STANDARD SPECIFICATIONS FOR WILCON-PAC BULK MATERIAL AND ELEMENTS

LIMITS OF ERROR FOR THERMOC0UPLES

Selection and Application Data

Thermocouples must be selected to meet the conditions of the application. Length of service, temperature, accuracy required, atmosphere and speed of response are some of the considerations.

The following tables may be helpful in selecting the most suitable thermocouple for your application. Additionally, one of our sales engineers will be happy to assist you in your selection.

Thermo-couple Calibra-tion	Thermocouple Material w/ identifying Characteristics		Color Code (Positive Conductor)	Temperature Range F	Limits of Error	
	Positive	Negative (red)			Standard Grade	Premium Grade
J	Iron (Magnetic)	Constantan	White	0 to +530 +530 to+1400	± 4°F ± ¾%	± 2°F ± ⅜% *
K	Chromel	Alumel (Magnetic)	Yellow	0 to +530 +530 to +2300	± 4°F ± ¾%	± 2°F ± ⅜% *
T	Copper (Copper Color)	Constantan	Blue	-300 to -150 -150 to -75 -75 to +200 +200 to +700	- - - - ± 2% ± 1½% ± ¾%	± 1% ± 1% ± ¾% * ± ⅜% *
E	Chromel	Constantan (Silver Color)	Purple	0 to +600 +600 to +1600	± 3°F ± ¾%	- - - - - - - -
R S	Platinum 13 % Rh Platinum 10% Rh	Platinum Platinum (Softer than Pt. Rh)	Black	0 to +1000 +1000 to +2700 (Intermittent to 3000)	± 5°F ± ½%	

* Where the limits of error for thermocouple wire are given in percent, the percentage applies to the temperature being measured.