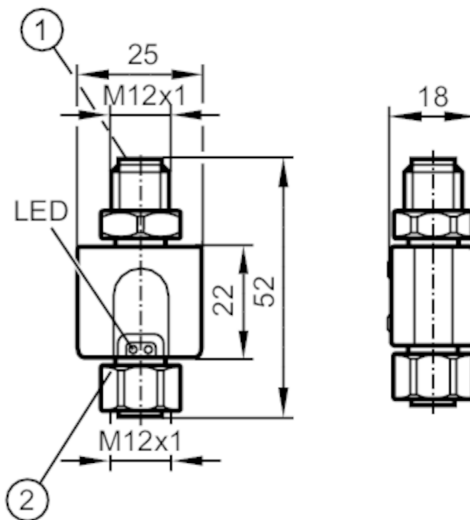


TP3231



Evaluation unit for PT100/PT1000 temperature sensors

TP- CEC -A-ZVG/US/



- 1 connection for voltage supply and output signals
2 connection for temperature sensor



Application

Application for Pt100 and Pt1000 measuring elements

Electrical data

| | |
|-----------------------------|------------|
| Operating voltage [V] | 20...32 DC |
| Protection class | III |
| Reverse polarity protection | yes |
| Power-on delay time [s] | 1 |
| Integrated watchdog | yes |

Outputs

| | |
|----------------------------------|--|
| Total number of outputs | 1 |
| Output signal | analogue signal; IO-Link; (configurable) |
| Number of analogue outputs | 1 |
| Analogue current output [mA] | 4...20 |
| Max. load [Ω] | 300 |
| Short-circuit protection | yes |
| Type of short-circuit protection | pulsed |
| Overload protection | yes |

Measuring/setting range

| | | |
|-----------------|--------------|--------------|
| Measuring range | -50...300 °C | -58...572 °F |
| Factory setting | -50...150 °C | |

Accuracy / deviations

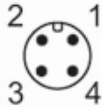
| | |
|--|-----------------------------|
| Precision analogue output [K] | $\pm 0,3 + (\pm 0,1 \% MS)$ |
| Temperature coefficient [% of the span / 10 K] | 0,1 |

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| Interfaces | | |
|--|--|---------------------|
| Transmission type | COM2 (38,4 kBaud) | |
| IO-Link revision | 1.0 | |
| Operating conditions | | |
| Ambient temperature [°C] | -25...70 | |
| Storage temperature [°C] | -40...85 | |
| Protection | IP 67 | |
| Tests / approvals | | |
| EMC | EN 61326-1 | |
| Shock resistance | DIN IEC 68-2-27 | 50 g (11 ms) |
| Vibration resistance | DIN IEC 68-2-6 | 20 g (10...2000 Hz) |
| MTTF [years] | 449 | |
| Mechanical data | | |
| Weight [g] | 40.6 | |
| Dimensions [mm] | M12 x 1 | |
| Thread designation | M12 x 1 | |
| Materials | PA; PET; Sealing: FKM; Lock nut: stainless steel (1.4404 / 316L); plug: TPU | |
| Material nut | stainless steel (1.4404 / 316L) | |
| Remarks | | |
| Remarks | operating voltage "supply class 2" according to cULus MS = set measuring span | |
| Pack quantity | 1 pcs. | |
| Electrical connection | | |
| Connector: 1 x M12; Moulded body: TPU; Locking: stainless steel (1.4404 / 316L); Contacts: gold-plated | | |
|  | | |

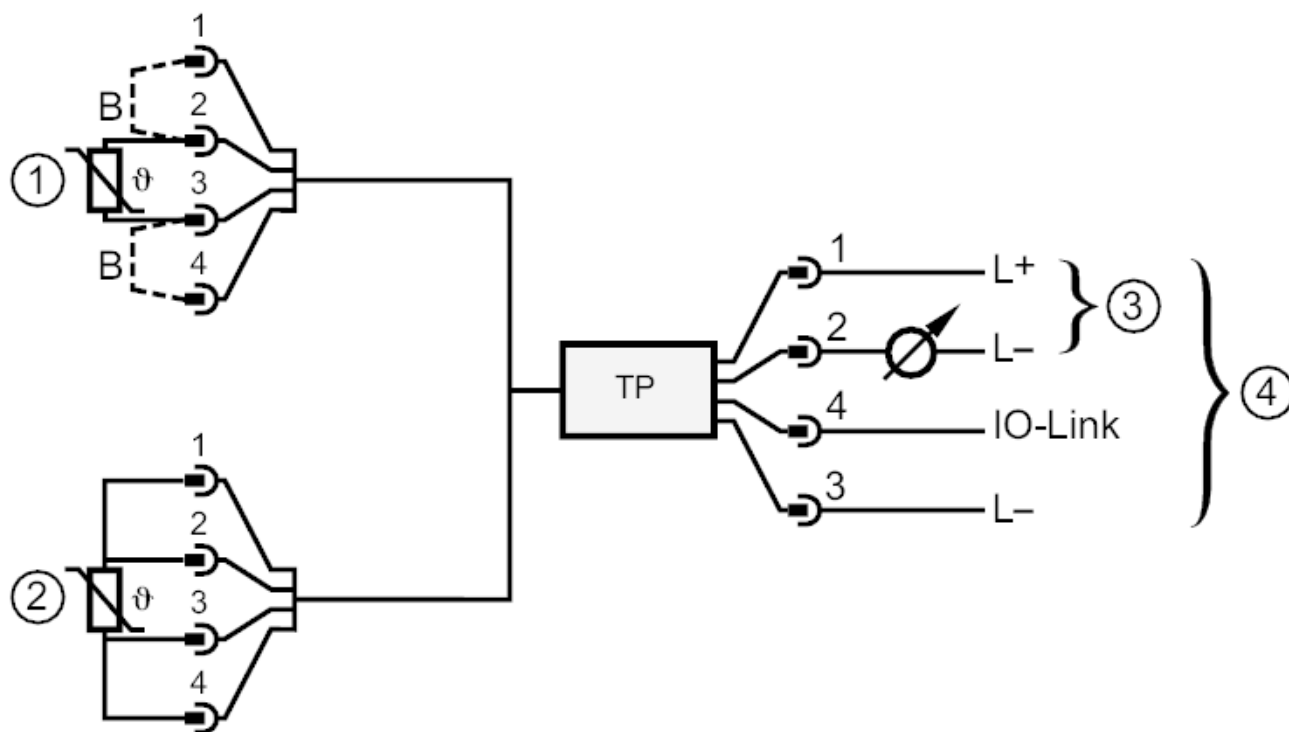
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Connection



- 1: two-wire sensor
- 2: four-wire sensor
- 3: operation as 2-wire temperature transmitter
- 4: operation as 3-wire unit, IO-Link communication possible
- B: link