TS01E SERIES

TEMPERATURE SWITCH
WITH 2 INDEPENDENT RELAY OUTPUTS

DESCRIPTION

The TS01E Series Temperature Switch is designed to integrate two independent relays that change states using fixed temperature points within one device. The TS01E serves as an electronic thermostat control with probe mounted thermistors that sense the change in temperature within the media. In addition, the unit contains no mechanical components that can cause delay or chatter during operation. The TS01E is comprised of 316 stainless steel and is made to order in 1/4", 1/2" or 3/4" NPT mounting connections.

TS01E

PRINCIPLE OF OPERATION

As the process temperature changes, the single or dual thermistors contained within the probe change resistance. The variation is compared to the factory set switch points and results in the changing state of the relays. The differential between the relay states has sufficient hysteresis to avoid switch chatter during temperature transients.

KEY FEATURES

- Single Piece Assembly
- Four Integrated Temperature Set Points
- Horizontal or Vertical Mounting Orientation
- Robust & Accurate Embedded Electronics
- No Calibration Required
- Fast Response & Accurate Temperature Control
- No Moving Parts

ELECTRICAL

- Input: 12 to 24 VDC
- Output: Two Independent Relay Outputs
  Min: -20 ºF ±10º F (-29 ºC ± -12 ºC)
  Max: +250 ºF ±10 ºF (+121 ºC ± -12 ºC)
- Power Consumption: 50 mA
- Repeatability: > 96%
- Response Time: < 1 Second
- Warm Up Time: < 3 Seconds

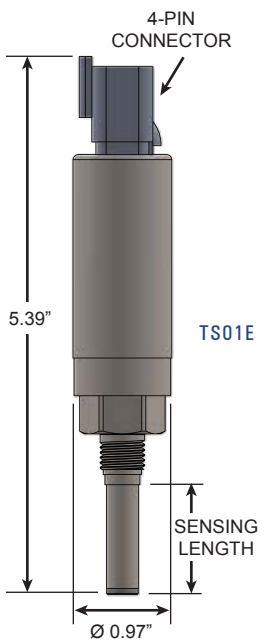
ENVIRONMENTAL

- Ambient Temperature:
  -24 to +250 ºF (-31 to +121 ºC)
- Process Temperature:
  -20 to +250 ºF (-29 to +121 ºC)
- Process Pressure: 750 PSIG (51.7 bar)
- Media: Water, Oil, Refrigerant, Chemicals

APPLICATIONS

- Fuel Tanks
- Chemical Processing Tanks
- Generators
- Pump Control & Protection
- Combustion Fluid

DIMENSIONS



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SPS-053.0
03/2017