PERFORMANCE MADE SMARTER

## 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.

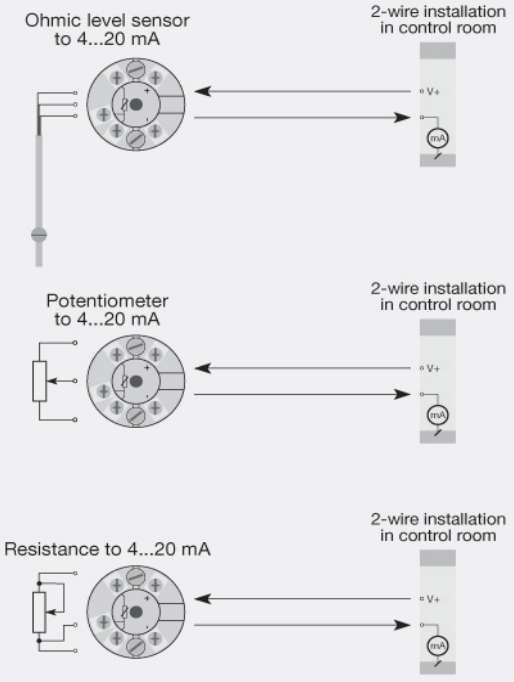
### Technical characteristics

- 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

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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 |

**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 |

**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

| | |
|---|---|
| EMC | 2004/108/EC |
| ATEX 94/9/EC | KEMA 10ATEX0004 X |
| IECEx | DEK 13.0036X |
| INMETRO | DEKRA 13.0002 X |
| EAC | TR-CU 020/2011 |
| DNV Marine | Stand. f. Certific. No. 2.4 |
| GL | V1-7-2 |