PRODUCT: STAINLESS WATER MEMBRANE TANK

TYPE: IWT-24-10/RP-24V (24L 10Bar)

MATERIAL: SHELL SS30408 MEMBRANE EPDM

DIMENSION: OD270mm Length 400mm In/Out:1"(NPT)

WEIGHT: 6.0KG



PICTURE:

# **DESCRIPTION:**

## Bladder type vertical expansion tank

Expansion tank is widely used in central air conditioning water circulating system, steam water supply expansion system, heating system, fire water supply system, frequency conversion water supply system, boiler water feeding system, pressure water supply and other occasions.

#### Structure:

It is consisting of main body bladder and water inlet/outlet and air inlet. It is made of stainless steel or baked-enamel coating carbon steel; the bladder is made of EPDM; the compressed air has been filled before the product leaving the factory.

## Operating principle:

Once the tank is connected to the system, the temperature increases, and with it also increases the water volume which starts to fill the membrane.

The water volume keeps expanding until the maximum working temperature is reached. At this stage the bladder occupies almost all the space inside the tank. The pressurized air cushion avoids any contact between water and the internal surface of the tank. Gradually the temperature goes down so does the

water volume. Because of the pressure of the air cushion the water starts to come out of the tank until the bladder reaches its initial volume. At this point a new cycle begins.

### Advantages:

- 1. Energy efficient: the bladder type vertical expansion tank makes full use of heat energy of pressure, compensate the water effectively. And effectively achieve the frequency control.
- 2. Clean and hygienic: Continuous sealed pressurized water supply system, maintaining state water quality health standards, which can avoid the problem of water quality standards caused by the pressurization system to reduce and all kinds of water pollution.
- 3. Eliminate waste: Not only eliminated the high-level water tank, also completely abolished pool tank (underground), eliminated the tank overflow, waste of water resulting of cleaning regularly.
- 4. Low noise: bladder type vertical expansion tank adopts full frequency adjustment, most of the time, especially at night in a low-noise operating condition.
- Design a fully closed, cushioning effect and dynamic compensating functions, compared with the tank so-called no negative pressure tank in the current market, has practical significance, and the control system is simplified.