

Components and accessories

Transmitter

Transmitter LKM 223



DIN rail transmitter LKM 223 for Pt100 / Pt1000 resistance thermometers with output signal 4...20mA

The LKM 223 is an analog transmitter for Pt100, Pt1000 temperature sensors according to DIN EN 60751. Events for mounting on the 35mm DIN-rail. The temperature dependent resistance signal of the sensors is converted a standard signal of 4...20mA. The output signal is highly accurate temperature linear. The transmitter is delivered from the factory calibrated to customer specifications. A span and zero controller allows subsequent fine adjustment. The influence of lead resistances is largely eliminated by the use of a 3-wire circuit. A larger distance between sensor and transmitter is therefore possible without loss of accuracy. If possible, all three leads should be of the same length and have the same cross-section. The transmitter can also be used in a 2-wire circuit. A correction of the line resistance is then possible with the zero point controller.

* depends on sensor

Input

Pt100/Pt1000, 2-/3 wire circuit

Output

4...20mA current loop

Range

> 20 °C*

Zero point

-200 °C ... +600 °C*

Loop voltage

10...35VDC, reverse protection

Test current

0.8 ... 1mA*

Sensor fracture

>20 mA

Shorted Sensor

< 4 mA

Permissible ripple

< 10 %

Reaction time

< 0.1s

Vibration

5g/10-200Hz

Linearity error

Components and accessories

Transmitter

Transmitter LKM 223

	<0.1% FS
TCR	
	< 100 ppm/°C
Operating temperature range	
	-25 °C ... +85 °C
Terminal type	
	screw terminal
Clamping range	
	0.2...2.5mm ²
Humidity	
	< 95%
EMC emission	
	EN 61000-6-3:2001
EMC interference rejection ratio	
	EN 61000-6-3:2001
Mounting	
	35mm DIN rail
Case	
	EMG25-LG
Case material	
	Polycarbonat
Case dimension (HxWxD)	
	75 x 25 x 53 mm
Weight	
	approx. 60g