

THERMOCOUPLE MINERAL MODEL CT-TC



Thermocouple type	Temperature range	Wire materials	Accuracy (special only)
K	-200...1260°C	Chromel (90% Nickel + 10% Chromium)	1.1°C/0.4%
		Alumel (95% Nickel + 2% Manganese + 2% Aluminum + 1% Silicon)	
J	0...760°C	Iron	1.1°C/0.4%
		Constantan (55% Copper + 45% Nickel)	
T	-200...370°C	Copper	0.5°C/0.4%
		Constantan (55% Copper + 45% Nickel)	
N	-270...1300°C	Nicrosil (84.1% Nickel + 14.4% Chromium + 1.4% Silicon + 0.1% Manganese)	1.1°C/0.4%
		Nisil (95.6% Nickel + 4.4% Silicon)	
E	0...900°C	90% Nickel + 10% Chromium	0.25%
		95% Nickel + 2% Aluminum + 2% Manganese + 1% Silicon	
B	870...1700°C	70% Platinum + 30% Rhodium	0.25%
		94% Platinum + 6% Rhodium	
R	0...1480°C	100% Platinum	0.6°C/0.1%
		87% Platinum + 13% Rhodium	
S	0...1480°C	100% Platinum	0.6°C/0.1%
		90% Platinum + 10% Rhodium	

Available tubes and wires

Tube type	Max. temp.	Notes
SS 316	300/600°C	SS OB wire inside
SS 316 mineral	900°C	For TC J
Inconel mineral	1145°C	
Ceramic - Pythagoras	1400°C	
Ceramic - Alsint	1700°C	Higher durability

Cable type	Max. temp.	Notes
PVC	80°C	
SS Overbraided	300/600°C	For dry areas
Teflon	200/250°C	Waterproof and highly durable
Silicon rubber	200°C	Waterproof
Fiberglass	500/1200°C	

Thermocouple order code

CT-TC			
Type			
J	J		
K	K		
T	T		
N	N		
E	E		
R	R		
S	S		
B	B		
Isolation			
Not isolated (standard)	G		
Isolated thermocouple	U		
Sensor Diameter /Length (mm)		Length(mm)	
1	A	##	
1.5	B	##	
2	C	##	
3	E	##	
5/4.8	F	##	
6	G	##	
Cable type			
PVC	P		
SS Overbraided	S		
Teflon	T		
Silicon rubber	I		
No cable, with plug standard/mini	M	S	
Sensor head			
Standard head Epoxy coated Aluminum	K		
Small head Epoxy coated Aluminum	L		
Plastic	M		
EX industrial	N		
No sensor head	X		
Double thermocouple			
Double thermocouple	V		
Single (standard)	X		
Dimensions in mm			
Tube length		##	-
Tube diameter (standard 9.5mm)		##	
Standard 1/2 BSP / required specifications		##	##
for ceramic thermocouples only * Dimensions required			

Common thermocouple schematics

Chart 1: Industrial thermocouple with an either ceramic or SS 316 tube



Chart 2: A tube thermocouple with a cable

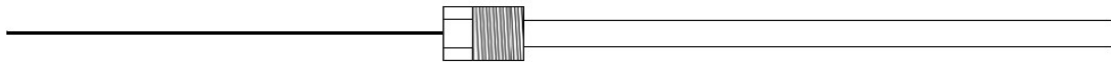


Chart 2: Thermocouple wire with a male connection

