

TR2432



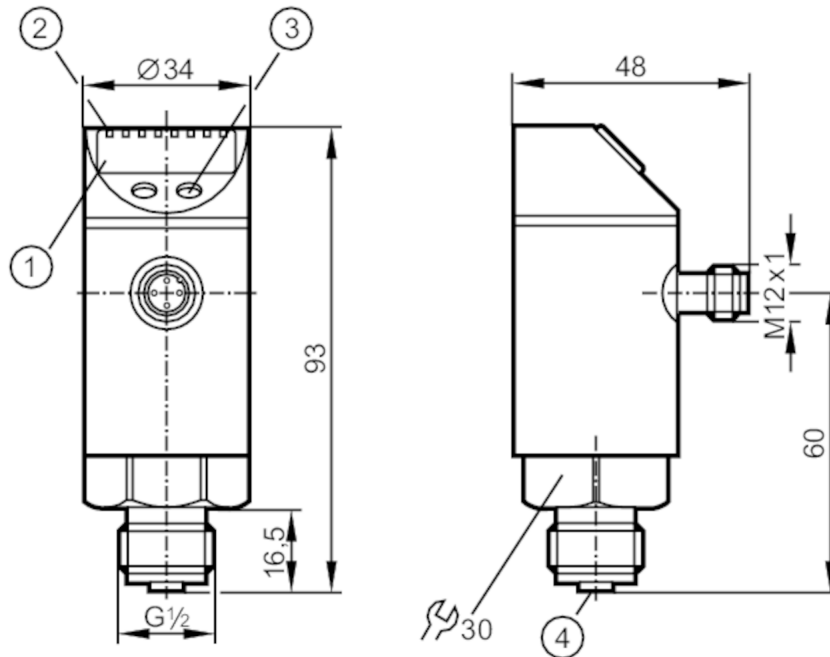
Evaluation unit with display for PT100/PT1000 temperature sensors

TR-...KDBR12-MFRKG/USI/...../V

Article to be discontinued

Alternative articles: TR2439

When selecting an alternative article and accessories please note that technical data may differ!



- 1 alphanumeric display 4-digit
- 2 status LEDs
- 3 Programming button
- 4 connector for temperature sensor M12 x 1



Product characteristics

| | | |
|------------------------------|---|--------------|
| Number of inputs and outputs | Number of digital outputs: 1; Number of analog outputs: 1 | |
| Measuring range | -40...300 °C | -40...572 °F |
| Process connection | threaded connection G 1/2 external thread | |

Application

| | |
|-------------|---|
| System | gold-plated contacts |
| Application | for Pt100 and Pt1000 measuring elements |

Electrical data

| | |
|-----------------------------|---|
| Operating voltage [V] | 18...32 DC; (cULus - Class 2 source required) |
| Current consumption [mA] | < 50 |
| Protection class | III |
| Reverse polarity protection | yes |
| Power-on delay time [s] | 1 |
| Integrated watchdog | yes |

Inputs / outputs

| | |
|------------------------------|---|
| Number of inputs and outputs | Number of digital outputs: 1; Number of analog outputs: 1 |
|------------------------------|---|



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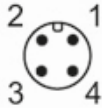
| Outputs | | |
|---|------|--|
| Total number of outputs | | 2 |
| Output signal | | switching signal; analog signal; IO-Link; (configurable) |
| Electrical design | | PNP/NPN |
| Number of digital outputs | | 1 |
| Output function | | normally open / closed; (configurable) |
| Max. voltage drop switching output DC | [V] | 2 |
| Permanent current rating of switching output DC | [mA] | 250 |
| Number of analog outputs | | 1 |
| Analog current output | [mA] | 4...20; (Response time analog output: 384 ms) |
| Max. load | [Ω] | (U _b - 10 V) x 50 |
| Analog voltage output | [V] | 0...10; (Response time analog output: 384 ms) |
| Min. load resistance | [Ω] | 2000 |
| Short-circuit protection | | yes |
| Type of short-circuit protection | | yes (non-latching) |
| Overload protection | | yes |
| Measuring/setting range | | |
| Measuring range | | -40...300 °C -40...572 °F |
| Set point SP | | -39.8...300 °C -39.6...572 °F |
| Reset point rP | | -40...299.8 °C -40...571.6 °F |
| Analog start point | | -40...295 °C -40...563 °F |
| Analog end point | | -35...300 °C -31...572 °F |
| In steps of | | 0.1 °C 0.1 °F |
| Resolution | | |
| Resolution of switching output | [K] | 0.1 |
| Resolution of analog output | [K] | 0.1 |
| Resolution of display | [K] | 0.1 |
| Accuracy / deviations | | |
| Switch point accuracy | [K] | ± 0,3 |
| Precision analog output | [K] | ± 0,3 |
| Display accuracy | [K] | ± 0,3 |
| Temperature drift per 10 K | [K] | 0.1 |
| Reaction times | | |
| Response time | [ms] | 130 |
| Interfaces | | |
| Communication interface | | IO-Link |
| Transmission type | | COM2 (38,4 kBaud) |
| IO-Link revision | | 1.0 |

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| Operating conditions | | |
|---|---------------------------|--|
| Ambient temperature | [°C] | -25...70 |
| Storage temperature | [°C] | -40...85 |
| Protection | | IP 67 |
| Tests / approvals | | |
| EMC | DIN EN 61000-4-2 ESD | 4 kV CD / 8 kV AD |
| | EN 61000-4-3 HF radiated | 10 V/m |
| | DIN EN 61000-4-4 Burst | 2 kV |
| | DIN EN 61000-4-5 Surge | 1 kV |
| | EN 61000-4-6 HF conducted | 10 V |
| Shock resistance | DIN IEC 68-2-27 | 50 g (11 ms) |
| Vibration resistance | DIN EN 60068-2-6 | 20 g (10...2000 Hz) |
| MTTF | [years] | 207 |
| Mechanical data | | |
| Weight | [g] | 231.2 |
| Material | | stainless steel (1.4301 / 304); EPDM/X; PC; PBT; FKM |
| Process connection | | threaded connection G 1/2 external thread |
| Displays / operating elements | | |
| Display | Display unit | 2 x LED, green |
| | Switching status | LED, yellow |
| | Measured values | alphanumeric display, 4-digit |
| | Programming | alphanumeric display, 4-digit |
| Remarks | | |
| Pack quantity | | 1 pcs. |
| Electrical connection | | |
| Connector: 1 x M12; coding: A; Contacts: gold-plated | | |
|  | | |

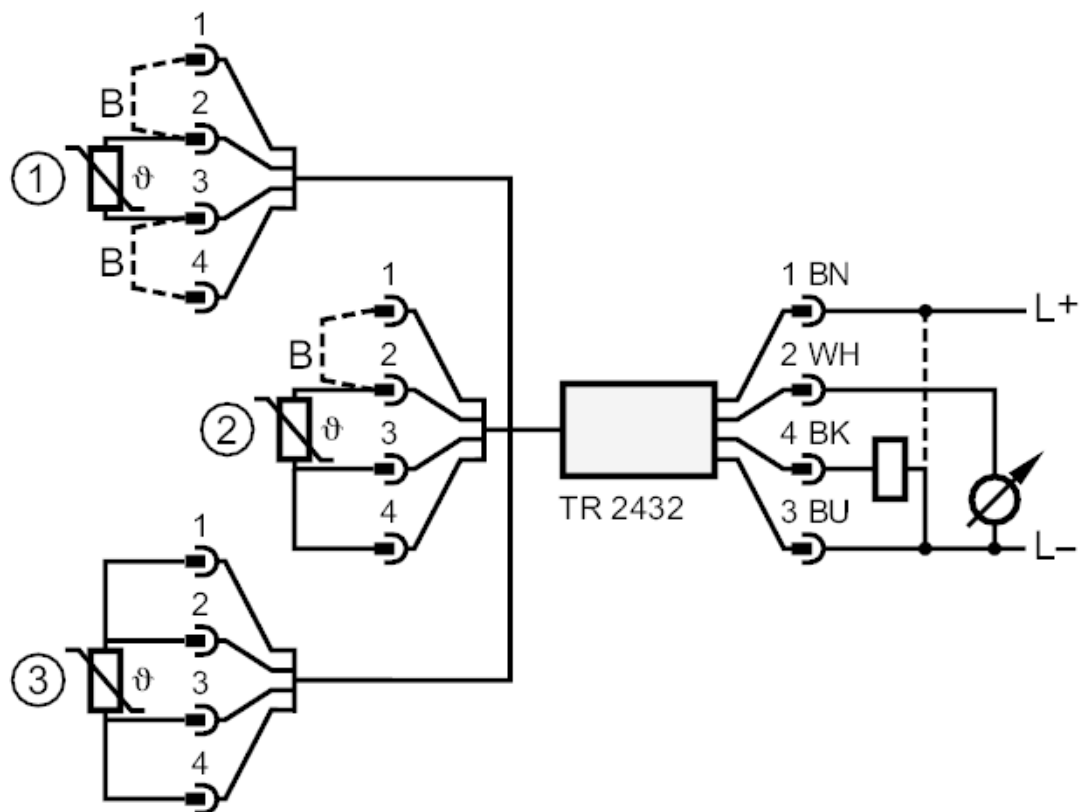
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Connection



- 1 = Two-wire sensor
- 2 = 3-wire measuring probe
- 3 = Four-wire sensor
- B = bridge