

Thermostatic Traps

Brand: Watson McDaniel



Short Description

They are extremely energy efficient and excellent at discharging air allowing steam to enter the system quickly during system startup. Models are available in Stainless and alloy steel for Drip, Tracing, and medium size Process applications. Pressures up to 650 psig. Superior air venting capability and extremely energy efficient Single model operates over the entire pressure range in contrast to (F&Ts & IBs) Considerably Smaller in size than F&Ts & IB traps of similar capacities Self-draining to prevent freezing (unlike F&Ts and IB traps)

Description

The bellows type thermostatic traps contains a fluid-filled thermal element (bellows). The operation of the bellows follows the steam saturation curve, always discharging condensate a few degrees cooler than the steam temperature. As long as steam is present, the valve will remain closed. Only when subcooled condensate or air is present will the valve open. Sub-Cool: The sub-cooling of condensate prior to discharge can have certain beneficial effects. In the majority of tracing applications, the sub-cooling of condensate is highly desirable because of the additional energy that is extracted from the Hot condensate. If the trap did not sub-cool condensate, this energy would be wasted. In Batch style process applications such as jacketed kettles, plating tanks and heating of outdoor storage tanks, the sub-cooling of condensate is generally not a factor to consider since the amount of condensate back-up requires less than 1% of the heat transfer surface area and is therefore considered negligible.