

INPUT

Resistance Thermometer (RTD)

TYPE	MEASUREMENT RANGE		MINIMUM RANGE
Pt100 ($\alpha = 0.00385\text{ }^{\circ}\text{C}^{-1}$)	(-200 to 850) °C	[-328 to 1562] °F	10° C [18 °F]
Pt500	(-200 to 250) °C	[-328 to 482] °F	10° C [18 °F]
Pt1000	(-200 to 250) °C	[-328 to 482] °F	10° C [18 °F]
Ni100 ($\alpha = 0.00618\text{ }^{\circ}\text{C}^{-1}$)	(-60 to 250) °C	[-76 to 356] °F	10° C [18 °F]
Ni500	(-60 to 150) °C	[-76 to 302] °F	10° C [18 °F]
Ni1000	(-60 to 150) °C	[-76 to 302] °F	10° C [18 °F]
Connection Type	2-, 3- or 4-wire connection cable. Resistance compensation possible in the 2 wire system (0 to 30) Ω		
Sensor cable resistance	maximum 20 Ω per cable in the 3 and 4 wire system		
Sensor current	≤ 0.2 mA		

Resistance (Ω)

TYPE	MEASUREMENT RANGE	MINIMUM RANGE
Resistance (Ω)	(10 to 400) Ω (10 to 2000) Ω	10 Ω 100 Ω

Thermocouples (TC)

TYPE	MEASUREMENT RANGE		MINIMUM RANGE
B (PtRh30-PtRh6)	(0 to 1820) °C	[32 to 3308] °F	500 °C [900 °F]
C (W5Re-W26Re)	(0 to 2320) °C	[32 to 4208] °F	500 °C [900 °F]
D (W3Re-W25Re) [3]	(0 to 2495) °C	[32 to 4523] °F	500 °C [900 °F]
E (NiCr-CuNi)	(-270 to 1000) °C	[-454 to 1832] °F	50 °C [90 °F]
J (Fe-CuNi)	(-210 to 1200) °C	[-346 to 2192] °F	50 °C [90 °F]
K (NiCr-Ni)	(-270 to 1372) °C	[-454 to 2501] °F	50 °C [90 °F]
L (Fe-CuNi) [2]	(-200 to 900) °C	[-328 to 1652] °F	50 °C [90 °F]
N (NiCrSi-NiSi)	(-270 to 1300) °C	[-454 to 2372] °F	50 °C [90 °F]
R (PtRh13-Pt)	(-50 to 1768) °C	[-58 to 3214] °F	500 °C [900 °F]
S (PtRh10-Pt)	(-50 to 1768) °C	[-58 to 3214] °F	500 °C [900 °F]
T (Cu-CuNi)	(-270 to 400) °C	[-454 to 752] °F	50 °C [90 °F]
U (Cu-CuNi) [2]	(-200 to 600) °C	[-328 to 1112] °F	50 °C [90 °F]
Cold junction	internal (Pt100) or external (0 to 80) °C [32 to 176] °F		
Cold junction accuracy	± 1 °C		
[1] no reference [2] according to DIN 43710 [3] according to ASTM E1751			

Voltage (mV)

TYPE	MEASUREMENT RANGE	MINIMUM RANGE
Millivolt (mV)	(-10 to 75) mV	5 mV