PERFORMANCE MADE SMARTER



2-wire programmable transmitter

5334B

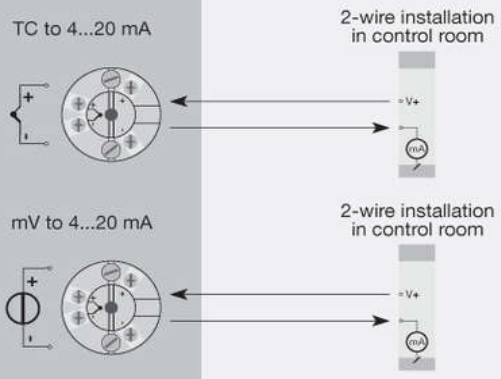
– TC input
– High measurement accuracy
– Galvanic isolation
– Programmable sensor error value
– For DIN form B sensor head mounting

Application
- Linearized temperature measurement with TC sensor.
- Amplification of bipolar mV signals to a 4...20 mA signal, optionally linearized according to a defined linearization function.

Technical characteristics
- Within a few seconds the user can program PR5334B to measure temperatures within all TC ranges defined by the norms.
- Cold junction compensation (CJC) with a built-in temperature sensor.
- Continuous check of vital stored data for safety reasons.

Mounting / installation
- For DIN form B sensor head mounting.
- NB: As Ex barrier we recommend 5104B, 5114B, or 5116B.

Applications



This page is automatically generated on the basis of information provided on www.prelectronics.com and affiliated websites. It is provided to you as a service and for information purpose only. While we have attempted to maintain the information as accurately as possible, the page may contain errors or omissions for which we disclaim any and all liability

Order:

Type	Ambient temperature	Galvanic isolation
5334B	-40°C...+85°C : 3	1500 VAC : B

Environmental Conditions

Operating temperature..... -40°C to +85°C
Calibration temperature..... 20...28°C
Relative humidity..... < 95% RH (non-cond.)
Protection degree (encl./terminal)..... IP68 / IP00

Mechanical specifications

Dimensions..... Ø 44 x 20.2 mm
Weight approx..... 50 g
Wire size..... 1 x 1.5 mm^2 stranded wire
Screw terminal torque..... 0.4 Nm
Vibration..... IEC 60068-2-6
2...25 Hz..... ±1.6 mm
25...100 Hz..... ±4 g

Common specifications

Supply

Supply voltage..... 7.2...30 VDC
Internal power dissipation..... 25 mW…0.8 W

Isolation voltage

Isolation voltage, test / working..... 1.5 kVAC / 50 VAC

Response time

Response time (programmable)..... 1...60 s

Voltage drop..... 7.2 VDC
Warm-up time..... 5 min.
Programming..... Loop Link
Signal / noise ratio..... Min. 60 dB
EEprom error check..... < 3.5 s
Accuracy..... Better than 0.05% of selected range
Signal dynamics, input..... 18 bit
Signal dynamics, output..... 16 bit
Effect of supply voltage change..... < 0.005% of span / VDC
EMC immunity influence..... < ±0.5% of span
Extended EMC immunity: NAMUR NE21, A criterion, burst..... < ±1% of span

Input specifications

Common input specifications

Max. offset..... 50% of selected max. value

TC input

Thermocouple type..... B, E, J, K, L, N, R, S, T, U, W3, W5, LR
Cold junction compensation (CJC)..... < ±1.0°C
Sensor error detection..... Yes
Sensor error current: When detecting / else..... Nom. 33 µA / 0 µA

Voltage input

Measurement range..... -12...150 mV
Min. measurement range (span)..... 5 mV
Input resistance..... 10 MΩ

Output specifications

Current output

Signal range..... 4…20 mA
Min. signal range..... 16 mA
Load (@ current output)..... ≤ (Vsupply - 7.2) / 0.023 [Ω]
Load stability..... ≤ 0.01% of span / 100 Ω
Sensor error indication..... Programmable 3.5…23 mA
NAMUR NE43 Upscale/Downscale..... 23 mA / 3.5 mA

Common output specifications

Updating time..... 440 ms

of span..... = of the presently selected range

Observed authority requirements

EMC..... 2014/30/EU
EAC..... TR-CU 020/2011

Approvals

ATEX 2014/34/EU..... KEMA 06ATEX0062X
IECEx..... DEK 13.0035X
INMETRO..... DEKRA 16.0013 X
EAC Ex TR-CU 012/2011..... RU C-DK.GB08.V.00410
DNV-GL Marine..... Stand. f. Certific. No. 2.4