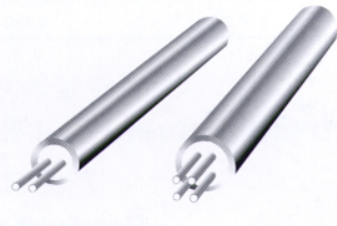
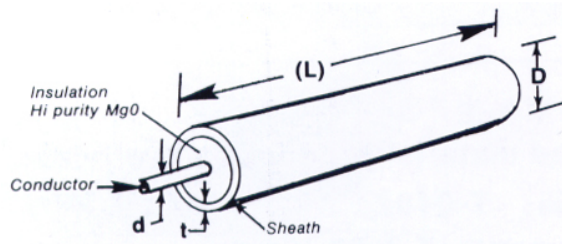


Armoured thermocouple Cable

Armoured thermocouple cable consists of the thermocouple wire as conductor, Hi purity magnesium oxide as insulation fillings and outer metal sheath. The metal sheath provides thermocouple with armor which has good mechanical protection even at small diameters. It is inexpensive, reliable, with the features of withstanding vibration, high temperatures and pressures, strong resistance against corrosive environments and can be widely used for high accuracy temperature measurement in industry.



Armoured thermocouple material, dimension & specification



Structure of thermocouple cable

Picture of thermocouple cable (two-core, four-core)

Sheath outer diameter(D) (mm)	Sheath wall thickness(t) (mm)	Diameter of conducton(d) (mm)	Standard coil length (m)	Available sheath material			
				K, N type	E, J, T types	S, R types	B type
0.25±0.025	0.030	0.043		SS316 SS310 INCONEL600	SS316 SS310 INCONEL600	INCONEL600	INCONEL600
0.5±0.025	0.060	0.085					
1.0±0.025	0.120	0.170	About 200				
1.5±0.025	0.180	0.255	About 200				
2.0±0.025	0.240	0.340					
3.0±0.030	0.360	0.510	About 150				
4.5±0.045	0.540	0.765	About 100				
6.0±0.060	0.720	1.020	About 40				
8.0±0.080	0.960	1.360	About 25				

Allowable error

Type name	Graduation mark	Allowable error grade					
		I		II		III	
		Error value $\pm$	Temperature range °C	Error value $\pm$	Temperature range °C	Error value $\pm$	Temperature range °C
Ni Cr-Ni Si	K	1.5°C or 0.4%t	-40-1000	2.5°C or 0.75%t	-40-1000	2.5°C or 0.75%t	-200-40
Ni Cr Si-Ni Si	N		-40-1100		-40-1100		-200-40
Ni Cr-Konstantan	E		-40-800		-40-800		-200-40
Fe-Konstantan	J		-40-750		-40-750		---
Cu-Konstantan	T	0.5°C or 0.4%t	-40-350	1°C or 0.75%t	-40-350	1°C or 0.75%t	-200-40
Pt Rh 10-Pt	S	1°C or $1+(t-1100) \times 0.003$	0-1600	1.5°C or 0.25%t	0-1600	---	---
Pt Rh 13-Pt	R		0-1600		0-1600		
Pt Rh 30-Pt Rh 6	B	---	---		600-1700	4°C or 1.5%t	600-1700