JH225

2-WIRE RANGEABLE THERMOCOUPLE TRANSMITTER

FEATURES

- Thermocouple Types J, K and T
- Input Ranges as Low as 2mV
- Low-Drift Input Amplifier
- In-The-Terminal Cold Junction Compensation
- Fits Standard Connection Heads
- -40 to +80 Degree C Operation
- DIN Rail Mounting Available

DESCRIPTION

The Model JH225 2-wire transmitter provides a 4/20mA current loop output proportional to the input from a thermocouple. 16-position Zero and Span switches plus fine-adjust trimpots allow recalibration over a wide range of gains and offsets. Types J, K or T thermocouples may be selected. Cold junction compensation is located in the terminal block for optimum accuracy. Conformal coating protects the circuitry against condensation and corrosion in industrial atmospheres. Upscale burnout indication is standard.

The JH225 is a loop-powered device. Connected in series between a 24Vdc supply and readout instruments, it receives its power from the 4/20mA output loop. A built-in LED indicates loop current: dim at 4mA, bright at 20. The JH225 does not provide input/output isolation.

Its small 1-3/4 inch diameter allows the transmitter to fit most standard thermocouple-type connection heads. It also may be surface mounted. A DIN rail mounting clip option is available.

HOW TO ORDER

Model Number: JH225.

Input Range:
The JH225 is normally shipped tested but uncalibrated. If you would like us to calibrate it simply specify on your order. We'll do so at no extra charge. Specify thermocouple type J, K or T and specify any input range allowed by the "Input Capabilities" spec (see back).

T/C Burnout Indication:
(Always upscale – offscale high.)

Output Range:
(Always 4/20mAdc.)

Power:
(Always dc loop powered.)

DIN-Rail Mounting:
Change model number to Model JH225-DIN. (See "Installation and Connections" on back.)

Note: Urethane coating is standard.

OEM PRODUCTS

JH Technology 2-wire thermocouple and RTD transmitters can be made available with solder-jumper pads for range selection. Contact the factory for details.

INSTALLATION

The 1-3/4 inch diameter JH225 is designed to fit many standard thermocouple-type connection heads. It may also be mounted to any surface using two #8 (or smaller) screws. An optional DIN-rail mounting clip (specify Model JH225-DIN) allows the transmitter to be snapped onto DIN rail. Width is 1-3/4 inches.

CONNECTIONS

Connections are made to the transmitter's terminal strip. Connections are:

"+" Terminal: Output/Power Loop. Receives current from (+) DC supply.

"-" Terminal: Output/Power Loop. Passes on current to the next series loop device, or to the (-) supply.

Terminal A: Thermocouple plus.

Terminal B: No connection – compensator is encapsulated in this position.

Terminal C: Thermocouple minus. (On most thermocouples, the red wire is minus.)

SPECIFICATIONS

Input Capabilities:
Span may be set anywhere from 2mV to 60mV. Low end (zero) may be set as follows: Type J, -210 to +340 deg. C. Type K, -270 to +520 deg. C. Type T, -270 to +400 deg. C.

Input Thermocouple Types:
May be set for use with types J, K or T.

T/C Burnout Indication:
Output goes offscale high (above 20mA).

Output:
4/20mA, 2-wire (loop-powered) output.

Endpoint Accuracy:
+/-0.1% of span or 10 microvolts, whichever is greater, if properly calibrated using precision instruments.

Adjustability:
Sufficient to achieve all specified input ranges.

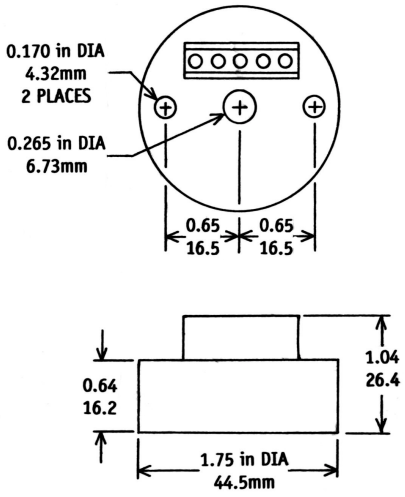
Linearity:
Linear with millivolts. Does not linearize the thermocouple.

Response Time:
Under 100 milliseconds.

Operating Temperature:
-40 to +80 deg. C (-40 to +176 deg. F).

Temperature Stability:
+/-(0.02% of span plus 1 microvolt) per deg. C, or better.

Power Requirements:
DC loop-powered. Requires at least 12Vdc at the transmitter's output terminals. 36Vdc maximum.



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