

Detailed values for temperature converting

ACT20M-UI-AO-S 1176030000

RTD temperature sensors

Type	min. Temperature	max. Temperature	according to norm:	Basic accuracy	Temperature coefficient
PT10	-200°C	+850°C	IEC60751	$\leq \pm 1.4^{\circ}\text{C}$	$\leq \pm 0.14^{\circ}\text{C} / ^{\circ}\text{C}$
PT20	-200°C	+850°C	IEC60751	$\leq \pm 0.8^{\circ}\text{C}$	$\leq \pm 0.08^{\circ}\text{C} / ^{\circ}\text{C}$
PT50	-200°C	+850°C	IEC60751	$\leq \pm 0.6^{\circ}\text{C}$	$\leq \pm 0.06^{\circ}\text{C} / ^{\circ}\text{C}$
PT100	-200°C	+850°C	IEC60751	$\leq \pm 0.2^{\circ}\text{C}$	$\leq \pm 0.02^{\circ}\text{C} / ^{\circ}\text{C}$
PT200	-200°C	+850°C	IEC60751	$\leq \pm 0.2^{\circ}\text{C}$	$\leq \pm 0.02^{\circ}\text{C} / ^{\circ}\text{C}$
PT250	-200°C	+850°C	IEC60751	$\leq \pm 0.6^{\circ}\text{C}$	$\leq \pm 0.06^{\circ}\text{C} / ^{\circ}\text{C}$
PT300	-200°C	+850°C	IEC60751	$\leq \pm 0.6^{\circ}\text{C}$	$\leq \pm 0.06^{\circ}\text{C} / ^{\circ}\text{C}$
PT400	-200°C	+850°C	IEC60751	$\leq \pm 0.6^{\circ}\text{C}$	$\leq \pm 0.06^{\circ}\text{C} / ^{\circ}\text{C}$
PT500	-200°C	+850°C	IEC60751	$\leq \pm 0.3^{\circ}\text{C}$	$\leq \pm 0.03^{\circ}\text{C} / ^{\circ}\text{C}$
PT1000	-200°C	+850°C	IEC60751	$\leq \pm 0.2^{\circ}\text{C}$	$\leq \pm 0.02^{\circ}\text{C} / ^{\circ}\text{C}$
NI50	-60°C	+250°C	DIN 43760	$\leq \pm 0.6^{\circ}\text{C}$	$\leq \pm 0.06^{\circ}\text{C} / ^{\circ}\text{C}$
NI100	-60°C	+250°C	DIN 43760	$\leq \pm 0.3^{\circ}\text{C}$	$\leq \pm 0.03^{\circ}\text{C} / ^{\circ}\text{C}$
NI120	-60°C	+250°C	DIN 43760	$\leq \pm 0.3^{\circ}\text{C}$	$\leq \pm 0.03^{\circ}\text{C} / ^{\circ}\text{C}$
NI1000	-60°C	+250°C	DIN 43760	$\leq \pm 0.3^{\circ}\text{C}$	$\leq \pm 0.03^{\circ}\text{C} / ^{\circ}\text{C}$

Effect of sensor cable resistance

$< 0.002 \Omega / \Omega$

Thermo couple

Type	min. Temperature	max. Temperature	according to norm:	Basic accuracy	Temperature coefficient
B	0°C	+1820°C	IEC 60584-1	$\leq \pm 4.5^{\circ}\text{C}$ (160...400°C) $\leq \pm 2^{\circ}\text{C}$ (400...1820°C)	$\leq \pm 0.45^{\circ}\text{C} / ^{\circ}\text{C}$ (160...400°C) $\leq \pm 0.2^{\circ}\text{C} / ^{\circ}\text{C}$ (400...1820°C)
E	-100°C	+1000°C	IEC 60584-1	$\leq \pm 1^{\circ}\text{C}$	$\leq \pm 0.1^{\circ}\text{C} / ^{\circ}\text{C}$
J	-100°C	+1200°C	IEC 60584-1	$\leq \pm 1^{\circ}\text{C}$	$\leq \pm 0.1^{\circ}\text{C} / ^{\circ}\text{C}$
K	-180°C	+1372°C	IEC 60584-1	$\leq \pm 1^{\circ}\text{C}$	$\leq \pm 0.1^{\circ}\text{C} / ^{\circ}\text{C}$
L	-200°C	+ 900°C	DIN 43710	$\leq \pm 1^{\circ}\text{C}$	$\leq \pm 0.1^{\circ}\text{C} / ^{\circ}\text{C}$
N	-180°C	+1300°C	IEC 60584-1	$\leq \pm 1^{\circ}\text{C}$	$\leq \pm 0.1^{\circ}\text{C} / ^{\circ}\text{C}$
R	-50°C	+1760°C	IEC 60584-1	$\leq \pm 2^{\circ}\text{C}$	$\leq \pm 0.2^{\circ}\text{C} / ^{\circ}\text{C}$
S	-50°C	+1760°C	IEC 60584-1	$\leq \pm 2^{\circ}\text{C}$	$\leq \pm 0.2^{\circ}\text{C} / ^{\circ}\text{C}$
T	-200°C	+400°C	IEC 60584-1	$\leq \pm 1^{\circ}\text{C}$	$\leq \pm 0.1^{\circ}\text{C} / ^{\circ}\text{C}$
U	-200°C	+600°C	DIN 43710	$\leq \pm 1^{\circ}\text{C}$	$\leq \pm 0.1^{\circ}\text{C} / ^{\circ}\text{C}$
W3	0°C	+2300°C	ASTM E988-90	$\leq \pm 2^{\circ}\text{C}$	$\leq \pm 0.2^{\circ}\text{C} / ^{\circ}\text{C}$
W5	0°C	+2300°C	ASTM E988-90	$\leq \pm 2^{\circ}\text{C}$	$\leq \pm 0.2^{\circ}\text{C} / ^{\circ}\text{C}$
LR	-200°C	+800°C	GOST 3044-84	$\leq \pm 2^{\circ}\text{C}$	$\leq \pm 0.2^{\circ}\text{C} / ^{\circ}\text{C}$