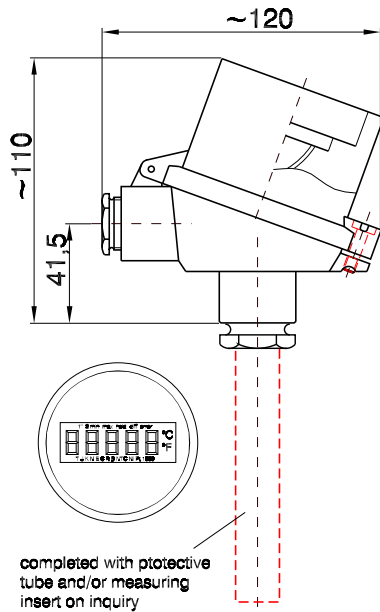


## Components and accessories

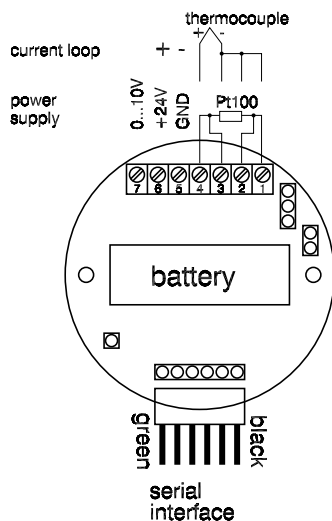
### Transmitter

#### Transmitter LKM 154



#### Programmable connection head transmitter for Pt100/Pt1000 and thermocouples with a variety of output signals and an LCD Display

The LKM 154 is a programmable transmitter for Pt100/Pt1000 and various thermocouples with an LCD display installed in a special connection head. It converts the temperature signal linearly with high accuracy into a standard current signal or an output voltage. A battery variant without an output signal is also available. The LKM 154 can be integrated with temperature sensors using an M12 connection thread to form a complete measurement module. For the range an adjustment capability of at least 20°C is required. The transmitter can be configured by the customer using a programming module that can be obtained separately. No recalibration is required. The output signals can similarly be scaled as required. Using this programming module it is also possible to record the measurement data digitally with a PC. The different variants are identified by an additional letter. We can also supply complete temperature sensors with this transmitter.



#### Construction

- U- Display and output signal 0...10V, serial interface (external voltage supply 24 V)
- I- Display and Output 4...20 mA, serial Interface (Voltage supply from loop)
- B- Display (Voltage supply 9V battery, shutdown after 5 min.)

#### Connection head

BUZH

#### Protection classification

IP 65 according DIN 60529

## Components and accessories

### Transmitter

#### Transmitter LKM 154

##### Input

Pt100  
Pt1000  
Thermocouple Typ K  
Thermocouple Typ T  
Thermocouple Typ J  
Thermocouple Typ S  
on inquiry

##### Circuitry

2 wire circuit  
3 wire circuit  
4 wire circuit

##### Output

0 ... 10V  
4 ... 20mA

##### Measuring range

Typ K -200 °C ... +1370 °C  
Typ T -200 °C ... +400 °C  
Typ J -200 °C ... +1200 °C  
Typ S 0 °C ... +1760 °C  
Pt100/Pt1000 -200 °C ... 835 °C

##### Range

domain of definition of sensor, minimal 20 °C \*

##### Zero point

as defined for the sensor\*

##### Resolution

0.1 °C/1 °C° \*

##### Display

LCD 5-digit, 10mm character height, rotatable

##### Test current

0.2mA

##### Sensor fracture

approx. 11V for voltage output  
approx. 21 mA for current loop

## Components and accessories

### Transmitter

#### Transmitter LKM 154

##### Shorted Sensor

at resistance sensors approx. 0V for voltage output and approx 3 mA for current loop;  
Temperature value on fracture point for thermocouples

##### Permissible ripple

< 10 %

##### Messgenauigkeit

0,5°C ± 1Digit

##### Accuracy

0.2°C ± 1Digit for resistance sensors  
0.5°C for thermocouples  
0.2°C ± 1Digit for resistance sensors  
0.5°C for thermocouples

##### Temperature drift

<150ppm/°C

##### Operating temperature range

0°C ... +60°C

##### Mounting

Thread M24x1.5

##### Power supply

3.3V Lithium (CR123)

##### Supply voltage

24VDC ± 30% reverse protection

##### Sampling rate

>0.25/s\*

##### Battery operation time

>1000h on automatic switch off after 3 min \*

##### Features

Maximum, Minimum, Hold

##### Weight

approx. 290g

##### Interface

USB

Components and accessories

Transmitter

Transmitter LKM 154

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**cold-junction compensation**

internal

\* programmable