

Semi Conductive Black Tubes - (Used in composition with insulating tubes in nesting form) - RCBT (Electrical Heat Shrink Tube)

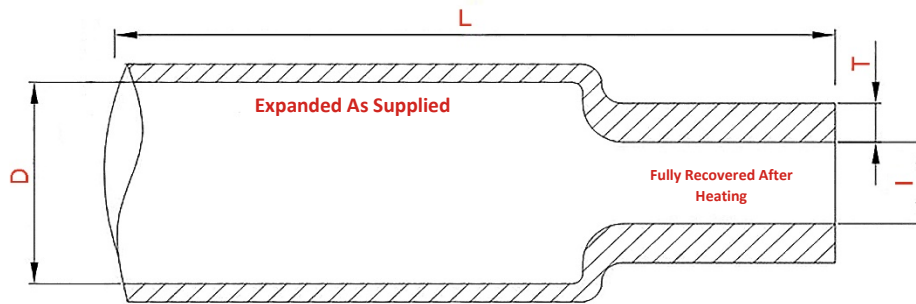


REPL International Ltd UK/Hi-Power Correlation

RCBT

REPL Heat Shrinkable Semi-Conductive Tubes (RCBT) 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 | L – Maximum Internal Diameter | L – Length as per requirement | T – Wall Thickness | E – As Supplied | S – After Free Recovery

PRODUCT DIMENSIONS – RCBT Series

CODE	D (mm)		T (mm)
	E	S	S
	Min	Max	± 0.2
RCBT 35/12 *	35	12	2.80
RCBT 45/15 *	45	15	2.80
RCBT 80/22 +	80	22	3.00
RCBT 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/cm ³	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	IEC - 216
Heat shock (30 min 200° C)	No cracking / No flow	ESI 09-13
Heat Ageing (500 hrs 120° C)- Tensile Strength	12 N/mm ² (min)	ASTM D-412 / ISO-37
Ultimate Elongation	400% (min)	
Low Temp. Flexibility (- 40° C)	No cracking	ASTM D-2671
Electrical Properties		
Volume Resistivity	1x10 ³ Ohm-cm (max)	ASTM D – 257 / IEC 93
Chemical Properties		
Fungus Resistance	1 (max)	ASTM G - 21
Chemical resistance immersion in following liquids NaOH (40%), H ₂ SO ₄ (3%), Toluene acetone for 24 hrs at room temperature	Good (no change in appearance)	ISO 175

REPL reserve the right to update the information contained in this document at any time without notice. It is the users responsibility to ensure it is suitable for the intended application. Any implied warranty relating to fitness for a particular purpose are explicitly excluded unless agreed in writing by REPL.

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RCBT 18/01

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