

# 2-WIRE LEVEL TRANSMITTER



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



**Application:**

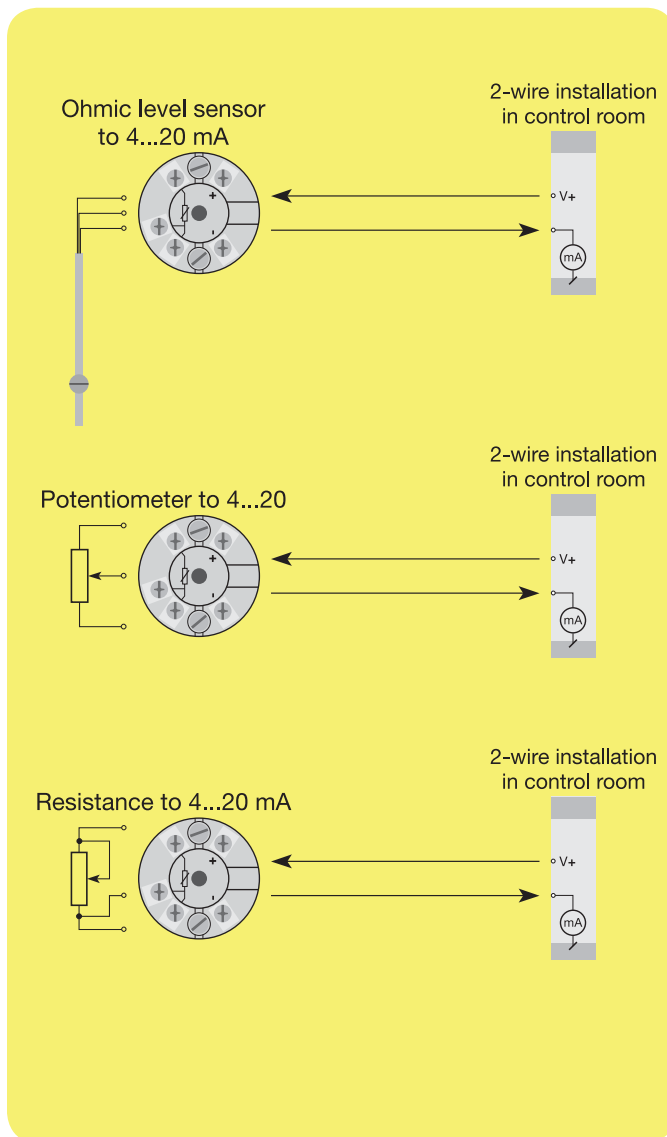
- Conversion of resistance variation to standard analogue current signals, e.g. from Ohmic level sensors or valve positions.
- User-defined linearisation function can be activated.

**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 PRelevel software and the communications interface Loop Link.
- The PRelevel 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 linearisation function for volume linear output from horizontal cylindrical tanks.

**Mounting / installation:**

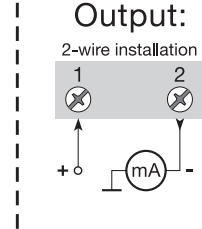
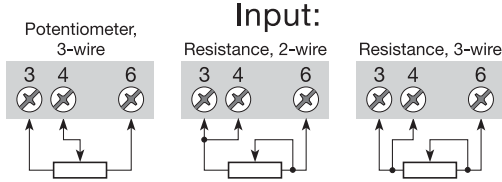
- For DIN form B sensor head or DIN rail mounting with a special fitting.



Order: 5343A

Type
5343A

**Connections:**



**Electrical specifications:**

**Specifications range:**

-40°C to +85°C

**Common specifications:**

- Supply voltage, DC ..... 8.0...35 V
- Internal consumption..... 25 mW...0.8 W
- Voltage drop ..... 8 VDC
- Warm-up time..... 5 min.
- Communications interface ..... Loop Link
- Signal / noise ratio..... Min. 60 dB
- Response time (programmable) ..... 0.33...60 s
- Signal dynamics, input ..... 19 bit
- Signal dynamics, output..... 16 bit
- Calibration temperature..... 20...28°C
- Accuracy, the greater of the general and basic values:

General values		
Input type	Absolute accuracy	Temperature coefficient
Lin. R	≤ ±0.1% of span	≤ ±0.01% of span / °C

Basic values		
Input type	Basic accuracy	Temperature coefficient
Lin. R	≤ ±0.05 Ω	≤ ±0.002 Ω / °C

- EMC immunity influence ..... < ±0.5% of span
- Effect of supply voltage change ..... < 0.005% of span / VDC
- Vibration ..... IEC 60068-2-6 Test FC
- Lloyd's specification no. 1 ..... 4 g / 2...100 Hz
- Max. wire size..... 1 x 1.5 mm<sup>2</sup> stranded wire
- Humidity ..... < 95% RH (non cond.)
- Dimensions..... Ø 44 x 20.2 mm
- Tightness (enclosure / terminal) ..... IP68 / IP00
- Weight ..... 50 g

**Electrical specifications, input:**

**Linear resistance input:**

- Measurement range ..... 0...100 kΩ
- Min. measurement range (span)..... 1 kΩ
- Max. offset..... 50% of selec. max. value
- 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

**Output:**

**Current output:**

- Signal range ..... 4...20 mA
- Min. signal range ..... 16 mA
- Updating time..... 135 ms
- Load resistance ..... < (V<sub>supply</sub> - 8) / 0.023 [Ω]
- Load stability ..... < ±0.01% of span/100 Ω

**Sensor error detection:**

- Programmable..... 3.5...23 mA
- NAMUR NE43 Upscale ..... 23 mA
- NAMUR NE43 Downscale..... 3.5 mA

**Marine approval:**

Det Norske Veritas, Ships & Offshore.. Standard for Certification No. 2.4

**Observed authority requirements: Standard:**

- EMC 89/336/EEC, Emission ..... EN 50081-1, EN 50081-2
- Immunity ..... EN 50082-2, EN 50082-1
- Emission and immunity ..... EN 61326

**Of span** = Of the presently selected range