

Thermocouples – Tolerances on Initial Values of Electromotive Force vs. Temperature

Reference Junction 32°F (0°C)

Calibration Type	Temperature Range °F (°C)		Tolerances (whichever is greater)			
			Standard °F (°C)		Special °F (°C)	
Thermocouples ① ③						
B	1600 to 3100	(870 to 1700)		±0.5%		±0.25%
E	32 to 1600	(0 to 870)	②	(±1.7 or ±0.5%)	②	(±1.0 or ±0.4%)
J	32 to 1400	(0 to 760)	②	(±2.2 or ±0.75%)	②	(±1.1 or ±0.4%)
K or N	32 to 2300	(0 to 1260)	②	(±2.2 or ±0.75%)	②	(±1.1 or ±0.4%)
R or S	32 to 2700	(0 to 1480)	②	(±1.5 or ±0.25%)	②	(±0.6 or ±0.1%)
T	32 to 700	(0 to 370)	②	(±1.0 or ±0.75%)	②	(±0.5 or ±0.4%)
E [®]	-328 to 32	(-200 to 0)	②	(±1.7 or ±1%)	②	⑤
K [®]	-328 to 32	(-200 to 0)	②	(±2.2 or ±2%)	②	⑤
T [®]	-328 to 32	(-200 to 0)	②	(±1.0 or ±1.5%)	②	⑤
Extension Wires ⑥ ⑦						
EX	32 to 400	(0 to 400)	±3.0	(±1.7)	±1.0	(±1.8)
JX	32 to 400	(0 to 400)	±4.0	(±2.2)	±1.1	(±2.0)
KX or NX	32 to 400	(0 to 400)	±4.0	(±2.2)	±1.1	(±2.0)
TX	32 to 200	(0 to 200)	±1.8	(±1.0)	±0.5	(±0.9)
Compensating Extension Wires ⑧ ⑨						
RX, SX	32 to 400	(0 to 200)	±9.0	(±5.0)	-	-