

## SEMI CONDUCTIVE BLACK TUBES

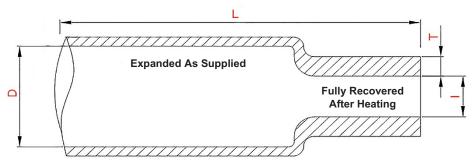
ACBT

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KACAB Heat Shrinkable Semi Conductive Tubes (ACBT) are used to reconstruct the electrical cable by providing insulation in medium voltage as integral part of cable joint along with insulating tubes in complementary combination rated up to 36kV and to rebuild the semi conductive layer on power cables.

These tubes are made from thermally stabilized, cross linked, semi conductive polymeric material and have a nominal shrink ratio of 3:1 and an unlimited shelf life when stored at normal warehouse temperatures.





\*Drawing depicts typical dimensions (Dimensions are all in mm)

- D Internal Diameter
- I Maximum Internal Diameter
- L Length as per requirement
- T Wall Thickness
- E As Supplied
- S After Free Recovery

## **PRODUCT DIMENSIONS - RCBT SERIES**

|              | D (MM) |     | T (mm) |
|--------------|--------|-----|--------|
| PART NO.     | E      | S   | S      |
|              | Min    | Max | ± 0.2  |
| ACBT 35/12*  | 35     | 12  | 2.80   |
| ACBT 45/15*  | 45     | 15  | 2.80   |
| ACBT 80/22+  | 80     | 22  | 3.00   |
| ACBT 110/35+ | 110    | 35  | 3.50   |

- + Available in discrete lengths only
- \* Available in 25 meter spools or discrete lengths

Custom sizes are available on request with minimum volume requirements

## **MATERIAL SPECIFICATIONS**

| CHARACTERISTIC   | VALUE                                | TEST METHOD         |  |  |
|--|--------------------------------------|---------------------|--|--|
| Physical Properties  |                                      |                     |  |  |
| Specific Gravity   | 1.19 ± 0.2 g/cm3                     | ASTMD - 1505        |  |  |
| Water Absorption   | 0.5% (max)                           | ASTM D - 570        |  |  |
| Tensile Strength   | ≥14 N/sqmm (min)                     | ASTM D - 412/ISO 37 |  |  |
| Ultimate Elongation  | 500% (min)                           | ASTM D - 412/ISO 37 |  |  |
| Hardness   | 45 ± 3 Shore D                       | ASTM D - 2240       |  |  |
| Longitudinal Change  | ±10%                                 | ESI 09 - 13         |  |  |
| Shrink Ratio   | 3 : 1 (Min)                          | TP / QA / 61        |  |  |
| Torching   | No Split                             | TP / QA / 7         |  |  |
| Thermal Tests  |                                      |                     |  |  |
| Shrink Temperature   | 120°C                                |                     |  |  |
| Heat shock (30 min 200°C)  | No cracking/No flow                  | ESI 09-13           |  |  |
| Heat Ageing (500 hrs 120°C)<br>Tensile Strength<br>Ultimate Elongation   | 12 N/mm2 (min)<br>400% (min)         | ASTM D-412/ISO-37   |  |  |
| Low Temp. Flexibility(- 40°C)  | No cracking                          | ASTM D-2671         |  |  |
| Electrical Properties  |                                      |                     |  |  |
| Volume Resistivity   | 1x103 Ohm-cm(max)                    | ASTM D - 257/IEC 93 |  |  |
| Chemical Properties  |                                      |                     |  |  |
| Fungus Resistance  | 1 (max)                              | ASTM G - 21         |  |  |
| Chemical resistance immersion<br>in following liquids NaOH (40%),<br>H2SO4 (3%), Toluene acetone<br>for 24 hrs at room temperature | Good<br>(no change in<br>appearance) | ISO 175             |  |  |

We certify that the values provided are as accurate as possible. Use of these values, however, remains the sole responsibility of the customer and cannot in any way substitute for testing the product under real conditions of use. The user must assess wether this product is suitable for a particular use. KACAB shall not be held responsible for any loss or anomaly resulting from the correct or incorrect use of this product.