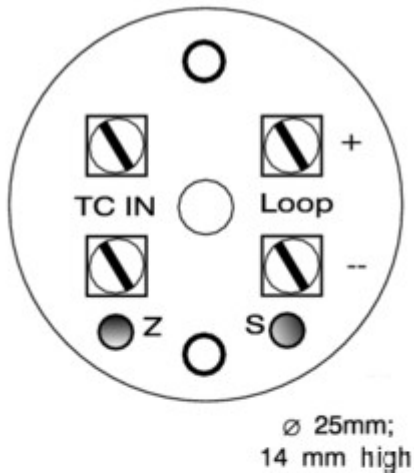


Components and accessories

Transmitter

Transmitter LKM 141



In-head transmitter LKM 141 for thermocouples with output signal 4...20mA for mounting in connection heads form J

The LKM 141 is an analog transmitter for thermocouples according to DIN EN 60584 or DIN 43710. It converts the temperature-dependent thermoelectric voltage linearly into a standard current signal of 4...20mA. Depending on the measuring range and thermocouple type, the signal is adjusted in such a way that the temperature errors are minimized. The transmitter is designed for mounting in the measuring head form J (F). An adjustment range of approx. 200 °C (depending on the thermocouple type) is required for the span. The LKM 141 transmitter is factory calibrated to customer specifications. Subsequent fine adjustment can be carried out by means of span and zero controllers.

* depends on thermocouple

Input

Thermocouples K, J (L), T (U), N, E
S and B with higher fault

Output

4...20mA current loop

Range

> 200 °C*

Zero point

> -270 °C*

Loop voltage

10...35VDC, reverse protection

Sensor fracture

>20 mA

Shorted Sensor

ambient temperature

Permissible ripple

< 10 %

Reaction time

< 0.1s

Vibration

5g/10-200Hz

Linearity error

<0.1% FS*

Error of compensation

<±0.5°C

Components and accessories

Transmitter

Transmitter LKM 141

TCR

< 100 ppm/°C

Operating temperature range

-25 °C ... +85 °C

Terminal type

screw terminal

Clamping range

0.13...0.75mm²

Humidity

< 95%

EMC emission

EN 61000-6-3:2001

EMC interference rejection ratio

EN 61000-6-3:2001

Mounting

J-head

Dimension

25 mm x 14 mm (DxH)

Sealing compound

Polyurethan, black

Weight

approx. 10g