

W200

for surface temperature measurement



For the contactless temperature measurement of rollers, calenders, e.g. also at higher speed.

Temperature sensor for the measurement of metallicly smooth, reflecting surfaces, like calender, high-grade steel belts, etc..

The small dimensioned probe makes the installation possible also in very difficulty accessible places.

A multiple thermopile (thermocouple NiCr Ni) is the actual measuring sensor. This thermopile is installed in a reflector, with a final special filter to the measuring side. The alignment of the system is made by a resistance network, that is integrated in the connection cable.

Standard

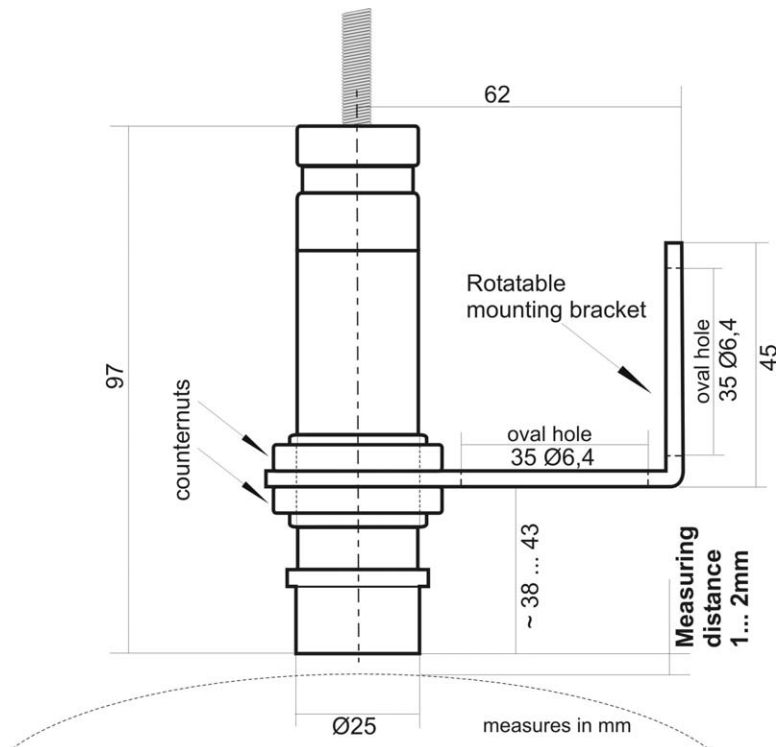
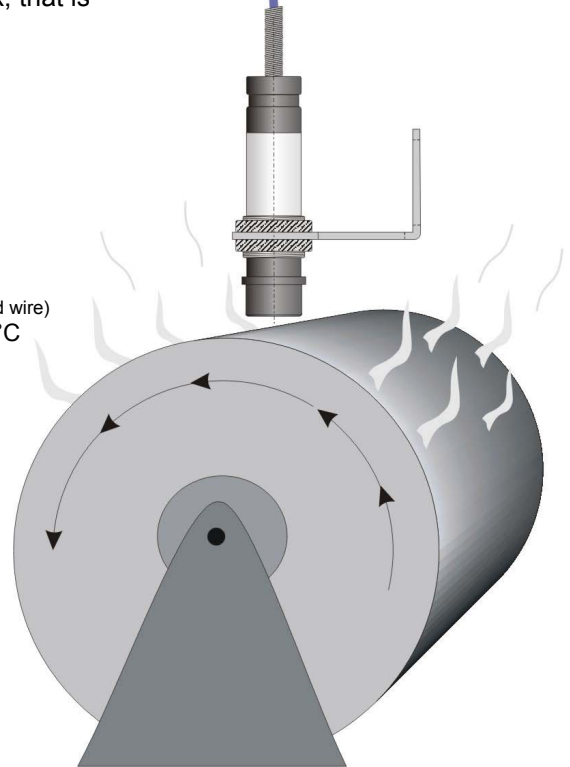
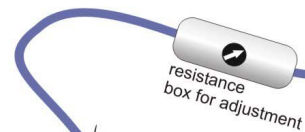
Output signal:	Thermo voltage NiCr-Ni (type K)
Measuring range:	room temperature to 500°C
Reproducibility:	better than ±5°C
Response time:	about 6s
Measuring distance:	1 ... 2mm
Smallest measuring spot:	about 30mm (width of object)
Ambient temperature:	max. 230°C
Output impedance:	15 ... 220Ω (19 ... 260Ω for a 10m length lead wire)
cabel:	5m silicone thermocouple wire up to 180°C
included in delivery:	mounting bracket

Order number: 01461

Spare parts:

Filter window

Order number: 014611



All prices exclusive of VAT. – Jan-11

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Stand-Documentation: 10/02/2006

Adjustment & measurement

Connect this sensor to a thermocouple type K receiver.
Attention: + red / - white

Let the measuring object be in operation and stabilize its temperature.

Measure the temperature of the object by a contact type thermometer (such as "MP2000"; have a look at our datasheet).
If the object is in moving conditions, stop and measure it.

Coincide the output of this sensor with the measured value of a contact type thermometer by adjusting the trimmer resistance in the resistance box (cabel) with a driver.

Now all the procedures are completed for a self-balancing type instrument used as a receiver.

resistance box



Turn this screw so that the output of this sensor may coincide with the measured value of a contact type thermometer.

Advice:

The sensor filter window is to be removed only with extreme caution, since it serves the thermopile as protection.

Use the sensor only in clean atmosphere (no organic or aggressive atmospheres).

Pollution of the sensor filter window lead to deviations of the measured values.
Keep clean therefore if possible.
Do not clean the sensor window with sharp or aggressive agents.