## INDEPENDENT ELEMENTS

Reg No:- 1997/016570/23

HEATING ELEMENTS, THERMOCOUPLES AND CONTROLLERS

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## IN BUSINESS FOR 19YEARS AND GROWING STRONGER EVERY YEAR

THERMOCOUPLE COLOUR CODE CHART  POSITIVE LEG NEGATIVE LEG			APPROXIMATE WORKING TEMPERATURE RANGE AT MEASURING JUNCTION	BRITISH TO BS 1843	AMERICAN TO ANSI/MC96.1	GERMAN TO DIN 43714	FRENCH TO NF C 42-323	JAPANESE TO JIS C 1610 - 1981
K	NICKLE / CHROMIUM	NICKLE / ALUMINIUM ( MAGNETIC )	0 TO +1000		+	***	+	+
V	COPPER	COPPER / NICKLE		***	COLOUR CODED FOR USE AS A COMPENSATING CABLE FOR TYPE K . THERMOCOUPLES		+	+
T	COPPER	COPPER / NICKLE	-185 TO +300	+	+	+	+	+
J	IRON	COPPER / NICKLE	+20 TO +700	***************************************	+	+	***	
E	NICKLE / CHROMIUM	COPPER / NICKLE	0 TO +800	+	+	***************************************	+	+
N	NICKLE/ CHROMIUM/ SILICON	NICKLE/ SILICON/ MAGNESIUM	0 TO +1100	+	+			
R	PLATINUM / 13% RODIUM	PLATINUM	0 TO +1600	+	+	+	+	+
S	PLATINUM / 10% RODIUM	PLATINUM	0 TO +1550	++	+	+	+	
В	PLATINUM / 30% RODIUM	PLATINUM / 6% RODIUM	+100 TO +1600		+	+		+
U	COPPER	COPPER / LOW GRADE NICKLE		+//	+	+	+	+

A thermocouple is formed when two different metal conductors are joined together. When heat is applied, because of the different metals being used one junction will heat up at a higher temperature than the other. When this happens a current will flow through the circuit. The EMF in the circuit is now proportional to the temperature difference between the junctions.

Please ee our reference chart for the EMF to temperature.