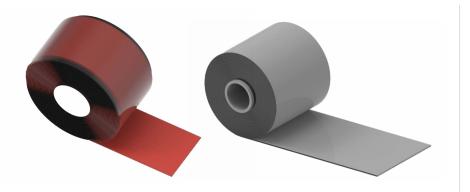


# RAYCHEM MEDIUM VOLTAGE FUSION TAPES MVFT

WILDLIFE AND ASSET PROTECTION PRODUCTS



### **APPLICATIONS**

- Overhead Power Networks
- Electrical Substations
- Data Center Power Systems

#### RELEVANT STANDARDS AND TEST REPORTS

- EU RoHS Compliant
- EU ELV Compliant

SELF-AMALGAMATING DESIGN PROVIDES EFFECTIVE PROTECTION AGAINST FLASHOVER FOR ENHANCED SAFETY.

## **KEY FEATURES**

- Compatible with TE Raychem medium voltage insulation enhancement system
- Suitable for indoor and outdoor applications
- Non-tracking properties
- Continuous operating temperature up to 90°C

TE Connectivity's (TE) Raychem Medium Voltage Fusion Tapes are self-amalgamating, providing insulation enhancement and protection against accidentally induced discharge. The design aims to combine the integrity of silicone polymers with the versatility of wraparound products.

Our Raychem MVFT tapes are quick and easy to install. When applied, the tapes amalgamate the overlapped layers, producing a complete seal. A single MVFT layer, two-thirds overlapped, will provide AC voltage withstand (flashover protection) to at least 15 kV, increasing to 35 kV if a second layer is applied. Although the tapes will stick to themselves and other insulating materials, they will not adhere to metal or porcelain, for easy removal and maintenance.

Our Raychem MVFT tapes offer a simple and effective solution to the challenges of retrofit insulation of busbars, particularly where existing equipment cannot be dismantled. They can be used for indoor and outdoor applications and installed on different shapes, including complex connections.

## **PRODUCT PERFORMANCE**

Test			
AC Dry Withstand/1 min.	15 kV (one insulation layer) 35 kV (two insulation layers)		
Loading Cycleing 30 days at 130°C	No Deformation or Splitting		
Low Temperature Install at 0°C	Installable without Difficulty		
Physical			
Key Material Properties	Test Method	Required	
Accelerated Aging 168hrs at 150°C Tensile Strength	ASTM D412	> 1,000 psi (6.8MPa)	
Accelerated Aging 168hrs at 150°C Ultimate Elongation	ASTM D412 > 450%		
Low Temperature Flexibility 4hrs 40°	ASTM D2671 No cracking		
Electrical			
Dielectric Strength 0.76 mm (0.03 inch) wall	ASTM D149	> 160 kV/cm (400 V/mil)	
Tracking and Erosion Resistance	ASTM D2303	No tracking, erosion to top surface or flame. Failure after: 1hr. at 2.5 kV 1hr. at 2.75 kV 1hr. at 3.0 kV 20 min at 3.25 kV	

## **PRODUCT SELECTION**

Description	Supplied Length: m (yards)	Width: M (inches)	Color	STD Pack
MVFT-G-2-12(B4)	11 (12)	50 (2)	Grey	4 rolls
MVFT-50-6400	6.4 (7)	50 (2)	Red	1 roll
MVFT-50-1800	1.8 (2)	50 (2)	Red	1 roll

INSTALLATION INSTRUCTIONS		
EPP-3150	Installation Instructions for Medium Voltage Fusion Tapes MVFT	

TECHNICAL REPORT			
EDR-5465	MVFT Product Test Report		
EDR-5651	MVFT Material Test Report		

# **MVFT APPLICATION LENGTH GUIDE**

Busbar Width X Thickness mm (inches)		Estimated Length of MVFT required to insulate 1 m (3 ft) of busbar
	25 X 10 (1 X 0.3)	4.7 (15)
	50 X 10 (2 X 0.3)	7.6 (25)
	75 X 10 (3 X 0.3)	11.4 (38)
	100 X 10 (4 X 0.3)	15.6 (51)
	150 X 10 (6 X 0.3)	25 (82)
Rectangular Busbar	200 X 10 (8 X 0.3)	30 (98)
	25 X 25 (1 X 1)	6 (20)
	50 X 50 (2 X 2)	12 (39)
	75 X 75 (3 X 3)	18 (59)
	100 X 100 (4 X 4)	24 (79)
Square Busbar	150 X 150 (6 X 6)	36 (118)
	12 (0.5)	2.5 (8)
	25 (1)	5 (16)
	50 (2)	10 (33)
	75 (3)	15 (49)
Round Busbar	100 (4)	20 (66)

#### Learn more: TE.com/energy

© 2024 TE Connectivity. All Rights Reserved. EPP-2644-DDS-10/24

TE, TE Connectivity, TE connectivity (logo), EVERY CONNECTION COUNTS, Raychem are trademarks owned or licensed by TE Connectivity. Other logos, product and company names mentioned herein may 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 connectivity's obligations shall only be as set forth in TE Connectivity's Standard Terms and Conditions of Sale for this product and in no case will TE Connectivity be liable for any incidental, indirect or consequential damages arising out of the sale, resale, use or misuse of the product. 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, specifications, and/or information contained herein are for reference purposes only and are subject to change without notice. Consult TE for the latest dimensions, specifications, and/or information. Users of TE Connectivity products should make their own evaluation to determine the suitability of each such product for the specific application.

#### Connect with us: TE.com/energy-contact

