

WFT10 Series Magnetic Filter Installation Manual



summary:

The WFT series magnetic filter is a filter specially developed for HVAC water systems with strong magnetic adsorption and precision filter mesh. It is usually installed at the inlet of the air conditioning and heat pump hosts in HVAC water systems. When impurities enter the heat pump and air conditioning water side heat exchanger, it may cause it to malfunction. The filter is used to filter out iron impurities and dirt in the water system to protect the normal operation of the heat pump. In order to facilitate the cleaning of impurities inside the filter for users, a transparent shell is designed for easy viewing of water quality and impurities inside the filter screen. By manually or using a special tool to rotate the handle from "OPEN" to "CLOSE" position, the main water pipes at both ends of the filter can be closed. At this time, a special tool can be used to unscrew the fixing nut of the transparent cup to remove the filter screen and clean the filter. The entire filter cleaning can be completed without the need for professional personnel, greatly reducing maintenance costs.

Characteristic:

1. 40-80 mesh filter, effectively filtering impurities.
2. 1T strong magnetic neodymium iron boron magnet effectively adsorbs iron impurities and prevents the shielded pump from getting stuck.
3. Cleaning the filter screen is convenient and

does not require professional tools. Rotate the handle from OPEN (normal operation filter) to CLOSE (heat pump shutdown cleaning), the inlet and outlet of the filter are closed, and there is no water flowing to the filter screen. You can then unscrew the filter screen housing to clean the filter screen.

4. Transparent filter cup, easy to observe water quality and filter fouling.
5. Full bore valve ball design ensures smooth water flow and low pressure drop.
6. The effective filtration area of the filter is over 95%, which is only 30% of the pressure drop of traditional filters, saving water pump head.
7. The external reinforcement of the filter effectively prolongs its service life.

Technical parameters:

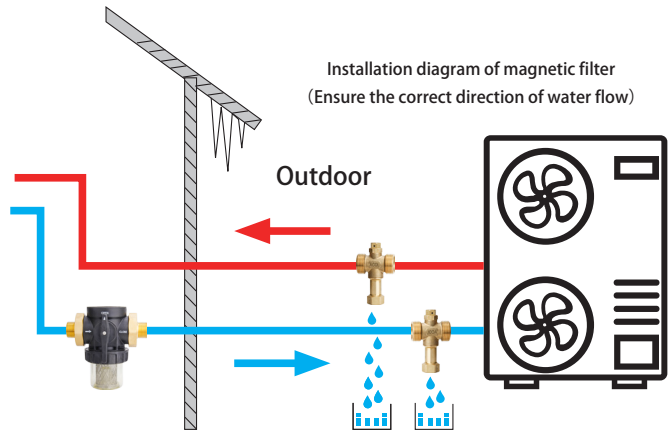
- Pressure: PN4.5
- Working medium: water, not exceeding 50% ethylene glycol aqueous solution
- Working medium temperature: -30-100 °C, ambient temperature: -30-80 °C
- Filtering accuracy: 40, 50, 60, 80 mesh (different diameters can choose different mesh numbers)
- Shell material: PA66+30GF
- Filter screen: 304 stainless steel outer reinforced mesh, 304 stainless steel filter screen, 304 stainless steel reinforced edging
- Sealing: PTFE
- Kvs: 10m³/h
- Magnetic induction intensity of magnet: 1T
- Water leakage rate after closure: ≤ 5g/min

Installation:

The WFT series magnetic filter has two main functions: magnetism and filtration. Therefore, it is best to install it at the suction end of the shielded water pump and the inlet of the heat exchanger when installing the heat pump water system. This can effectively filter impurities, including iron impurities, in the water system, avoiding the problem of impurities getting stuck in the shielded pump, and also preventing impurities from entering the water side heat exchanger and reducing heat transfer efficiency.



Magnetic filters must be installed on horizontal pipelines.



Clean the filter screen and iron impurities:

The WFT series magnetic filter has a white arrow on the front representing the direction of water flow. When the heat pump is running normally, the filter knob should be in the "OPEN" position. When the water quality inside the transparent cup cover of the filter is poor or the filter screen is dirty and needs to be cleaned, the heat pump unit stops running. Turn the handle on the filter (if it cannot be rotated by hand, you can use a special tool to rotate it) from OPEN (normal operation filtration) to CLOSE (heat pump shutdown cleaning) position. Use a special tool to slide the lock nut from the bottom of the transparent cup and unscrew it clockwise. Take out the filter screen for cleaning. If there are iron impurities on the

transparent cup cover, unscrew the magnetic lock screw at the bottom of the transparent cup cover clockwise, remove the magnet, rinse the cup cover with water to remove iron, and remove the magnet. After cleaning the impurities, place the magnet at the bottom of the transparent cup and lock it tightly, Then place one side of the cleaned filter screen in the transparent cup slot and the other end in the filter positioning slot inside the valve body. Use a special tool to lock the black nut of the transparent cup, and then turn the handle from the CLOSE position to the OPEN position to complete the entire cleaning process. Turn on the heat pump unit to operate normally.

