



Energy Division

ZBIT
Raychem Low Fire Hazard
busbar insulation tubing
Voltage class 3.6 kV
Size Ø 25-120 mm

 **Tyco Electronics**
Our commitment. Your advantage.

ZBIT

Product description

ZBIT is a halogen-free, black, medium wall, heat-shrinkable tubing which insulates busbars and other equipment to the same fire safety standards as modern Low Fire Hazard specified cables. The ZBIT range of busbar insulation tubings uses the latest Low Fire Hazard zerohalogen polymer technology.

LSF performance

This provides ZBIT with exceptionally high flame retardancy and Low Smoke and Fume performance. This significantly reduces potential dangers to people from toxic smoke and reduced visibility. Equipment is also protected from corrosive fumes. Low Smoke and Fume and Low Fire Hazard systems are increasingly specified for places such as railways, buildings, power plants, ships, oil and gas production installations and chemical plants. ZBIT tubing can be easily installed using an oven, gas torch or hot air.

Applications

ZBIT is ideal for enclosed and exposed busbars and connections in substations, switchgear, motors and other electrical equipment. All sizes of ZBIT are suitable for aluminium or copper busbars of rectangular or round cross sections.

Features/benefits

- Zero-halogen material has low toxicity index and acid gas generation
- Low Smoke and Fume formulation improves visibility in emergencies and reduces acid gas
- High flame retardance helps fire containment
- Continuous operating temperature up to 105°C
- Radiation crosslinked polymer technology gives good solvent resistance
- Good thermal emissivity and contact with busbars means no derating is required
- Extremely high split resistance and excellent flexibility
- Can be stored indefinitely at temperatures up to 50°C without loss of performance

All of the above information, including drawings, illustrations and graphic designs, reflects our present understanding and is to the best of our knowledge and belief correct and reliable. Users, however, should independently evaluate the suitability of each product for the desired application. Under no circumstances does this constitute an assurance of any particular quality or performance. Such an assurance is only provided in the context of our product specifications or explicit contractual arrangements. Our liability for these products is set forth in our standard terms and conditions of sale. Raychem, TE Logo and Tyco Electronics are trademarks.

Energy Division – economical solutions for the electrical power industry: cable accessories, connectors & fittings, electrical equipment, instruments, lighting controls, insulators & insulation enhancement and surge arresters.

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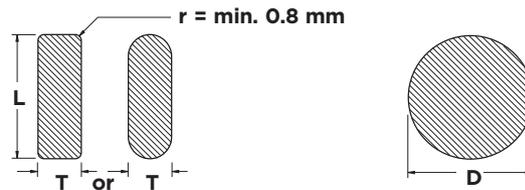
Raychem Low Fire Hazard busbar insulation tubing

Key product specifications	Test method	Requirement
Flammability	UL94 HB	Pass
Flame propagation	IEC 332-1	Pass
Temperature index	NES 715 (Type B)	250°C min.
Limiting oxygen index	ISO 4589	29 min.
Smoke index	NES 711	20 max.
3m ³ smoke	IEC 1034 (London Underground Ltd)	Pass
Acid gas generation	BR TDE 76-P-16	1.5% max.
Toxicity index	NES 713	3.0 per 100 g max.

Note: For further product specification information see Raychem PPS 3010/35.

Product selection

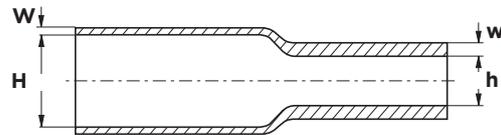
ZBIT should normally be used on the following busbar sizes



Product size	Rectangular busbars L+T (mm)		Round busbars, D (mm)	
	min.	max.	min.	max.
ZBIT 55/22	39	75	25	50
ZBIT 80/35	63	105	40	70
ZBIT 130/55	95	180	60	120

Note: Dimensions in mm unless otherwise stated.

Ordering information



Ordering description	Inside diameter (mm)		Wall thickness (mm)		UOM: m spool length
	H min.	h max.	W min.	w min.	
ZBIT 55/22-A/U-S(30)	55	22	0.5	1.5	30
ZBIT 80/35-A/U-S(20)	80	35	0.5	2.0	20
ZBIT 130/55-A/U-S(25)	130	55	0.5	2.0	25

Note: Dimensions in mm unless otherwise stated. Maximum longitudinal change after free recovery: +5%/-15%. Maximum eccentricity: 40% (as supplied), 10% (after free recovery). Select the larger size of ZBIT when two sizes fit the required application. Installation instructions EPP 0622 5/96 and Material Safety Data Sheet available on request.

Technical reports

UVR 8176 – Qualification report for ZBIT: low fire hazard busbar insulation tubing