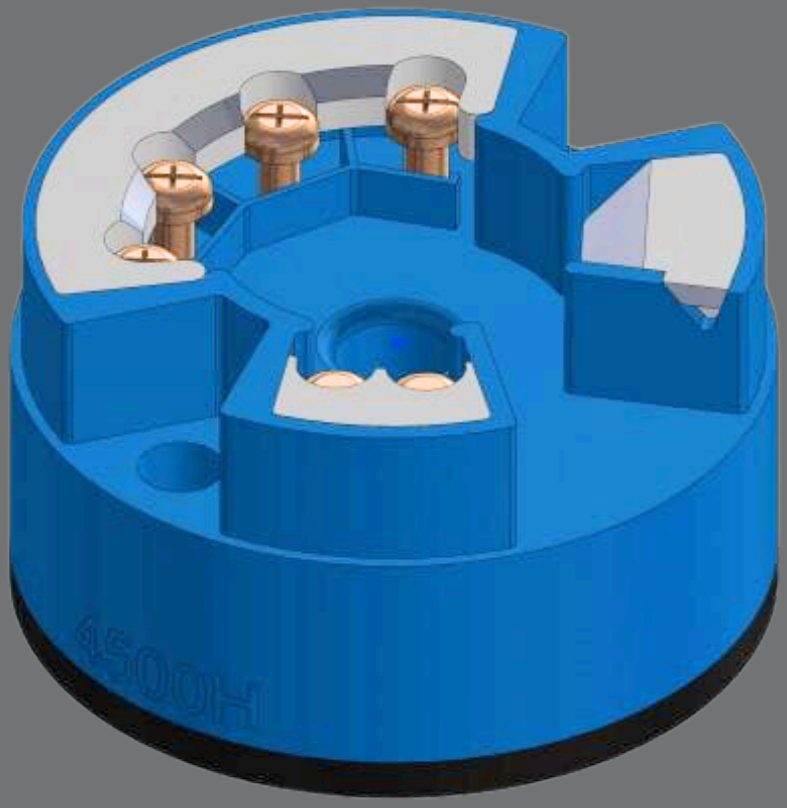
9100H HART temperature transmitter



Key features

- Low cost
- 0.08% accuracy
- Full input-output isolation
- Custom input/linearization capability
- Configurable via a PC or HART Communicator
- T/C Inputs: B, C, D, R, S, E, J, K, L, N, T, U
- RTD inputs: Pt100, Pt500, Pt1000, Ni100, Ni500, Ni1000
- mV Inputs: -10 to 75mV
- Ohm Inputs: 10 to 2000 ohms
- Outputs: 2-wire, 4-20mA or 20-4mA with optional HART signal superimposed
- Full instruction manual available on request

Overview

Microprocessor-based, this a highly accurate temperature transmitter accepts a wide range of inputs, is loop powered and provides 4-20mA and HART output signals. Configured through HART Communicator or a PC and software, the 9100H is a DIN Form B design for mounting in a sensor connection head. An optional digital display/meter provides local indication of the process temperature in °F or °C, 0-100% of scale or the 4-20mA output. The transmitter and display are mounted in a windowed, explosion-proof instrument enclosure and can be installed in virtually any enclosure or on a wall.

Technical specification

Feature	Description
Input range	Standard Pt100, selectable range -328 to 1202F (-200 to +650C), minimum span 18F (10C), with optional various RTD and TC inputs
Output	Standard 4-20mA, with optional 20 to 4mA, HART signal superimposed on 4-20mA loop signal
Zero and span adjustments	Using HART communicator or software provided, it can be set anywhere within sensor range. Zero and Span are non interacting.
Failsafe	Standard upscale at 21.5mA, with downscale option at 3.6mA
Response time	1 second
Damping	User settable from 0 to 100 seconds
Isolation	200 VAC, input to output
Power supply	11.5 to 35VDC
Load resistance	RMax (ohms) = (VSupply - 11.5VDC) / .022A
Accuracy	Standard Pt100: .36F (0.2C) or 0.08% of span, whichever is greater with options depending on input range
Long term stability	+/-0.05% of calibrated span per year
Cold junction compensation	+/-1C (measured with Pt100 IEC 751, Class B)
Temperature limit	-40F to 185F (-40C to 85C)
EMI/RFI effect	Conforms to EU Directives (CE Mark) and Meet IEC 61326 amend 1, 1998 and NAMUR NE21.

Technical specification

Feature	Description
Approvals	Optional Factory Mutual (FM) / Canadian Standards Association (CSA) / ATEX / Intrinsically Safe (IS)
Acessories	Programming software

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