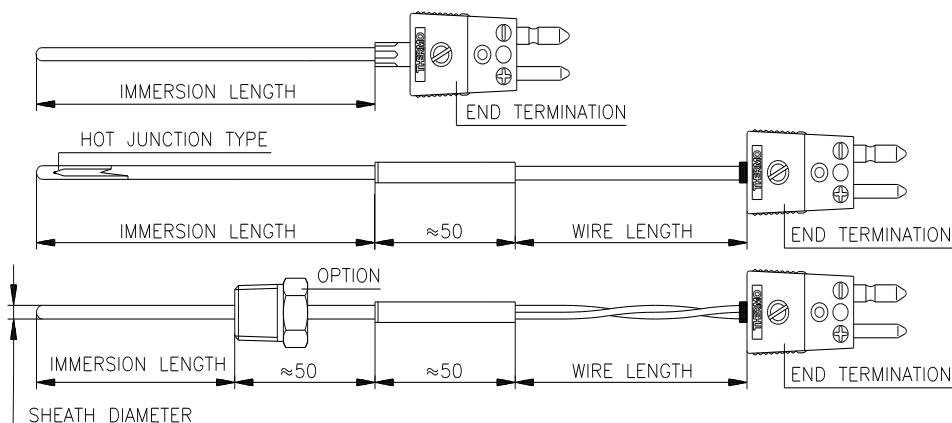


MINIATURE MI-CABLE THERMOCOUPLES

T Miniature Thermocouple (Mineral Insulated Cable)					
Code	Calibration	Code	Calibration		
J	Iron - Constantan	N	Nicrosil - Nilil		
K	Chromel - Alumel	S	Pt - Pt/10%Rh		
T	Copper - Constantan	R	Pt - Pt/13%Rh		
E	Chromel - Constantan				
<i>(EMF Values as per IEC.584-1 unless otherwise noted.)</i>					
Code	Class	Code	Class		
1	Class 1, IEC colour coded	4	Class 1, ANSI colour coded		
2	Class 2, IEC colour coded	5	Class 2, ANSI colour coded		
<i>(Tolerances as per IEC.584-2, S & R only available in class 2 and ISA colour coding)</i>					
Code	Sheath Diameter	Code	Sheath Diameter	Code	Sheath Diameter
B	0,25 mm	F	1,6 mm (1/16")	L	4,5 mm
C	0,5 mm (1/50")	G	2,0 mm	M	4,8 mm (3/16")
D	1,0 mm (1/25")	J	3,0 mm	N	6,0 mm
E	1,5 mm	K	3,2 mm (1/8")	P	6,4 mm (1/4")
Code	Hot Junction	Code	Hot Junction		
1	Single insulated	5	Duplex individually insulated		
2	Single grounded	6	Duplex common insulated		
3	Single insulated reduced tip	7	Duplex grounded		
4	Single grounded reduced tip	8	Duplex individually insulated reduced tip		
		9	Duplex grounded reduced tip		
<i>(Reduced tip length will be 25 mm)</i>					
Code	Sheath Material	Available Calibrations			
A	SS304	J, K, T			
B	SS316	J, K, T, E			
C	SS310	K			
D	SS321	J			
H	Inconel 600	K, S*, R*, N	* In combination with thermocouple type S and R, max. recommended service temperature 850°C due to drift in calibration which occurs at high temperature		
K	Nicrobel C	K, N			
N	NiCroSil	N			
Immersion Length Specify immersion length in mm. Always use 4 characters including leading zero's. 10 meters and above use "m" as 3rd digit. 100 meters and above use "m" as 4th digit.					
Code	Wire Type	Available Cal.	Code	Wire Type	Available Cal.
A	P/TW	J,K,T	F	HF/D	J,K,T,E
B	P/PTW	K	H	Flexible Armour + TEX/TW	J,K,T,S,R,E
C	P/CuPTW	J,K,T	J	G/GS	J,K,T
D	TEX/TW	J,K,T,S,R,E	K	G/G	J,K,T,E
E	TEX/CuTEXTW	J,K,T,S,R,E,N	X	No lead wire	
Wire Length Specify wire length in mm. Always use 4 characters including leading zero's. 10 meters and above use "m" as 3rd digit. 100 meters and above use "m" as 4th digit. <i>(Enter '0000' when no wire is selected; e.g. 300mm=0300 and 11.600mm=11m6)</i>					
Code	End Termination (Connectors)	Code	End Termination (Connectors)		
A	Bare ends	M	High Temp. miniature male		
B	Standard male	N	High Temp. miniature female		
C	Standard female	P	Lemo size 0 female		
D	High Temp. standard male	Q	Lemo size 1 female		
E	High Temp. standard female	R	Lemo size 2 female		
F	Ceramic male	S	Lemo size 0 male		
G	Ceramic female	T	Lemo size 1 Male		
H	Phenolic standard male	U	Lemo size 2 male		
J	Phenolic standard female	V	Junction Box connector ¹		
K	Miniature male				
L	Miniature female				
<i>(¹ For flexible armour only)</i>					
Code	Options				
X	No option				
A	Wire clamp bracket				
B	Bracket with fitting				
C	Moisture proof jacket ²				
D	Spring on transition				
E	Pot seal M 8 x 1 + locknuts ³				
<i>(² Only for standard & miniatur, ³ only for Ø 1,5 to 3,0 mm sheath dia.)</i>					
Code	Options				
X	No option				
F	Fixed plug 1/8"NPT (SS316)				
G	Fixed plug 1/4"NPT (SS316)				
H	Fixed plug 1/2"NPT (SS316)				
J	Fixed plug 1/8"BSPP (SS316)				
L	Fixed plug 1/2"BSPP (SS316)				
R	Ceramo out of one batch (at extra cost)				
BLACK CODES ARE STANDARD COMBINATIONS					
T	Your ordering code				

T MINIATURE MI-CABLE THERMOCOUPLES

mineral insulated cable



Hot junction

1		4 ⁴		7	
2		5		8 ⁴	
3 ⁴		6		9 ⁴	

⁴ reductions: 1 → 0,5 - 1,5/1,6 → 1,0 - 2,0 → 1,0 - 3,0/3,2 → 1,6 - 4,8 → 3,2 - 6/6,4 → 3,2)

Wire type:

A	P/TW : PVC insulated single	F	HF/D : Kapton insulated
B	P/PTW : PVC insulated	G	Si/SiTW : Silicon insulated
C	P/CuPTW : PVC insulated + copper braided	H	Flex. armour + TEX/TW: Flex. armour over Teflon insulated
D	TEX/TW : Teflon insulated	J	G/G : Fibreglass insulated
E	TEX/CuTEXTW : Teflon insulated + copper braided	K	G/GS : Fibreglass ins. + SS overall braiding

End termination

A		K		V ⁵	
B		M			
D		L			
C		N			
E		P			
		U			

⁵ For flexible armour only)

Options

A		C		E	
B		6		7	
		D			

⁶ Only for standard & miniature, ⁷ Only for Ø. 1,5 to 3,0 sheath dia.)

Because of the large number of possible combinations, some constructions will be subject to availability of materials and technical feasibility. Please contact your nearest THERMO ELECTRIC office for confirmation. Other calibrations e.g. Tungsten/Rhenium, diameters e.g. 8,0 mm, sheath materials e.g. Tantalum and special connectors (weather proof), sketch preferred.