



## HIGH VOLTAGE BUSBAR INSULATION TAPE

### WILDLIFE AND ASSET PROTECTION PRODUCTS

#### KEY FEATURES

- Compatible with all Raychem MV insulation enhancement systems
- Easy to apply using readily available equipment
- Indoor and Outdoor use
- Anti-tracking properties
- Continues operating temperature up to 90°C
- Versatile and flexible at temperatures as low as -40°C.

TE Connectivity's (TE) Raychem high voltage busbar insulation tape (HVBT) is a heat-shrinkable, adhesive-coated tape which provides insulation enhancement and protection against accidentally induced flashover. HVBT tape is designed to combine the integrity of a heat-shrinkable tubing with the versatility of a wraparound product.

HVBT tape is quick and easy to install. Upon application of heat the tape shrinks and the adhesive lining melts amalgamating the overlapping layers, to produce a complete lap to lap seal. A single layer of HVBT tape, two-thirds overlapped, will provide AC voltage withstand (flashover protection) to at least 17.5 kV increasing to 36 kV if a second layer is applied.

Although HVBT tape will adhere to itself and other insulating materials, it will not adhere to metal or porcelain, allowing easy removal for maintenance.

HVBT tape offers a simple and effective solution to the problems of retrofit insulation of busbars, particularly where existing equipment cannot be dismantled. It can be used for indoor and outdoor applications and is easily installed over a wide variety of shapes, including complex connections.

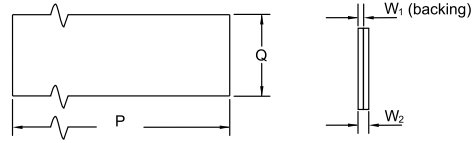
Customers can count on consistent, high quality products, driven by TE's proven innovation and backed by our extraordinary customer support.

ENERGY /// HIGH VOLTAGE BUSBAR INSULATION TAPE (HVBT)

## Raychem High Voltage Busbar Insulation Tape (HVBT)



TE's wildlife and asset protection products and systems of tubes, tapes, sheets, pre-formed covers and barriers provide a proven, cost-effective and easy-to-install solution to bird, animal and weather related outages.



PRODUCT PERFORMANCE						
TEST	Key Material Properties		Test Method		Required	
	Volume resistivity		ASTM D257, IEC 93		1 x 10 <sup>13</sup> Ohm cm min.	
	Smoke Index		NES 711		Less than 50	
	Acid gas generation		Raychem PPS 3010 4.23		Less than 3% by weight	
PHYSICAL	Accelerated aging		ISO 188, ASTM D2671		168 hrs. at 120°C, 10 MPa min., 300% min.	
	Tensile Strength					
	Ultimate elongation					
	Resistance to transformer oil		VDE 0370		168 hrs. at 23°C, 10 MPa min., 300% min.	
	Tensile Strength					
	Ultimate Elongation					
	Low Temperature Flexibility		ASTM D 2671, Procedure D		No cracking after 4 hrs. at -40°C	
	Dielectric strength		ASTM D149, IEC 243		130 kV/cm min.	
SELECTION	Rectangular	Length Needed/meter		Round	Length Needed/meter	
	Busbar Width	Description	of Busbar	Busbar	Description	of Busbar
	1.0 (25)	HVBT-1-R-01	33 (10.0)	0.5 (12)	HVBT-1-R-01	16.5 (5.0)
	2.0 (50)	HVBT-2-R-01	25 (7.6)	1.0 (25)	HVBT-2-R-01	16.5 (5.0)
	3.0 (75)	HVBT-2-R-01	38 (11.4)	2.0 (50)	HVBT-2-R-01	33 (10.0)
	4.0 (100)	HVBT-2-R-01	52 (15.6)	3.0 (75)	HVBT-4-R-01	55 (16.7)
	6.0 (150)	HVBT-2-R-01	82 (25.0)	4.0 (100)	HVBT-4-R-01	33 (10.)
	8.0 (200)	HVBT-4-R-01	52 (15.6)			
APPLICATION	Description	Q a min.	W <sub>1</sub> a min.	W <sub>1</sub> b min.	w2 b min.	UOM: Roll of lenght, P
	<i>Dimensions in inches</i>					
	HVBT-1-R-01 (8)	1	.014	.022	0.034	25 feet
	HVBT-2-R-01 (4)	2	.014	.022	0.034	24 feet
	HVBT-4-R-01 (2)	4	.014	.022	0.034	25 feet
	<i>Note: a = as supplied, b = after free recovery</i>					

### TECHNICAL REPORT

EDR-5466

Qualification report for HVBT

[te.com/energy](http://te.com/energy)

© 2001, 2009-2012, 2014 TE Connectivity Ltd. family of companies. All Rights Reserved. 1-1773455-0 E356 10/14  
 HVBT, Raychem, TE Connectivity and TE connectivity (logo) are trademarks. Other logos, product and/or company names might be trademarks of their respective owners. While TE has made every reasonable effort to ensure the accuracy of the information in this brochure, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this catalog are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

### FOR MORE INFORMATION: TE Technical Support Centers

USA: +1 800 327 6996  
 France: +33 380 583 200  
 UK: +44 0870 870 7500  
 Germany: +49 896 089 903  
 Spain: +34 916 630 400  
 Benelux: +32 16 351 731  
 Canada: +1 (905) 475-6222  
 Mexico: +52 (0) 55-1106-0800  
 Latin/S. America: +54 (0) 11-4733-2200  
 China: +86 (0) 400-820-6015

ENERGY /// HIGH VOLTAGE BUSBAR INSULATION TAPE (HVBT)