

MINERAL INSULATED HEATER CABLE

Tempsens Mineral Insulated Heating Cable is an electrical metal sheath heating cable with high economic efficiency (specific heating capacity up to 300 W/m). It is the most rugged and durable type of heating cable. Mineral Insulated Heating Cable is applicable for operation in high temperatures and explosion-proof areas. It can have a very high watt output and is used for process heating applications at temperatures where plastics insulated heating cables are not suitable. When properly installed, it has a very high lifetime.

Mineral Insulated Heaters are applicable in the Machinery, power generating industry, chemical and petrochemical industry as well as research and development.

Heating Element	Sheath Material	Operating Temperature up to
NiCr Alloy	Inconel 600 (2.4816) and SS316L (1.4404)	800°C
CuNi Alloy	SS321/AISI 321 (1.4541)	500°C

Technical Data

Conductors NiCr Alloy, applicable for temperature up to 800°C				
Outer Diameter (mm)	Resistance at 20°C (Ω/m)	Conductor Diameter (mm)	Wall Thickness(mm)	Maximum Voltage Rating
3.2	10	0.38	≥ 0.32	800 V
3.2	6.3	0.48	≥ 0.32	
3.2	4	0.61	≥ 0.32	
3.6	2.5	0.77	≥ 0.36	
3.8	1.6	0.96	≥ 0.38	
4.1	1	1.21	≥ 0.41	
4.5	0.63	1.52	≥ 0.45	
5	0.4	1.91	≥ 0.50	
5.6	0.25	2.42	≥ 0.56	
6.5	0.16	3.03	≥ 0.65	
Conductors CuNi, applicable for temperature up to 500°C				
6.5	0.16	3.03	≥ 0.65	up to 300V /500V
6.5	0.16	3.03	≥ 0.65	
6.5	0.16	3.03	≥ 0.65	
6.5	0.16	3.03	≥ 0.65	
6.5	0.16	3.03	≥ 0.65	
6.5	0.16	3.03	≥ 0.65	

Tolerance for the resistance per Mtr: ± 10%

Tolerance for the outer diameter: according to DIN EN 61515

Example : 45-NiCr316 Heater MI Cable : 4.5 mm OD, 1 Core, NiCrAlloy Conductor, SS316L Sheath