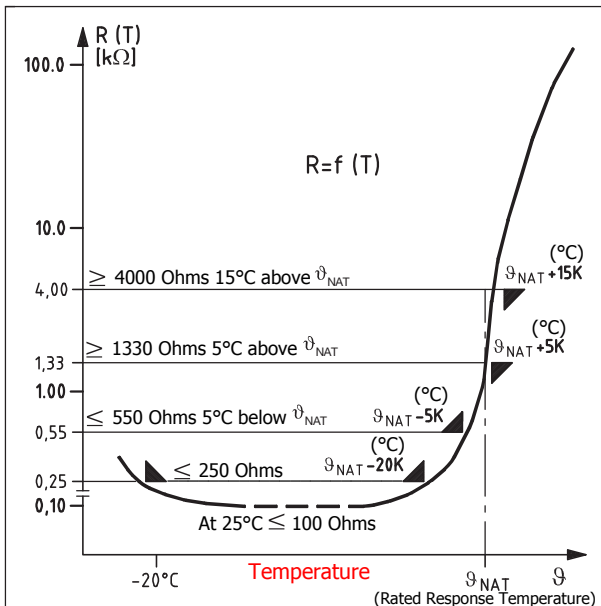
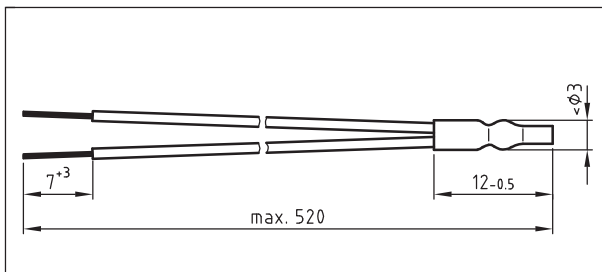


Resistance
kOhms

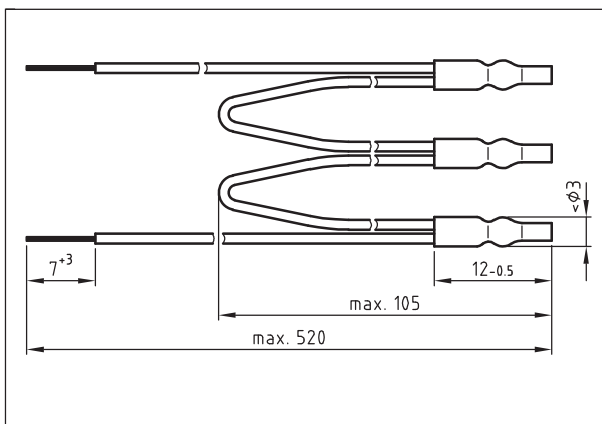


Note: resistance values above for a single PTC thermistor

PTC characteristic curve acc. to DIN 44081/082



PTC single sensor mini



PTC triple sensor mini

Application

PTC thermistors are used to monitor temperature in machines and installations. The design ensures short

response times and easy installation.

General information on PTC thermistors



PTC Thermistors according to DIN 44081 (triple sensors acc. to DIN 44082) are used to protect electrical equipment from thermal overload. MOD-TRONIC Thermistors have an even steeper R/T characteristic than the DIN standard. The temperature range is from 60 to 180°C. PTC thermistor beads with different rated response temperatures can be connected in series. This permits optimal and economic thermal protection of machines and windings with different limit temperatures. This permits optimal and economic thermal protection of machines and windings with different limit temperatures. Mod-tronic PTC Thermistors are both Canadian and U.S. UL Recognized components.

Technical Data PTC acc. to DIN 44081/082

	Single	Triple	
Max. operating voltage	30	30	V
Rated response temperature ϑ_{NAT}	see ordering information		°C
Tolerance of ϑ_{NAT}	± 5	± 5	K(°C)
Reproducibility of ϑ_{NAT}	± 0.5	± 0.5	K(°C)
Resistance at 25°C (R_{25})	≤ 100	≤ 300	Ω
Resistance at a temperature of $\vartheta_{NAT} - 5K$ (°C)	≤ 550	≤ 1650	Ω
Resistance at a temperature of $\vartheta_{NAT} + 5K$ (°C)	≥ 1330	≥ 3990	Ω
Resistance at a temperature of $\vartheta_{NAT} + 15K$ (°C)	≥ 4000	≥ 12,000	Ω
Thermal response time t_a	≤ 5	≤ 5	s
Insulation test voltage U_{is}	AC 2.5	AC 2.5	kV
Max. operating temperature	200	200	°C
Max. storage temperature	160	160	°C
Min. storage temperature	-25	-25	°C
Weight	2	3.5	g

PTC Identification and Part Numbers

The colour of the connection leads identifies the rated response temperature. These are defined in DIN 44081/082

Rated response temperature ϑ_{NAT} in °C	Lead colours outer / outer (inner: yellow)	Mini Single DIN 44081 Part-Number	Mini Triple DIN 44082 Part-Number
60	white/grey	MT-1-060C	MT-3-060C
70	white/brown	MT-1-070C	MT-3-070C
80	white/white	MT-1-080C	MT-3-080C
90	green/green	MT-1-090C	MT-3-090C
100	red/red	MT-1-100C	MT-3-100C
110	brown/brown	MT-1-110C	MT-3-110C
120	grey/grey	MT-1-120C	MT-3-120C
130	blue/blue	MT-1-130C	MT-3-130C
140	white/blue	MT-1-140C	MT-3-140C
145	white/black	MT-1-145C	MT-3-145C
150	black/black	MT-1-150C	MT-3-150C
155	blue/black	MT-1-155C	MT-3-155C
160	blue/red	MT-1-160C	MT-3-160C
170	white/green	MT-1-170C	MT-3-170C
180	white/red	MT-1-180C	MT-3-180C

Green part numbers normally in stock