



2-wire level transmitter

5343B

- Potentiometer or Ohmic input
- Programmable sensor error value
- High measurement accuracy
- Unique process calibration function
- Programmable via standard PC



Application

- Conversion of resistance variation to standard analog current signals, e.g. from Ohmic level sensors or valve positions.
- User-defined linearization function can be activated.

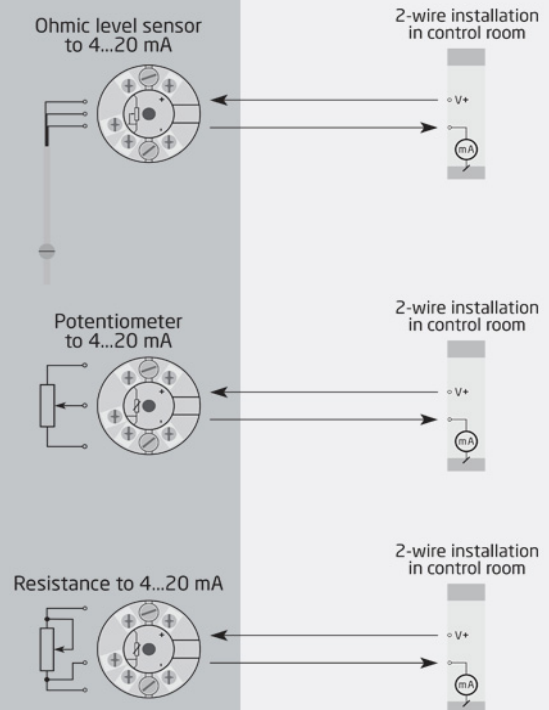
Technical characteristics

- Within a few seconds the user can program PR5343B to measure within the defined Ohmic values.
- Continuous check of vital stored data for safety reasons.
- The transmitter is protected against polarity reversal.
- PR5343B is configured to the current task by way of a PC, the PReset software and the communications interface Loop Link.
- The PRelevel configuration tool included in the PReset software has been developed specifically for the configuration of level applications. Among other things, it contains a function for "on line" measurement of input span as well as a linearization function for volume linear output from horizontal cylindrical tanks.

Mounting / installation

- For DIN form B sensor head or DIN rail mounting with a special fitting.
- NB: As I.S. / Ex barrier for 5343B we recommend 5104B, 5114B or 5116B.

Applications



Order:

Type
5343B

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.....	8.0...30 VDC
Internal power dissipation.....	25 mW...0.8 W

Response time

Response time (programmable).....	0.33...60 s
Voltage drop.....	8.0 VDC
Warm-up time.....	5 min.
Programming.....	Loop Link
Signal / noise ratio.....	Min. 60 dB
Accuracy.....	Better than 0.1% of sel. range
Signal dynamics, input.....	19 bit
Signal dynamics, output.....	16 bit
Effect of supply voltage change.....	< 0.005% of span / VDC
EMC immunity influence.....	< ±0.5% of span

Input specifications**Common input specifications**

Max. offset.....	50% of selected max. value
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Linear resistance input

Measurement range / min. range (span).....	0...100 kΩ / 1 kΩ
Cable resistance per wire (max.).....	100 Ω
Sensor current.....	> 25 μA, < 120 μA
Effect of sensor cable resistance (3-wire).....	< 0.002 Ω / Ω
Sensor error detection.....	Yes
Min. measurement range.....	1 kΩ

Output specifications**Current output**

Signal range.....	4...20 mA
Min. signal range.....	16 mA
Load (@ current output).....	≤ (Vsupply - 8) / 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.....	135 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 03ATEX1538
FM.....	FM17US0013X
IECEx.....	DEK 13.0036X
INMETRO.....	DEKRA 16.0014 X
EAC Ex TR-CU 012/2011.....	RU C-DK.GB08.V.00410
DNV-GL Marine.....	Stand. f. Certific. No. 2.4
DNV-GL Marine.....	V1-7-2