



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.

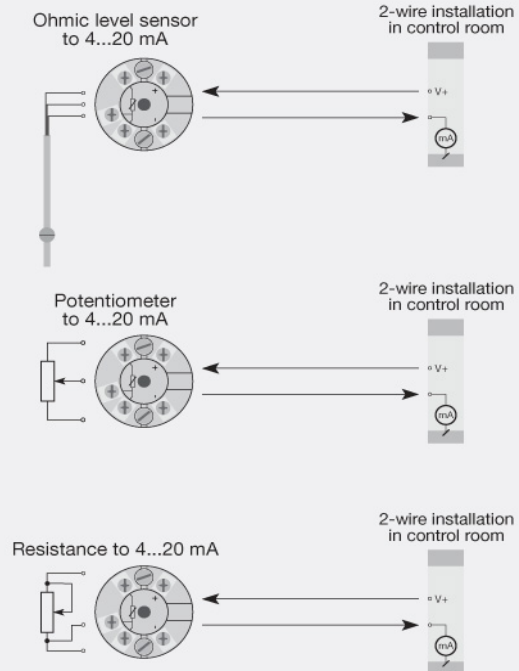
Technical characteristics

- 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 voltage.....	8.0...35 VDC
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
Response time (programmable).....	0.33...60 s
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

Max. offset.....	50% of selected max. value
Linear resistance input: Measurement range / min. range (span).....	0...100 kΩ / 1 kΩ
Min. measurement range.....	1 kΩ
Cable resistance per wire (max.), lin. R.....	100 Ω
Sensor current, lin. R.....	> 25 μA, < 120 μA
Effect of sensor cable resistance (3-wire), lin R.....	< 0.002 Ω / Ω
Sensor error detection, lin. R.....	Yes

Output specifications

Current output: Signal range.....	4...20 mA
Min. signal range.....	16 mA
Updating time.....	135 ms
Load resistance, current output.....	≤ (Vsupply - 8) / 0.023 [Ω]
Load stability, current output.....	≤0.01% of span/100 Ω
Sensor error indication, current output.....	Programmable 3.5...23 mA
NAMUR NE 43 Upscale/Downscale.....	23 mA / 3.5 mA
*of span.....	= of the presently selected range

Approvals

EMC.....	EN 61326-1
ATEX.....	KEMA 10ATEX0004 X
IECEX.....	DEK 13.0036X
INMETRO.....	DEKRA 13.0002 X
GOST R.....	Yes
DNV Marine.....	Stand. f. Certific. No. 2.4