

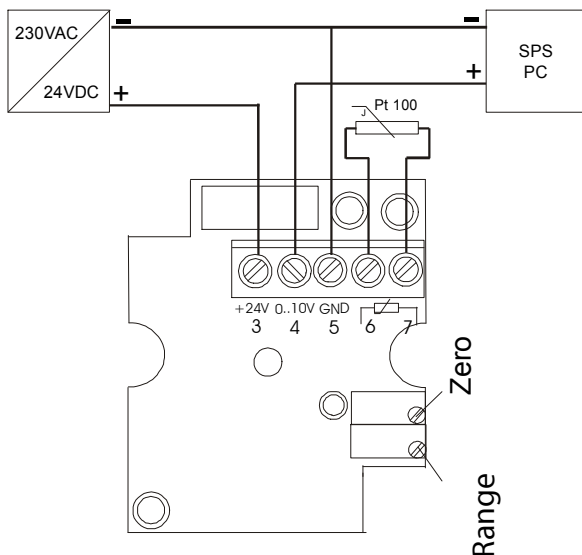
## LKM426 INSTRUCTIONS FOR USE

The Type 426 is an analog measuring transducer for Pt100/1000 temperature sensors. It converts the temperature-dependent resistance into a standard voltage signal of 0...10 V. The Type 426 measuring transducer is designed for assembly in a housing like Bopla Type PK101.

### ADJUSTERS

On the top of a transmitter adjustment control is for fine adjustment of the output voltage. The location of the controller is shown in the picture. The regulator is secured against accidental change by sealing.

### EXTERNAL CIRCUIT



The Type 424 measuring transducer is operated as a **2-lead circuit**, i.e. the resistance of the leads affects the results measured. The leads to the sensor should be as thick and short as possible. The null point potentiometer can be used to correct for lead resistance within limits. The range potentiometer should be adjusted as little as possible.

The output voltage follows the temperature signal at input linearly. It must be noted that the output only allows control to within approx. 0.02 V at the lower supply voltage.

If you have longer leads than should the output lead get locked with a 10 kΩ resistor. Also is it advisable to use a screened line.

### FAULT DIAGNOSTICS INCLUDING POSSIBLE CAUSES

When measuring with resistance thermometers factors arising from the design and measuring technology used can falsify the results measured. The most important effects that can lead to faults are listed in brief below:

Fault observed	Cause of the fault
No voltage at output	No supply voltage Read-out unit defective Lead fractured
Output signal 0V	Short circuit in sensing element
Output signal > 10V	Sensing element fractured
Temperature read-out too low or fluctuates	Poor lead insulation resistance
Read-out obviously too high or too low	Moisture in the sensor or the sensor leads

