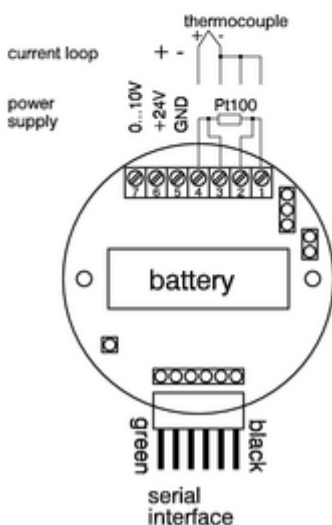
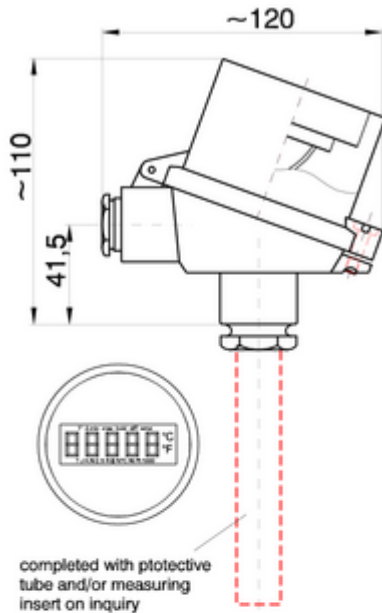


Components and accessories

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 free programmable transmitter for Pt100 / Pt1000 and various thermocouples with LCD display mounted 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 version without an output signal is also available. The LKM 154 can be integrated with temperature sensors using an M24x1,5 connection thread to form a complete measurement module. For the range an adjustment capability of at least 20°C is required for the span. The transmitter can be configured by the customer with a separately available programming set. No readjustment is required. The output signals are also freely scalable. Via this programming set it is also possible to acquire the measurement data digitally with a PC. The different versions are identified by an additional letter.

* programmable

Construction

U-Display and output signal 0...10V, serial interface (external voltage supply 24V)

I-Display and output signal 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

Input

Thermocouple type K

Thermocouple type T

Thermocouple type J

Thermocouple type S

Pt100

Pt1000

on inquiry

Circuitry

2 wire circuit

3 wire circuit

Components and accessories

Transmitter

Transmitter LKM 154

4 wire circuit

Output

0 ... 10V

4 ... 20mA

Measuring range

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

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 %

Accuracy

0.2°C±1Digit for resistance sensors

0.5°C for thermocouples

Temperature drift

< 150 ppm/°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

Components and accessories

Transmitter

Transmitter LKM 154

Maximum, Minimum, Hold

Weight

approx. 290g

Interface

USB*

Cold-junction compensation

internal