

FEATURES

- Inputs from 10mV to 220V, 1mA to 100mA
- Outputs from 0/0.5V to -10/+10V, 0/1mA to 0/25mA (Includes 4/20mA)
- Input/Output Isolation Standard
- High Speed Option HS Available
- Quick-Check Red/Green Output LEDs
- AC or DC Power Options



DESCRIPTION

The Model JH5080 User-Rangeable Transmitter provides an isolated DC output proportional to a DC voltage or current input. Fully user-rangeable, it handles input voltages from millivolts to over 200 volts and currents to 100mA. Its wide selection of output ranges includes all common process signals. Applications include amplifying, reducing, scaling or offsetting DC signals and converting currents to voltages or voltages to currents.

Input/output isolation eliminates ground loops and noise problems, and guards against shock hazards when using high-voltage inputs. The JH5080 incorporates a low-drift input amplifier for maximum accuracy when measuring millivolt-level inputs. Linearity is better than 0.05%. Its one-inch-wide case clips onto DIN rail and the terminal strip unplugs for ease of replacement.

The standard JH5080 includes filtering to smooth measurements and minimize noise pickup. When fast response is needed, Option HS speeds the response time to approximately 1 millisecond. Other response speeds are readily available on special order.

AC and DC power choices are available.

HOW TO ORDER

Model Number: JH5080

Power:

Add suffix A (Model JH5080A) for AC power, D for DC power. Specify 115Vac, 230Vac, 12Vdc or 24Vdc.

Factory Settings:

The JH5080 is normally supplied tested but uncalibrated. If you wish, specify your desired input and output range on your order and we will calibrate at no extra

charge. Refer to the "Input Capabilities" and "Output Capabilities" specifications on back.

High Speed Response:

Approximately 1 msec. (see Specifications). Specify Option HS.

Other Options:

Please refer to JH5000 Series fixed range transmitters for a complete selection of options.

INSTALLATION

Model JH5080 snaps onto 35mm DIN rail. Connections are made to the front-panel terminals. The terminal strip unplugs to facilitate calibrating or replacing the transmitter.

CONNECTIONS

Connections to the 8 terminals (top to bottom) are:

- 1: Input plus. (Also jumper this terminal to terminal 3 for current inputs.)
- 2: Input minus.
- 3: Current input plus. (Jumper to terminal 1 for current inputs.)
- 4: No connection.
- 5: Output plus.
- 6: Output minus.
- 7: Power (AC or, if DC power option, DC plus).
- 8: Power (AC or, if DC power option, DC minus).

QUICK-CHECK LEDs

Red-green Quick-Check LEDs give a quick indication of the relative output. Red is brighter at the low end, green at high, while at mid-scale both are approximately equal. Red-only indicates offscale low while green-only indicates offscale high.

SPECIFICATIONS

Input Capabilities:

Any zero-based voltage range from 0/10mV to 0/220V, or current range from 0/1 to 0/100mA. Range also may be elevated 25% (such as 1/5V or 4/20mA) or suppressed 50% (center-zero such as -10/+10V or -1/+1mA.)

Voltage Output Capabilities:

Standard output ranges include 0/1V, -1/+1V, 0/2V, 0/5V, 1/5V, 0/10V, -10/+10V. Many others are possible.

Current Output Capabilities:

Standard output ranges include 0/1mA, 1/5mA, 0/10mA, 0/20mA, 4/20mA. Many others are possible. (Positive current outputs only.)

Accuracy:

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

Linearity:

+/-0.05% of span or better.

Response Time:

Standard: Under 100 milliseconds. Option HS: Approx. 95% complete in 1msec. Frequency response 3dB down at approx. 600 Hz. Others available on special order

Isolation:

3-way (Power/Input/Output)
1,500Vac rms (2,100V peak).

Operating Temperature:

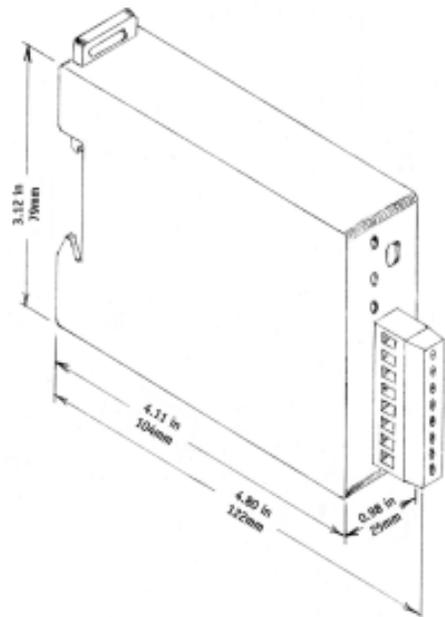
-10 to +60°C (14 to 140°F).

Temperature Stability:

+/- (0.02% of span plus 1.3 microvolts) per °C, or better.

Power Requirements:

AC, 115 or 230Vrms, 50/60Hz, 2.5V-A. DC, 12 or 24V, 2.5W.



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