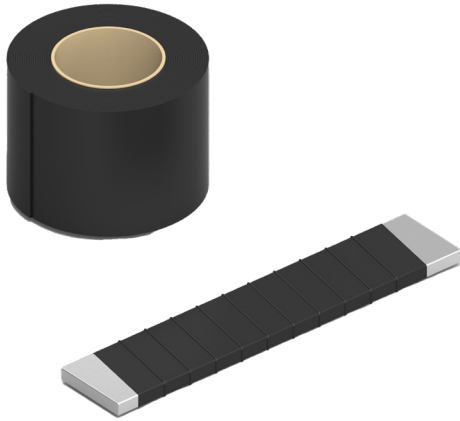


# RAYCHEM LOW VOLTAGE BUSBAR INSULATION TAPES LVBT

WILDLIFE AND ASSET PROTECTION PRODUCTS



**1 kV FLASHOVER PROTECTION WITH HEAT-SHRINK INSULATION FOR COMPLEX BUSBAR SHAPES, DELIVERING DURABILITY FOR EXCELLENT PERFORMANCE IN DEMANDING ENVIRONMENTS.**

## APPLICATIONS

- Overhead Power Networks
- Substation Solutions
- Data Center Power Systems

## RELEVANT STANDARDS AND TESTING

- EU RoHS Compliant
- EU ELV Compliant

## KEY FEATURES

- Compatible with TE Raychem low voltage insulation products
- Suitable for indoor and outdoor applications
- Non-tracking properties, UV resistant and flame retardant
- Continuous operating temperature up to 70°C (178°F)
- Can be stored indefinitely up to temperatures of 50°C (122°F)

TE Connectivity's (TE) Raychem Low Voltage Busbar Tapes LVBT are black, general-purpose insulation tapes that are adhesive-coated and heat-shrinkable, applicable for up to 1 kV systems.

Our LVBT tapes are designed to be compatible with our Raychem low voltage insulation product range suitable for complex busbar geometries and restricted access areas. In the case of non-availability of open-end, or when equipment cannot be dismantled, this wraparound product provides the optimum solution.

When LVBT tapes are wrapped around a substrate and shrunk down by applying heat, the clear adhesive melts and amalgamates the overlapping layers of tape together forming a wraparound tube. Although it sticks to itself, LVBT tapes do not adhere to busbars or hardware and are easily removed for maintenance.

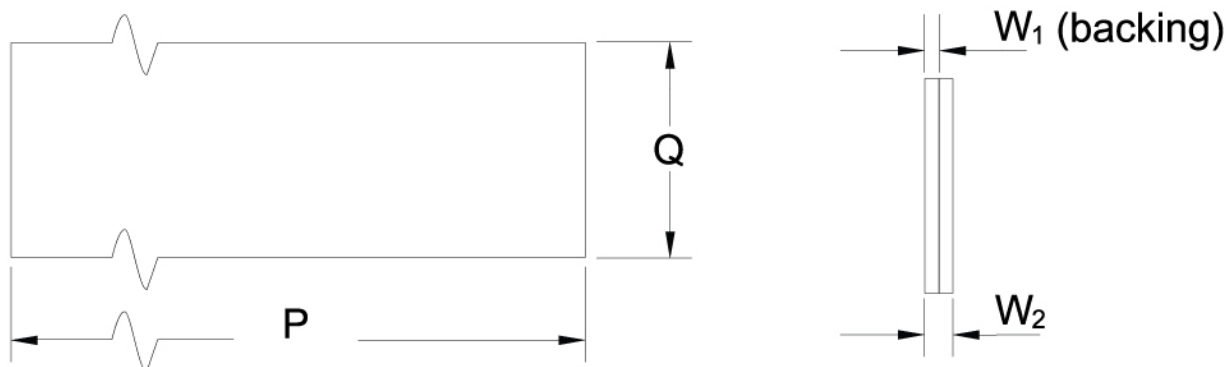
Our LVBT tapes provide flashover protection up to 1 kV in applications where tubing is not suitable for use. It can be used for both indoor and outdoor applications and is easily installed over a wide variety of substrate shapes, including complex connections.

## TECHNICAL INFORMATION

Properties	Test Method	Requirement
<b>Physical</b>		
Tensile Strength	ASTM D412	12 MPa min.
Ultimate Elongation	ASTM D412	350% min.
Hardness	ISO 868	30-50 Shore D
Accelerated Aging 168 hrs at 150 °C (302 °F) Ultimate Elongation Tensile Strength	ASTM D2671	11 MPa min. 300% min.
Thermal Endurance	IEC 60216	125°C (257 °F)
Flammability	ANSI C37.20	60 seconds max.
Resistance to Transformer Oil (VDE 0370) 168 hrs at 23 °C (73 °F) Ultimate Elongation Tensile Strength	ASTM D543	11 MPa min. 300% min.
<b>Electrical</b>		
Dielectric Strength (2.5 mm)	ASTM D149	13 kV/mm min. 330 V/mil min.
Dielectric Constant	IEC 60250	6.5 max.
Volume Resistivity	ASTM D257	$1 \times 10^{13} \Omega \text{ cm min.}$

## APPLICATION LENGTH GUIDE

Busbar Width x Thickness mm (inches)	Recommended Product	Estimated Length of LVBT required to insulate 1 m (3 ft) of busbar
 Rectangular Busbar	25 x 10 (1 x 0.3)	10 m (33 ft)
	50 x 10 (2 x 0.3)	LVB-T-2-R-01 7.6 m (25 ft)
	75 x 10 (3 x 0.3)	LVB-T-2-R-01 11.4 m (38 ft)
	100 x 10 (4 x 0.3)	LVB-T-2-R-01 15.6 m (51ft)
	150 x 10 (6 x 0.3)	LVB-T-2-R-01 25 m (82 ft)
	200 x 10 (8 x 0.3)	LVB-T-4-R-01 15.6 m (51 ft)
 Square Busbar	25 x 25 (1 x 1)	LVB-T-1-R-01 6 m (20 ft)
	50 x 50 (2 x 2)	LVB-T-2-R-01 12.5 m (41 ft)
	75 x 75 (3 x 3)	LVB-T-2-R-01 20 m (66 ft)
	100 x 100 (4 x 4)	LVB-T-4-R-01 12.5 m (41 ft)
	150 x 150 (6 x 6)	LVB-T-4-R-01 20 m (66 ft)
 Round Busbar	12 (0.5)	LVB-T-1-R-01 5 m (16 ft)
	25 (1)	LVB-T-2-R-01 5 m (16 ft)
	50 (2)	LVB-T-2-R-01 10 m (33 ft)
	75 (3)	LVB-T-4-R-01 16.7 m (55 ft)
	100 (4)	LVB-T-4-R-01 10 m (33 ft)



## ORDERING INFORMATION - PRODUCT DESCRIPTION

Description	Q min. mm (inches)	W1 a max. mm (inches)	W1 b nom. mm (inches)	W2 b min. mm (inches)	Roll Length P m (inches)	Qty per Pack
LVBT-1-R-01 (B8)	25 (1)	0.4 (0.016)	0.6 (0.024)	1 (0.04)	8 (315)	8 Rolls
LVBT-2-R-01 (B4)	50 (2)	0.4 (0.016)	0.6 (0.024)	1 (0.04)	8 (315)	4 Rolls
LVBT-4-R-01 (B2)	100 (4)	0.4 (0.016)	0.6 (0.024)	1 (0.04)	8 (315)	2 Rolls

## INSTALLATION INSTRUCTIONS

DOCUMENT REFERENCE	DESCRIPTION
EPP-0621	Installation Instructions for Low Voltage Busbar Tape (LVBT)

## TECHNICAL REPORT

DOCUMENT REFERENCE	DOCUMENT DESCRIPTION
PPR-3607	LVBT Material Qualification Report
PPR-3614	LVBT Product Qualification Report

Learn more: [TE.com/energy](https://www.te.com/energy)

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