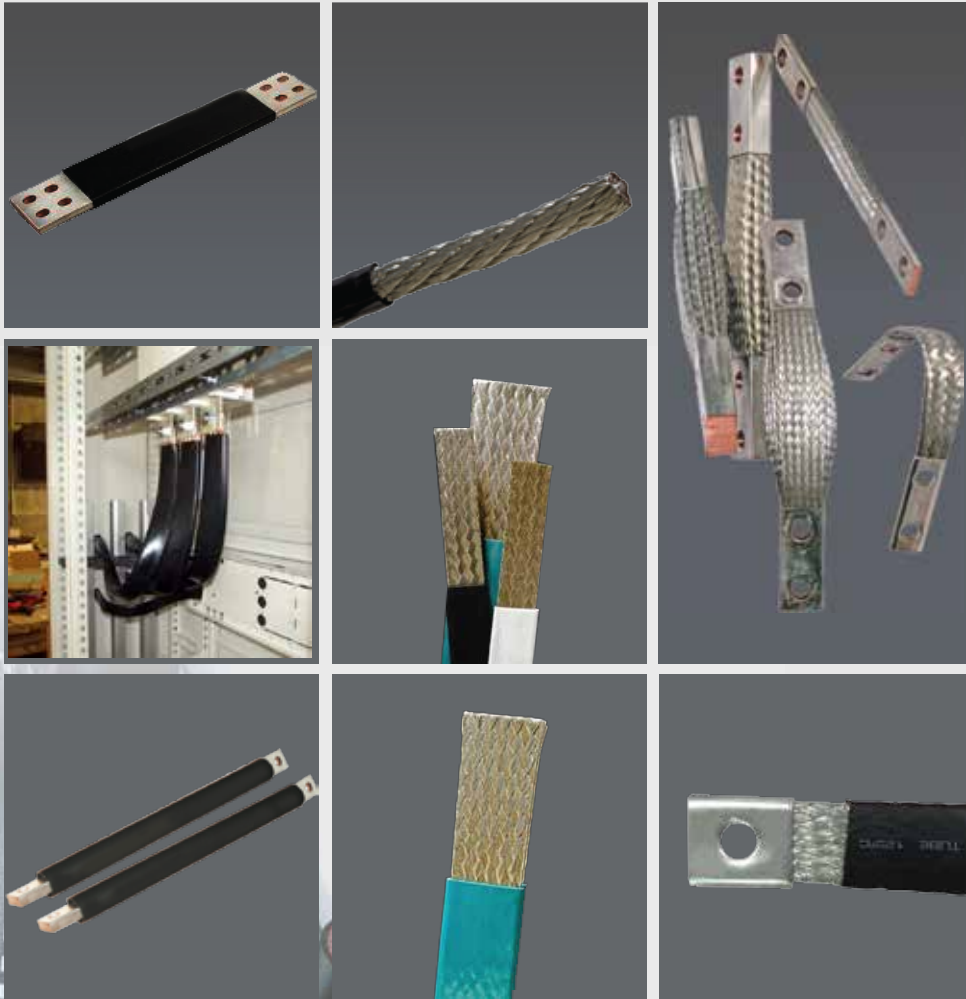




Conductivity > 100

Elcab Conductors



**Insulated Flat
Braided Flexible
Conductors for
Efficient Current
Transmission**

Insulated Copper Braided Flexibles.

Elcab has tested and developed braided insulated flexible copper conductors that make use of copper more efficiently as compared to conventional round cables.

Flat braided conductors have always been better for carrying both RF and DC current loads due to various unparalleled features and benefits.

We at Elcab, being in the manufacturing of both insulated cables and tinned copper braids under the same roof have combined both our product ranges to manufacture state of the art insulated braided flexible conductors for low voltage to medium voltage applications.

These come with pre punched palms that are electrically superior and commercially more economical, thus providing longer life and superior quality at reduced costs.

Elcab has a complete range of in-house testing instruments to develop, test and provide it's customers with superior quality products at attractive prices, thus enabling it's customers to reduce costs and enhance the overall quality of their product.

Features of flat braided Conductors:

- Better skinning effect resulting in more efficient use of copper.
- Lower Impedance along with lower inductance.
- Higher current carrying capacity than equivalent round cables.
- Provided with pre-punched palms that provide better electrical terminations.
- Allows reduction in space and weight of electrical unit.
- Better flexibility than round PVC cables.
- The conductor used is annealed EC grade tinned copper of strand thickness 0.19mm.
- For the same CSA, flat braids have a much lower conductor resistance than round conductors.
- Better heat dissipation.
- Ideal for usage in vibratory environments.

Features of Insulation

Elcab uses imported UL marked WOER heat shrink tubes that have the following characteristics:

- Surpasses IS 694, UL 758 and ISO 6722 standards.
- Temperature rating: -45° to 125° C.
- WOER HST are thermoset compounds.
- Flame Retardant.
- Resistant to UV, Ozone, Acid Alkalis and various chemicals unlike regular PVC cables.
- Resistant to abrasion.
- Tensile strength: > 13.79MPa (ASTM D2671).
- Elongation: > 300% (ASTM D2671).
- Heat Shock as per UL 224 at 250° C x 4 hours: No cracking or dripping observed.
- Dielectric strength: $\geq 15\text{KV/mm}$ (IEC 243)
- RoHS compliant.
- Copper compatibility as per UL 224: Passes.
- Volume Resistivity: $\geq 1 \times 10^{14} \Omega\text{.cm}$ (IEC 93).
- Heat Shrink Sleeves rated upto 40KV can also be provided.



A view of the tin plated conductor.



High temperature bend test at 150°C



Volume resistivity test at 70°C



High flexibility compared to cables.



A view of the finished ready to use product.



Pressure test at 125°C



HV withstand test at 2KV post pressure test.



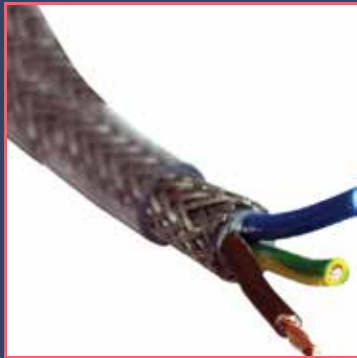
Pre punched palms for electrically stronger and robust terminations

Specifications, Features and Ampacity

| CSA in mm ² | Cond. Resistance in mili Ohm/m at 20° C | Conductor resistance as per IEC60228/IS8130 max. | Ampacity at 30° C ambient room temperature. | Ampacity at 60° C ambient room temperature. | Ampacity at 90° C ambient room temperature. |
|------------------------|---|---|---|---|---|
| 10 | 1.755 | 1.95 | 105 | 87 | 70 |
| 16 | 1.135 | 1.24 | 145 | 120 | 95 |
| 25 | 0.713 | 0.795 | 195 | 155 | 116 |
| 35 | 0.484 | 0.565 | 245 | 215 | 175 |
| 50 | 0.318 | 0.393 | 325 | 274 | 213 |
| 70 | 0.243 | 0.277 | 385 | 330 | 275 |
| 100 | 0.159 | 0.201 | 460 | 403 | 340 |
| 120 | 0.136 | 0.164 | 540 | 477 | 405 |
| 150 | 0.107 | 0.132 | 640 | 560 | 475 |

Rated voltage: 1.1 KV (IS 694) 750V_o (UL 758)
 Max ambient room temperature: -45 to 125 °C.
 Insulation: Halogen free WOER Heat shrink sleeve.
 Resistant to UV, Ozone, Acid, Alkalis and Various Chemicals.
 Resistant to abrasion.
 Dielectric Strength: $\geq 15\text{KV/mm}$ (IEC 243).
 Volume Resistivity: $\geq 1 \times 10^{14} \Omega\cdot\text{cm}$ (IEC 93).
 Made using 99.97% pure copper.
 Flame retardant.
 RoHS compliant.
 Electrically stronger termination due to pre punched lugs.
 Longer service life.
 Heat Shrink Sleeves rated upto 40KV can also be provided.

Other Products Manufactured By Us



PVC Shielded Cable



Flat & Round Cu Braids



-40 to 125°C Power Cable



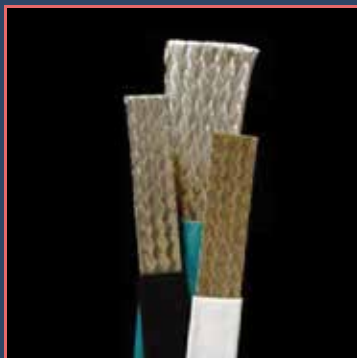
Welding Torch Cable



Shielded Power/Battery Cable



Encoder Cable



Insulated Flexible Braids



Low Capacitance Cables



Highly Flexible Battery Cables



A-103 & 94, H Block, MIDC, Pimpri, Pune- 411018



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