

# MINERAL INSULATED POWER CABLE

Mineral Insulated Copper cable belongs to electric cable class.

**Outer Sheath :** Copper Sheath with melting point of 1083°C

**Insulation :** Magnesium oxide insulator, hardly compressed, with melting point of 2800°C.

**Conductor:** Annealed conductor of 99.9% of purity electrolytic copper wire, with melting point of 1083°C

**Applicable Standard : IEC/EN 60702 Part 1**

- Maximum Continuous Temperature of Conductor is 250°C.
- Heavy Duty Grade Cable : Voltage Grade 750V

Details	Standard Follow	Description
MI Power Cable	IEC/EN 60702 Part 1	Mineral Insulated Copper sheathed Cable with Copper Conductor
Copper Conductor	IEC 60228 for Class 1	Copper (>99.9 %)
Insulation	IEC/EN 60702 Part 1	MgO (>99.4 % Pure)
Metallic Sheath	ASTM B75 Specification	Seamless Copper Tube (99.9%)
Insulation Resistance	IEC/EN 60702 Part 1	>1000 MΩ for above 100 Mtr coil
<b>TESTING</b>		
A) Routine Test	IEC/EN 60702 Part 1	Conductor Resistance, Insulation Resistance, Sheath And Insulation Integrity, Diameter & ovality
B) Type Test	IEC/EN 60702 Part 1	Voltage Test , Resistance of Copper Sheath, Insulation Thickness, Sheath Thickness, Bending test, Flattening test, Fire Resistance,

## How to Order - MI Power Cable

Type of Cable	No. of Core X Core Size (MM <sup>2</sup> )	Nominal Outer Copper Sheath Diameter (MM)	Mean Copper Sheath thickness (MM)	Nominal Core diameter (MM)	Maximum Core resistance (Ω/Km)	Nominal Insulation thickness (MM)	Maximum Resistance of Copper Sheath (Ω/Km)
<b>Suitable for (450/750 v); Single Core</b>							
1 C 1.5	1 X 1.5	4.9	0.41	1.38	12.1	1.3	4.13
1 C 2.5	1 X 2.5	5.3	0.42	1.78	7.41	1.3	3.71
1 C 4	1 X 4	5.9	0.45	2.26	4.61	1.3	3.09
1 C 6	1 X 6	6.4	0.48	2.76	3.08	1.3	2.67
<b>Suitable for (450/750 v); Multi Core</b>							
2 C 1.5	2 X 1.5	7.9	0.54	1.38	12.1	1.3	1.9
2 C 2.5	2 X 2.5	8.7	0.57	1.78	7.41	1.3	1.63
2 C 4	2 X 4	9.8	0.61	2.26	4.61	1.3	1.35
2 C 6	2 X 6	10.9	0.65	2.76	3.08	1.3	1.13
3 C 1.5	3 X 1.5	8.3	0.56	1.38	12.1	1.3	1.75
3 C 2.5	3 X 2.5	9.3	0.59	1.78	7.41	1.3	1.47
3 C 4	3 X 4	10.4	0.63	2.26	4.61	1.3	1.23

## Mineral Insulated Copper Cables are Useful:

- Doesn't deteriorate with age.
- Its high current carrying capacity.
- Over come the overload and short circuit.
- Resist to flame.
- Working under fire condition also.
- Such places where it is not allowed to break the walls to embed the conduit this is the ideal solution.