

## Submersible Winding Wire

*High purity electrolytic grade bright annealed flexible bunched bare copper conductor*

These are Copper wires covered by tripe tapes used solely for the purpose of winding. The wire produces alternating flux with the help of primary electromagnetic induction. Our submersible winding wire's amplitude is completely based on the voltage and the number of winding in each turn while using our wire.

Certified by Indian Standard institute our winding wire assures the minimum leakage possible during usage and a quality that our customers deserve.

We offer customization of Submersible winding wire as per our customer requirement on ID and OD confirming to IS:8783 (Part-4/Sec-3) - 1995.



# Technical Data Table

| Properties of Wire                    | Unit | Test Condition       | Value Required as per is | Value of Vipul Wires |
|---------------------------------------|------|----------------------|--------------------------|----------------------|
| Shrinkage Test                        |      | 150°C for 15 minutes | Max. 4                   | 2                    |
| After immersion in Water for 12 hours | KV   | 3 KV for 1 min       | Passes                   | With Stood           |
| hot deformation Depth of indentation  |      | 115°C for 6 Hour     | Max. 25                  | 22                   |
| Heat Shock Test                       |      | 150°C for 1 Hour     | No. Crack                | No. sign of Crack    |
| Insulation Test                       | M    | After 24 Hours       | 2000 M                   | Pass                 |

## Copper conductor:

- (a) High Conductivity Oxygen free Electrolytic Annealed Copper
- (b) Elongatic - of Copper wire (To Brak 30% min.- 1.0 mm wire)

## BOPP Film ( Dielectric Material) ::

- (a) Dielectric volume Resistivity

At 27°C -  $4 \times 10^{16}$  ohm-cm

At 85°C -  $4 \times 10^{15}$  ohm-cm

- (b) Tensile Strength

N/mm<sup>2</sup>-----90 ( Req. Min.50)

## Vipul Brand Insulated Copper Winding Wire for Submersible Pump Motors

| Dimension in (mm)       |                       |                      | Conductor Resistance (At 20°C, Ohm/km) |         |
|-------------------------|-----------------------|----------------------|--|---------|
| Conductor Diameter (ID) | Overall Diameter (OD) | Insulation Thickness | Normal                                 | Max.    |
| 0.40                    | 0.80                  | 0.20                 | 137.20                                 | 141.190 |
| 0.51                    | 0.91                  | 0.20                 | 87.81                                  | 90.370  |
| 0.61                    | 1.01                  | 0.20                 | 60.20                                  | 62.2    |
| 0.71                    | 1.11                  | 0.20                 | 43.55                                  | 44.810  |
| 0.80                    | 1.20                  | 0.20                 | 34.30                                  | 35.30   |
| 0.90                    | 1.30                  | 0.20                 | 27.10                                  | 27.89   |
| 1.00                    | 1.40                  | 0.20                 | 21.95                                  | 22.95   |
| 1.12                    | 1.50                  | 0.20                 | 17.50                                  | 18.00   |
| 1.20                    | 1.65                  | 0.225                | 15.26                                  | 15.66   |
| 1.32                    | 1.75                  | 0.225                | 12.60                                  | 12.96   |
| 1.42                    | 1.95                  | 0.225                | 11.20                                  | 11.530  |
| 1.50                    | 2.00                  | 0.25                 | 9.757                                  | 10.050  |
| 1.60                    | 2.10                  | 0.25                 | 8.575                                  | 8.830   |
| 1.70                    | 2.20                  | 0.25                 | 7.596                                  | 7.820   |
| 1.80                    | 2.30                  | 0.25                 | 6.775                                  | 6.978   |
| 1.90                    | 2.40                  | 0.25                 | 6.081                                  | 6.264   |
| 2.00                    | 2.50                  | 0.25                 | 5.488                                  | 5.652   |
| 2.12                    | 2.70                  | 0.30                 | 4.884                                  | 5.025   |
| 2.24                    | 2.84                  | 0.30                 | 4.375                                  | 4.500   |
| 2.36                    | 2.96                  | 0.30                 | 3.941                                  | 4.058   |
| 2.50                    | 3.20                  | 0.30                 | 3.512                                  | 3.614   |