

THERMOCOUPLE CALIBRATION								
THERMOCOUPLE CALIBRATION	TEMPERATURE RANGE		LIMITS OF ERROR				CONDUCTOR IDENTIFICATION	
	°F	°C	STANDARD		SPECIAL		POSITIVE (+)	NEGATIVE (-)
			°F	°C	°F	°C		
J IRON-CONSTANTAN	32 TO 530 530 TO 1400	0 TO 277 277 TO 760	+-.4 F. +-.3/4%	+-.2.2 C	+2 F +-.3/8%	+-.1.1 C	MAGNETIC	NONMAGNETIC
K CHROMEL-ALUMEL	32 TO 530 530 TO 2300	0 TO 277 277 TO 1260	+-.4 F. +-.3/4%	+-.2.2 C	+2 F +-.3/8%	+-.1.1 C	NONMAGNETIC	MAGNETIC
T COPPER-CONSTANTAN	-300 TO -75 -150 TO -75 -75 TO 200 200 TO 700	-184 TO -59 -101 TO -59 -59 TO 93 93 TO 371	+-.2% +-.1 1/2% +-.3/4%	+-.83 C	+-.1% +-.1% +-.3/4% +-.3/8%	+-.42 C	COPPER COLOR NONMAGNETIC	NONMAGNETIC
E CHROMEL-CONSTANTAN	32 TO 600 600 TO 1600	0 TO 316 316 TO 871	+-.3 F +-.1/2%	+-.1.7C	+2 1/4 F +-.3/8%	+-.1.2 C	NONMAGNETIC	SILVER COLOR NONMAGNETIC
S,R PT.10% RH-PT PT 13% RH-PT	32 TO 1000 1000 TO 2700	0 TO 538 538 TO 1482	+-.2 1/2 F +-.1/4%	+-.1.4 C +-.25%	+-.1.1F +-.1%	+-.6C +-.1%		SOFTER THAN POSITIVE CONDUCTOR
B PT 30% RH-PT 6% RH	32 TO 1000 1000 TO 3200	0 TO 538 538 TO 1760	+-.2 1/2 F +-.1/4%	+-.1.4 C	- -	- -		SOFTER THAN POSITIVE CONDUCTOR
W TUNG/TUNG 26% RE	32 TO 800 800 TO 4200	0 TO 427 427 TO 2316	+8 F +-.1%	+-.4.4 C	- -	- -	VERY BRITTLE	
W5 TUNG 5%/TUNG 26% RE	32 TO 800 800 TO 4200	0 TO 427 427 TO 2316	+8 F +-.1%	+-.4.4 C	- -	- -		MORE PLIANT THAN POSITIVE CONDUCTOR
W3 TUNG 3%/TUNG 25% RE	32 TO 800 800 TO 4200	0 TO 427 427 TO 2316	+8 F +-.1%	+-.4.4 C	- -	- -		MORE PLIANT THAN POSITIVE CONDUCTOR

SHEATH MATERIAL CHARACTERISTICS			
SHEATH MATERIAL	MELTING POINT F	MAXIMUM OPERATING TEMPERATURE (ATMOSPHERES)	IDEAL OPERATING ENVIRONMENT
304 SS	2560	1650	ORNV
310 SS	2560	2100	ORNV
316 SS	2500	1700	ORNV
321 SS	2550	1600	ORNV
347 SS	2600	1600	ORNV
446 SS	2700	2000	ORNV
CARBON STEEL	2500	1300	ON
INCONEL	2550	2100	ONV
INCONEL X	2620	2200	ONV
INCOLOY	2500	1600	ON
HASTELLOY X	2350	2200	O
HASTELLOY C	2310	1800	O
HASTELLOY B	2375	1400	OR
MONEL	2460	1000	OR
BRASS	1850	650	O
ALUMINUM	1220	700	O
NICKEL	2647	1400	O
TANTALUM	5425	5000	V
TITANIUM	3035	2000	VN

O = OXIDIZING N = NEUTRAL
R = REDUCING V = VACUUM

MTI - INDUSTRIAL TEMPERATURE SENSORS