

















# TH18 with Mini Tri-clamp Reduces Dead Leg

TH18 fits into small spaces and minimizes dead legs in hygenic ferrules



Product processed in a hygenic environment



13.0

TH18 RTD with mini Tri-clamp and TMT162 transmitter



Checking mixing tanks

Many Food and Beverage and Pharmaceutical manufactures must conform to ASME BPE and FDA standards for sterility and cleanability.

## Customer profile

Skid building suppliers and pilot plants have space limitations for their skid process systems. Due to its small size and use of mini Tri-clamps, the TH18 is ideal for these compact systems.

#### Application description

Instrument connection to process systems in food and beverage and pharmaceutical industries must have a low possibility of dead legs, that can contribute to the growth of bacteria and contamination of process systems.

The use of mini ferrules reduces the amount of dead leg space in processes and the TH18 RTD temperature assembly greatly helps in reducing the potential for buildup that can occur in these ferrules. These fittings were designed to minimize crevices and hard-to-clean areas in process systems.

### Application challenges

Incorrect process connections can result in inadequate sterility and cleanability, which impacts contamination and product safety,

resulting in the need for additional testing, downtime, loss of product and other common safety concerns for these manufacturers. There are many steps involved to assure product quality meets the Food and Drug Administration's (FDA) health standards, and bacteria growth or potential contamination is very high on that list.

Manufactures need an instrument that can be robust and a reliable measurement and still conform to these FDA sterility standards. Endress+Hauser has the solution.

## Instrument used

TH18 Hygienic Temperature Assembly and TMT162 Transmitter

#### Solution

In applications in the pharmaceutical and food and beverage industries where bacteria contamination is a major issue, Endress+Hauser offers the TH18 hygienic temperature assembly. The TH18 is standard with mini Tri-clamps (1/2" and 3/4").

These connections were made for connection to ferrules that require conformity to the sterility and cleanability in ferrules.

Not only does the sensing element conform, but the TH18 is available with transmitters that can provide dual sensor inputs, active

sensor backup, and averaging functions. This is the TMT162 transmitter. There are other head mounted transmitters available for HART, Profibus and Foundation Fieldbus, plus analog signals. Endress+Hauser temperature transmitters have the highest available galvanic isolation (2 kV).

There are currently many TH18 sensors coupled with TMT162 transmitters within the Food and Beverage industry and Pharmaceutical plants.

For more information, contact Endress+Hauser, Inc. 317-535-7138 www.us.endress.com



## ISO 9001:2000 Certified

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