SUPER ENAMELLED ALUMINIUM WINDING WIRES

The demand of aluminum magnet wires in many industrial applications has sky rocketed due to unprecedented increase in copper rates. To cater this demand, we proudly declare the addition of super enameled aluminum magnet wires in the product armory. These are manufactured as per Indian as well international standards and as per the specifications given by the customers. The product is available in different sizes, types and grades of coverings to cater to specific needs for special fields of applications. The latest technology is adopted for manufacturing to offer high quality products.

APPLICATIONS

Aluminum is an excellent electrical conductor next to copper. The super enameled aluminum wire can be used to replace the copper enameled wires with proper design modifications. Mainly it is used in electronic circuits, television degaussing coils and so on for many more applications including washing machine motors, fans and AC compressors. These wires have same properties for the enamel film but differ for the conductor properties when compared with enameled copper wires. Our products have very good elongation and smooth surface.

SIZE RANGE, TYPES AND SPECIFICATIONS

- Wire Dia Sizes from 4.0 to 0.25 mm (8 to 33 SWG), Grade – 1, 2, and 3
- Modified Polyesters, Class 130, 155. As per IS 13730 part 9 / IEC 60317 part 9
- Hermetic Grade, Class 180. As per IS 13730 part 15 / IEC 60317 part 15
- Dual Coated, Class 200. As per IS 13730 part 25 / IEC 60317 part 25 and NEMA MW 35A

SIZE CALCULATION

An indicative calculation for getting aluminum magnet wire size to replace copper magnet wire can be as below.
Resistivity ($\rho$) of Cu is 0.01709 $\Omega$mm$^2$/m & that of aluminum is 0.02789 $\Omega$mm$^2$/m.

By using formula of resistance $R = \rho L / A$

D (diameter) for aluminum = 1.277 X D of Copper