

POWER & CONTROL CABLES

Technocab Cables offers a wide range of LT PVC insulated Power and Control Cables with Aluminium Conductor as well as Copper Conductors. The insulation of normal PVC or HR-PVC can be offered. Special purpose FRLS compound for inner as well as Outer sheath can be offered on request. Following are the standards constructional features of PVC insulated Heavy Duty Cables as per IS:1554[Part-I]1988 with latest amendments.

CONDUCTOR

The conductor is made of electrolytic grade high conductivity annealed copper or aluminium. Generally, all power cables have aluminium as the conductor materials while control cables have copper. However, Power cables with copper conductor can be offered on request.

INSULATION

The insulation is suitably compounded PVC applied to the conductors by the extrusion process. For normal application PVC insulation Type - A and for HR-PVC insulation Type - C as per IS:5831/1984 is provided.

CORE IDENTIFICATION

Different cores in a cable are identified by colors. Following color scheme is followed: -

- | | | |
|-----------------|---|---|
| a] Single Core | : | Red, Yellow, Blue, Black or as specified |
| b] 2 Core | : | Red and Black |
| c] 3 Core | : | Red, Yellow and Blue |
| d] 4 Core | : | Red, Yellow, Blue and Black |
| e] 5 Core | : | Red, Yellow, Blue, Black and Gray |
| f] Above 5 Core | : | 2 adjacent cores [Counting core and direction core] in each layer are colored Blue and Yellow respectively, and the remaining cores are Gray. |

In 3.5 Core cables, the main cores are Red, Yellow and Blue and reduced core is Black.

Note : Control cables with core identification with numbered also can be provided.

LAYING UP

All multi-cores Cables are laid-up as per the color scheme indicated above with thermoplastic fillers in the interstices wherever applicable to make the cable circular.

INNER SHEATH

The laid-up cores are surrounded by an inner sheath of any of the following:-

- Extruded PVC
- Wrapping of Plastic Tapes.

Single core cables usually do not have any Inner Sheath. However, the same can be provided as an extra feature.

ARMOURING

Depending upon the application, these cables can be armoured or unarmoured. When armouring is desired for single core cables for use in a.c. system, the cable should be armoured with non-magnetic materials. If the single core cables are to use in d.c system, the cable can be armoured with galvanized Steel Wire/Strip.

The armouring is applied over the core insulation in case of single core cables and over the inner sheath in case of multi-core cables. Where the calculated nominal diameter over the insulation/inner sheath as the case may be, is not more than 13 mm, the armour consists of galvanised round steel wire. In other case, it can be of either galvanised round wire or steel strip. Steel wires and strip for armopuring conform to IS:3975.

OUTER SHEATH

The outer sheath is of suitable grade of PVC compound applied by extrusion method. The color of the outer sheath is generally Black. Outer sheath in a color than Black can be provided for special application.