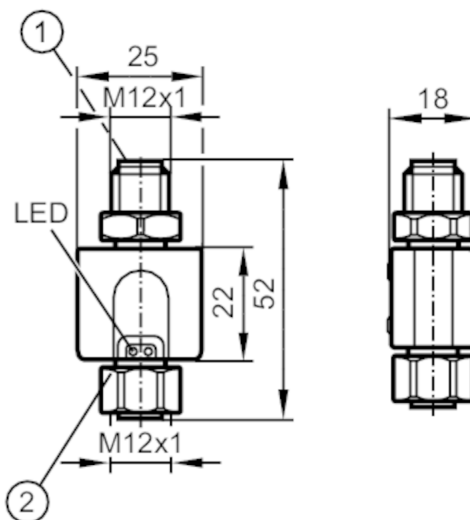




## Evaluation unit for PT100/PT1000 temperature sensors

TP- CEC -B-DVG/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]       | 18...32 DC |
| 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 analogue outputs: 1

### Outputs

|                                   |                                          |
|-----------------------------------|------------------------------------------|
| Total number of outputs           | 1                                        |
| Output signal                     | analogue signal; IO-Link; (configurable) |
| Number of analogue outputs        | 1                                        |
| Analogue voltage output [V]       | 0...10                                   |
| Min. load resistance [ $\Omega$ ] | 2000                                     |
| 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 | 0...100 °C   |              |

### Accuracy / deviations

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

# TP9237

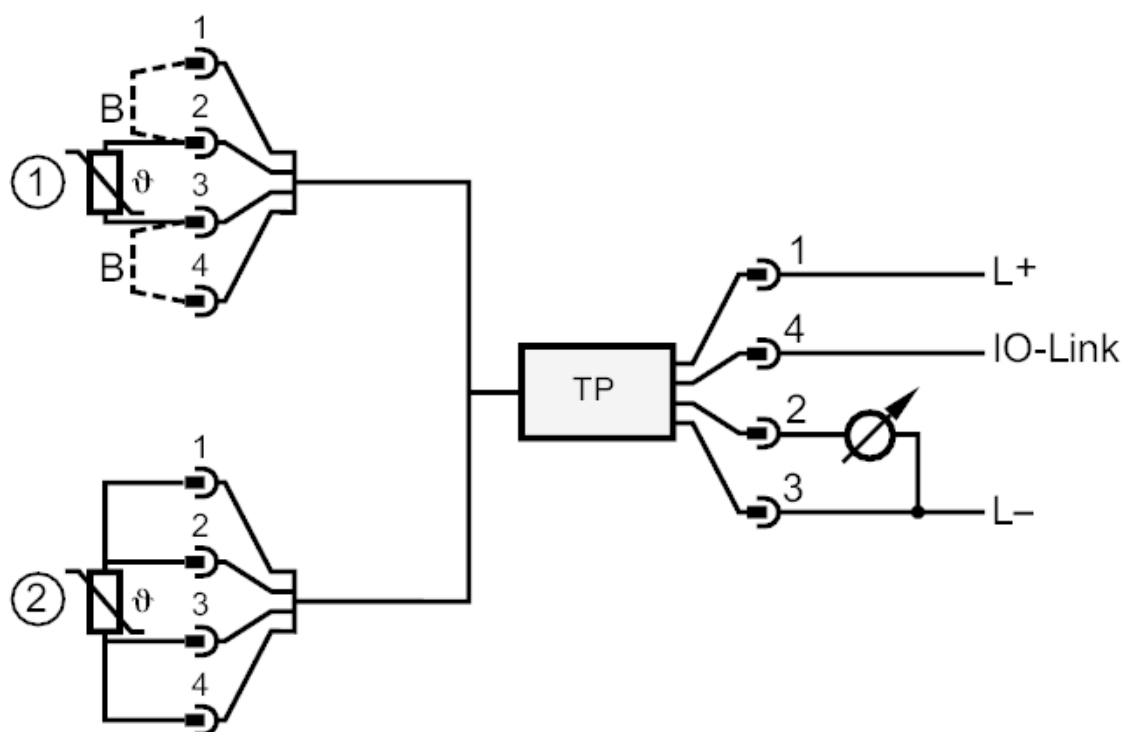


## Evaluation unit for PT100/PT1000 temperature sensors

TP- CEC -B-DVG/US/

| Response times                                                                                         |                                                                             |                     |
|--------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|---------------------|
| Max. measuring/display cycle                                                                           | [ms]                                                                        | 100                 |
| Interfaces                                                                                             |                                                                             |                     |
| Transmission type                                                                                      | COM2 (38,4 kBaud)                                                           |                     |
| IO-Link revision                                                                                       | 1.1                                                                         |                     |
| 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]                                                                     | 505.11              |
| Mechanical data                                                                                        |                                                                             |                     |
| Weight                                                                                                 | [g]                                                                         | 39.6                |
| 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 |                                                                             |                     |
| <div></div>         |                                                                             |                     |

### Connection



- 1: two-wire sensor
- 2: four-wire sensor
- B: link