Field mounted HART temperature transmitter

7501

– RTD, TC, Ohm, and bipolar mV input and analog output
– High definition local operator interface (LOI) with 3 optical buttons
– Selectable red or white backlight
– Ex d explosion proof / flame proof in aluminum or 316 stainless steel version
– HART 7 functionality with HART 5 compatibility

High defintion display
• 0, 90, 180, & 270 degree position adjustments.
• Monitoring, programming and diagnostics view.
• Extensive diagnostics with flashing red or white backlight
• Supports 7 languages.

Local operator interface (LOI)
• 3 optical buttons; up, down and enter.
• Dynamically adaptive to wear or accumulation of dirt.
• Immune to interference from ambient light sources.
• Useable with or without gloves.

Configuration
• From the LOI through PR guided menu.
• PReset and HART modem.
• HHC, DCS or AMS via HART.

Mounting / installation
• For installation in zone 0, 1, 2 and zone 20, 21, 22 and in Class 1, Division 1 and 2 applications.
• Hardware assessed for use in SIL applications.
• Mounting on 1.5"–2" pipe bracket or on wall / bulkhead.

Application
• Linearized temperature measurement with TC and RTD sensors e.g. Pt100 and Ni100.
• HART communication and 4...20 mA analog PV output for individual, difference or average temperature measurement of up to two RTD or TC input sensors.
• Conversion of linear resistance to a standard analog current signal, e.g from valves or Ohmic level sensors.
• Amplification of bipolar mV signals to standard 4...20 mA current signals.
• Up to 63 transmitters (HART 7) can be connected in a multidrop communication setup.
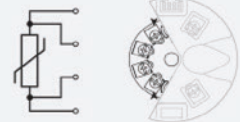
Technical characteristics
• NAMUR NE43 and NE89.
• HART protocol revision can be changed by user configuration to either HART 5 or HART 7 protocol.

Applications

Input signals: For full overview of input connections, refer to manual

RTD to 4...20 mA

TC to 4...20 mA

Resistance to 4...20 mA

mV to 4...20 mA

Difference or average RTD, TC or mV

2-wire output and HART:

Ex ia: 10...30 VDC (12...30 VDC with backlight)
Other: 10...35 VDC (12...35 VDC with backlight)

4...20 mA

HART