


Cross Reference	
BPTM	Raychem/Tyco
CBTM	DSG-Canusa



UPMBT

UNION POLYMER MEDIUM WALL BUS BAR INSULATION TUBING (6kV TO 24kV)





Medium wall cross-linked polyolefin

Exceptional insulation and long term reliability

Protects against flashover and accidental discharge

FEATURES AND APPLICATIONS

- Ideal for using in switchgear cabinets where space is limited and air spacing between bus bars need to be minimized
- Provides insulation and flashover protection up to 36kV
- Heat shrink ratio: 2.5 to 1
- Standard color: Red
- Halogen free, RoHS compliant
- Operating temperature: -40°C to 105°C; Shrink temperature: 125°C

DIMENSIONS (HEAT SHRINK RATIO 2.5:1)

Product Order Number	Internal Diameter As Supplied		Internal Diameter Recovered		Wall Thickness (Nominal) Recovered	
	inch	mm	inch	mm	inch	mm
UPMBT-25/10	1.0	25	0.4	10	0.10	2.50
UPMBT-30/12	1.2	30	0.5	12	0.10	2.65
UPMBT-40/16	1.6	40	0.6	16	0.10	2.65
UPMBT-50/20	2.0	50	0.8	20	0.10	2.65
UPMBT-65/25	2.6	65	1.0	25	0.11	2.85
UPMBT-75/30	3.0	75	1.2	30	0.11	2.85
UPMBT-85/35	3.3	85	1.4	35	0.11	2.85
UPMBT-100/40	4.0	100	1.6	40	0.11	2.85
UPMBT-120/50	4.8	120	2.0	50	0.11	2.85
UPMBT-150/60	6.0	150	2.4	60	0.11	2.90
UPMBT-175/75	7.0	175	3.0	75	0.11	2.90

Standard length per spool: 80 FT (25 meters)

TECHNICAL DATA

	Property	Test method	Values
Physical	Tensile strength	ASTM D2671	≥14 MPa
	Breakdown elongation	ASTM D2671	≥500%
Aging (136°C /168hrs)	Tensile strength	ASTM D2671	≥12 MPa
	Breakdown elongation	ASTM D2671	≥400%
Long term aging (120°C/3000hrs)	Breakdown elongation	IEC 60684-2	≥175%
Resistance to selected fluids (23°C/168hrs)	Tensile strength	IEC 60684-2	≥8 MPa
	Breakdown elongation	IEC 60684-2	≥250%
	Density	ASTM D2671	0.95~1.05
	Thermal endurance	IEC 216	105°C
	Water absorption (23°C/336hrs)	ASTM D570	≤0.2%
	Low temperature flexibility (-40°C/4hrs)	ASTM D2671	No cracking
	Heat shock (200°C /4hrs)	ASTM D2671	No drop, No flow, No cracking
	Holdig air test	more than 3 bendings on bus bar	After shrink, no air gap between H.S.T. and bus bar
	Cutting test (110°C /168hrs)	Raychem method	5mm Length cutting along longitudinal, no cracking
	Halogen free	IEC 61249-2-21	Cl:900ppmmax.Br: 900ppmmax. Total (Cl + Br):1500ppm max.
Electrical	Volume resistivity	ASTM D2671	≥10 ¹² Ω.cm
	Tracking and erosion resistance	ASTM D2303	After 1h at 2.5kV or 1h at 2.75kV no tracking
	Dielectric strength (in insulation oil)	ASTM D2671	≥16 KV/mm
Chemical	Color fastness to light	IEC 60684-3	Compare between exposed and unexposed parts the color does not change
	Copper corrosion(158°C /168hrs)	IEC 60684-3	Pass

ORDERING

Please specify:

- (1) Product Order Number
- (2) Quantity in spools, and
- (3) Printing options (Standard Union Polymer mark, Customized mark, or Unprinted)

Order Example: UPMBT-100/40, 200 spools, Unprinted

Once a purchase order is received

Order confirmation will be sent from Union Polymer within 12 hours

All in-stock products will be shipped from our Ohio warehouse within 48 hours