



Safety Precautions

Be sure to read this section before use.

Refer to Intro Page 59 for general precautions for using valves.

Product-specific cautions: Pilot operated 5-port valve 4F Series

Mounting, installation and adjustment

1. Common

⚠ CAUTION

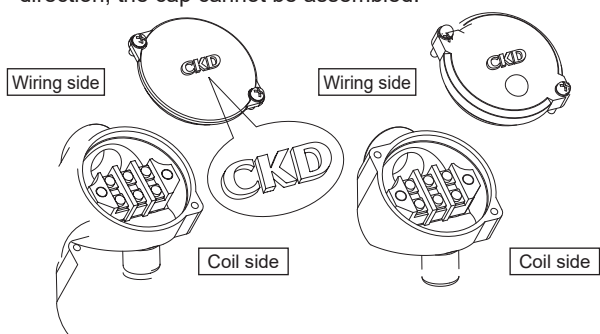
- The body sliding part uses a lip packing.
Be sure to use port P(S) for air supply.

Use/maintenance

1. Common

⚠ CAUTION

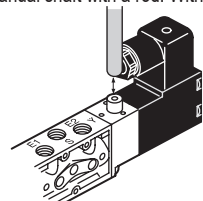
- Do not block the PE port.
Pilot pressure will not be discharged and will fail to operate.
- With the DIN terminal box, as using the unit with a high ambient temperature and continuously powered specifications will promote deterioration of the gaskets, be sure to regularly replace the gaskets.
- The external pilot is designed with low pressure specifications specifically for P (S) port pressurization. Contact CKD for applications with vacuums or pressurization from other ports.
- Use the manual button for confirmation of operation during test operation. When used for a long period of time in the locked state, the locking mechanism may fail and switch the unit from ON to OFF.
- Station No.
When operating 6 or more stations of valves at the same time, configure the air supply pressure (S) from both ends of the manifold block and release the exhaust (E) into the atmosphere from both ends as well. Not configuring these from both sides may cause malfunctions due to the exhaust pressure.
- With the 4F0 to 4F3 series, the connection port is prepared with Rp threading (parallel threading). In order to prevent leakage with the connection of piping, connect the pipes upon securely wrapping sealing tape or applying an adhesive.
- Precautions upon assembly of round terminal box cap
The cap must be assembled in a certain direction. When the cap is to be assembled after performing wiring work, etc., make sure to assemble the cap with attention to the assembly direction. (In the figure below, align with the direction of the CKD logo mark) When placed in the opposite direction, the cap cannot be assembled.



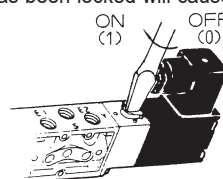
2. Manual override

⚠ CAUTION

- Manual override
As this is a pilot solenoid valve, the main valve will not be switched even if the manual override is operated unless air is supplied to the S port.
- Non-locking manual override
With the non-locking manual override, push the manual shaft with a rod. With the 2-position single solenoid and 3-position solenoid, the valve will be in the same state as when energized when the shaft is being pressed and will recover when the shaft is released. With the 2-position double solenoid, pressing the manual shaft of the X (Y) side will switch the unit into the same state as when X (Y) is energized and the main valve will retain this state even after the manual shaft has been released. For return, operate the manual shaft on the Y (X) side.
- Locking manual override
If the locking manual override is turned clockwise by approximately 45° with a screwdriver, the valve will be in the same state as when energized and locked. Do not force the rotation, as rotating the device further clockwise after the valve has been locked will cause damage. Be sure to release the lock (0 position) of the locking manual override prior to starting normal operation.



Push with a rod $\phi 7$ or less
(With the 4F0 and 1 types,
push with a rod $\phi 3$ or less.)



3. Outdoor

⚠ CAUTION

- When using the unit outdoors, do not configure the exhaust ports (E1, E2, and PE ports) for atmosphere release, and be sure to implement measures to prevent foreign matter, dust, and rainwater from entering the body.
In addition, implement waterproof measures for the electrical wires and piping with the use of cable glands, etc.
- After delivery of the product, do not change the direction of the conduits of the terminal box. Doing so may cause water to infiltrate the charging sections.
- This product is provided with performance which enables outdoor use in standard environmental conditions.
This product satisfies certain performance requirements after implementation of an accelerated weathering test (sunshine weathering meter) for 1000 hours and a (salt, dry, moisture) compound cycle test for 960 hours. However, the risk of defects such as rust occurring in a short amount of time may increase when using the unit in a special environment. Consult with CKD when using this device in a special environment.