - | 20~70℃ | | | | | | | |
| Port size | P/ | 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.

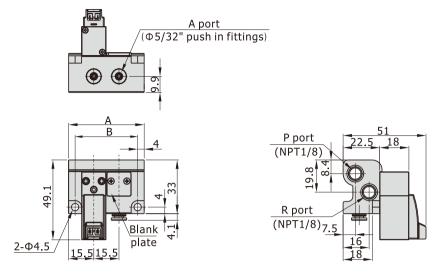




CPV15 Series — Manifold (NPT)

Dimensions

NPT thread



[Unit: mm]

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

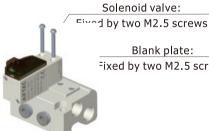
| Item\Number of stations | 11F | 12F | 13F | 14F | 15F | 16F | 17F | 18F | 19F | 20F |
|-------------------------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| А | 186 | 201.5 | 217 | 232.5 | 248 | 263.5 | 279 | 294.5 | 310 | 325.5 |
| В | 178 | 193.5 | 209 | 224.5 | 240 |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

Installation and Application

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

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.



Blank plate: -ixed by two M2.5 screws



place blank plate h solenoid valve

| A port tubing | Manifold mounting |
|-----------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| A port is at the side of manifold, port size is " Φ 5/32"" | Both sides of manifold attach two installing through-holes, using two M4 hexagon cap screws to fix. |
| | |

A(with push in fittings) (Φ5/32" tube)

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



Integrated solenoid valve's cable



F-DSUB25/F-DSUB37



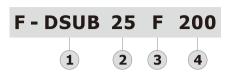
Specification

- 1. Flame resistand grade: UL94 VW-1.
- 2. Rated temperature: 80°C.
- 3. Rated voltage: 300V.

How to select cable

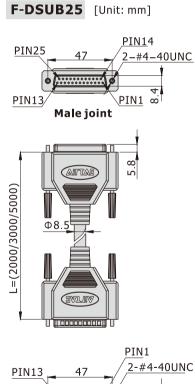
| Cable type\Valve type | CPV10S | CPV15S |
|-----------------------|--------|--------|
| F-DSUB25 | • | • |
| F-DSUB37 | | |

Cable ordering code



| 1 Model | DSUB: D-SUB Cable | |
|---------------------|-------------------|----------------------------|
| ②Pin Number | 25: 25PIN | 37: 37PIN |
| ③Terminal type | F: Two Females | M: One Female+another male |
| 4Wire length | 200: 2m | 300: 3m 500: 5m |

Dimensions and wire's assignment



| PIN13 47 2-#4-40UNC | | |
|---------------------|--|--|
| Female joint | | |

| Wire's assignment | | |
|-------------------|------------------|--|
| PIN | Color | |
| 1 | Red+Black | |
| 2 | Gray+Black | |
| 3 | Brown+Black | |
| 4 | Orange+Black | |
| 5 | Yellow+Black | |
| 6 | Green+Black | |
| 7 | Blue+Black | |
| 8 | White+Black | |
| 9 | Violet+Red | |
| 10 | Silt green+Black | |
| 11 | Pink blue+Black | |
| 12 | Pink+Black | |
| 13 | Black | |
| 14 | Red | |
| 15 | Gray | |
| 16 | Brown | |
| 17 | Orange | |
| 18 | Yellow | |
| 19 | Green | |
| 20 | Blue | |
| 21 | White | |
| 22 | Violet | |
| 23 | Silt green | |
| 24 | Pink blue | |
| 25 | Pink | |

| F-DSUB37 [Unit: mm] |
|-----------------------------|
| PIN37 63.5 PIN20 2-#4-40UNC |
| PIN19 PIN1 + |
| Male joint |
| L=(2000/3000/5000) 5.8 |
| (AATIA) |
| PIN1 |
| PIN19 63.5 2-#4-40UNC |
| oø |
| PIN37 PIN20 C. |
| Female joint |

| Wire's assignment | | |
|-------------------|------------------|--|
| PIN | Color | |
| 1 | Red+Black | |
| 2 | Gray+Black | |
| 3 | Brown+Black | |
| 4 | Orange+Black | |
| 5 | Yellow+Black | |
| 6 | Green+Black | |
| 7 | Blue+Black | |
| 8 | White+Black | |
| 9 | Violet+Red | |
| 10 | Silt green+Black | |
| 11 | Pink blue+Black | |
| 12 | Pink+Black | |
| 13 | Red | |
| 14 | Gray | |
| 15 | Brown | |
| 16 | Orange | |
| 17 | Yellow | |
| 18 | Green | |
| 19 | Black | |
| 20 | Blue | |
| 21 | White | |
| 22 | Violet | |
| 23 | Silt green | |
| 24 | Pink blue | |
| 25 | Pink | |
| 26 | Red+White | |
| 27 | Gray+White | |
| 28 | Brown+White | |
| 29 | Orange+White | |
| 30 | Yellow+White | |
| 31 | Green+White | |
| 32 | Blue+White | |
| 33 | Violet+White | |
| 34 | Silt green+White | |
| 35 | Pink blue+White | |
| 36 | Pink+White | |
| 37 | Red+Green | |