



2-wire level transmitter

5343A

- 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.

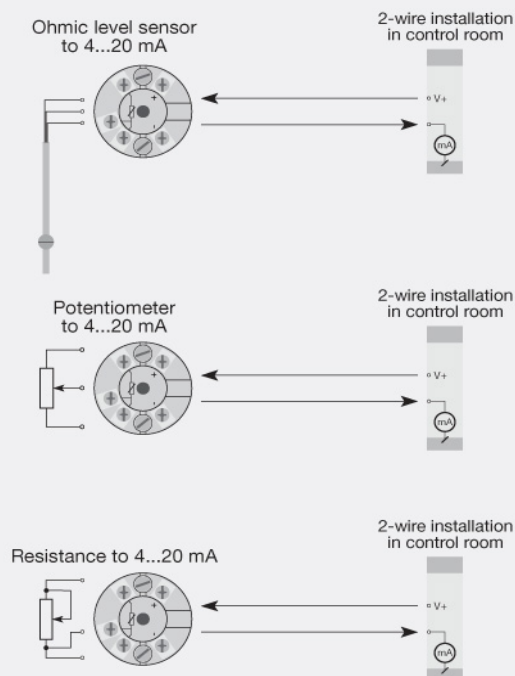
Technical characteristics

- Within a few seconds the user can program PR5343A to measure within the defined Ohmic values.
- Continuous check of vital stored data for safety reasons.
- The transmitter is protected against polarity reversal.
- PR5343A 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.

Connections



Order:

Type
5343A

Environmental Conditions

Specifications range.....	-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 : 2007
Vibration: 2...25 Hz.....	±1.6 mm
Vibration: 25...100 Hz.....	±4 g

Common specifications

Supply

Supply voltage.....	8.0...35 VDC
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Response time

Response time (programmable).....	0.33...60 s
Internal consumption.....	25 mW...0.8 W
Voltage drop.....	8.0 VDC
Warm-up time.....	5 min.
Communications interface.....	Loop Link
Signal / noise ratio.....	Min. 60 dB
Accuracy.....	Better than 0.1% of selected 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, lin. R.....	Yes
Min. measurement range.....	1 kΩ

Output specifications

Current output

Signal range.....	4...20 mA
Min. signal range.....	16 mA
Load resistance.....	≤ (Vsupply - 8) / 0.023 [Ω]
Load stability.....	≤0.01% of span / 100 Ω
Sensor error indication.....	Programmable 3.5...23 mA
NAMUR NE 43 Upscale/Downscale.....	23 mA / 3.5 mA

Common output specifications

Updating time.....	135 ms
*of span.....	= of the presently selected range

Approvals

General approvals

EMC.....	EN 61326-1
EAC TR-CU 020/2011.....	EN 61326-1

Ex / I.S.

ATEX 2004/108/EC.....	KEMA 10ATEX0004 X
IECEx.....	DEK 13.0036X
INMETRO.....	DEKRA 13.0002 X

Marine approval

DNV Marine.....	Stand. f. Certific. No. 2.4
GL.....	V1-7-2