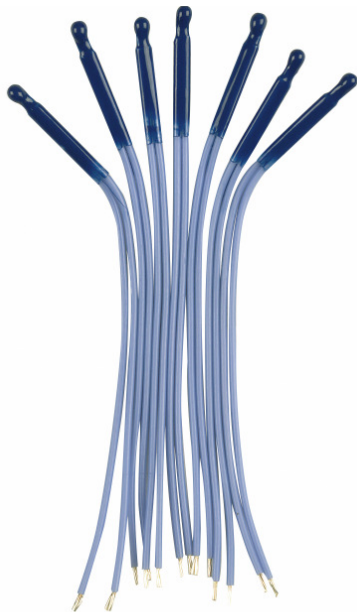


NTC-thermistor
for windings control



Basic information

The NTC-thermistor is used for precise temperature monitoring, control, and switching.

Application

Temperature monitoring of bearings, bus bars, machines, and windings.

General function

The NTC-temperature sensors have a non-linear, negative temperature coefficient of resistance over the complete temperature range.

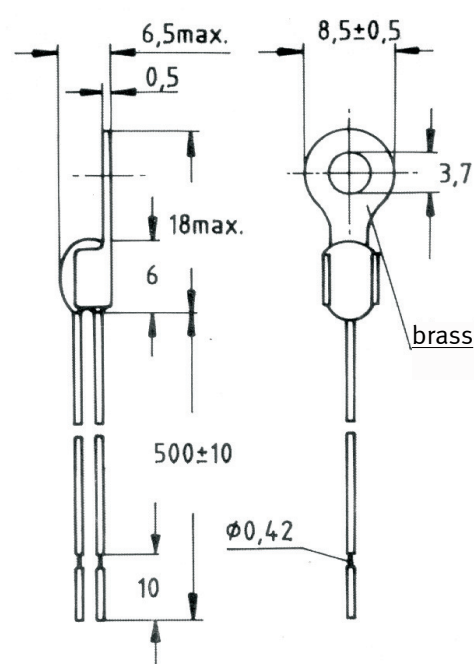
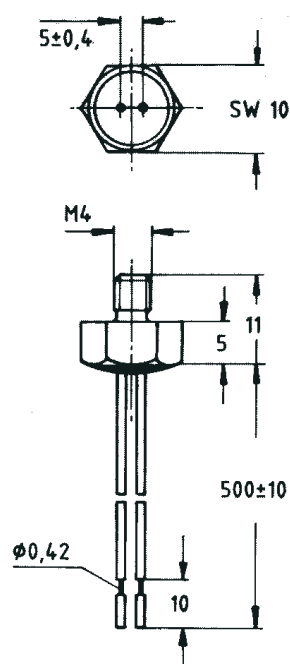
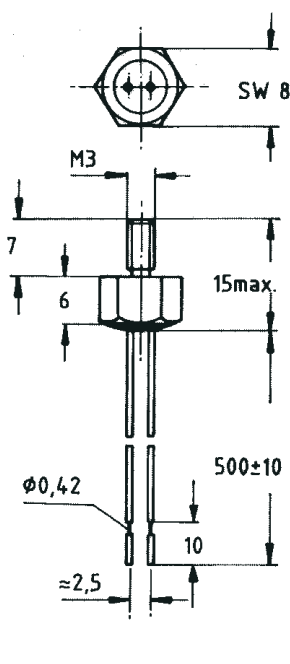
Advantages

- Low cost over a wide temperature range: $-40...300^{\circ}\text{C}$.
- Resistance characteristic: $0,1\text{ KOhm} \dots 1000\text{ KOhm}$ sufficient for most applications.
- Low weight.
- Low thermal time constant.

NTC-screw-in-sensor

and

surface sensor



Technical data

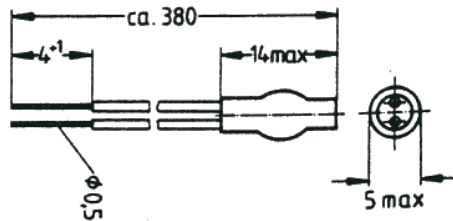
Parameter	Value	Unit
sensor resistance at 25°C (R_{25})	0.1 ... 1000 (E24-Series), Decadic Stepped (E24-Reihe): 1.0/ 1.1/ 1.2/ 1.3/ 1.5/ 1.6/ 1.8/ 2.0/ 2.2/ 2.4/ 2.7/ 3.0/ 3.3/ 3.6/ 3.9/ 4.3/4.7/ 5.1/ 5.6/ 6.2/ 6.8/ 7.5/ 8.2/ 9.1	KOhm
deviation of R_{25} -value	1, 2, 3, 5, 10	%
deviation of B-value (material constant)	0.75 ... 5	%
max. power loss	500	mW
reaction time dependent on housing:	< 1 ... 20	s
temperature range	-40 ... +300	°C

Mechanical data:

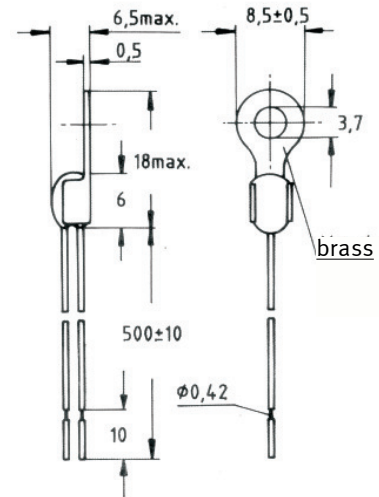
Type:	NTC-sensor for surface mounting	NTC-sensor for windings monitoring
	Alu-housing screw-in sensor SW 10/M4 ring shaped cable eye for self-tapping sheet metal screw	e.g.: electric motors, transformers: in stabilised shrink tube design
Lead-in:	AWG 24, Cu-strand silvered, Teflon insulation, Standard colour: green/brown, Standard length: 500mm ± 1%	
Insulation Class:	H	
Remarks:	Special designs for liquid or gaseous media, in V2A or other materials are manufactured on request for customers specific applications and specification. Resistance-temperature curves or table on request.	

NTC-sensors:

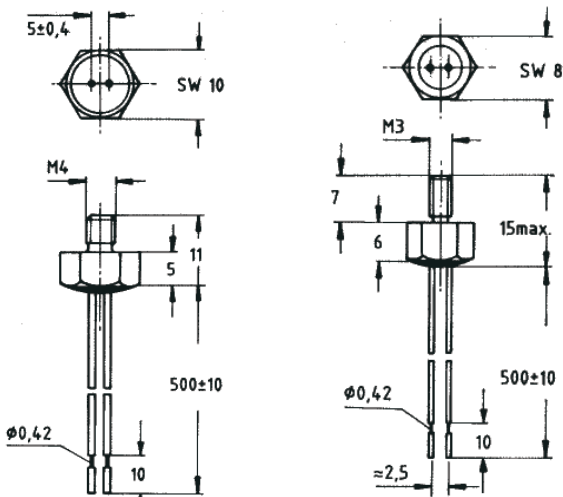
examples of NTC-thermistor-housings



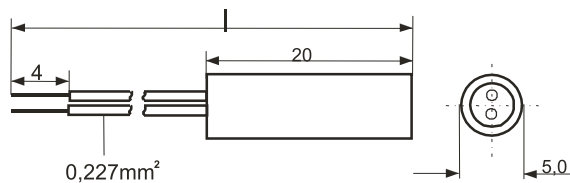
shrink tube housing
e.g. for monitoring windings



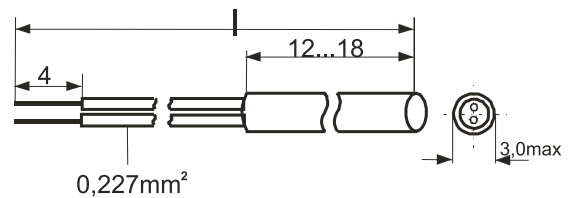
NTC-sensor in cable shoe-
surface sensor



Screw-in sensors in alu housing:
SW8-M3 SW10-M4



NTC-thermistor in stainless steel housing



NTC-thermistor in ceramics-
or brass-housing

For further advice and information contact: