

### Cross Reference

LVIT Raychem/Tyco



## UPTBT

UNION POLYMER THIN WALL BUS BAR INSULATION TUBING (VOLTAGE CLASS: 1kV)



**Thin 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 1kV
- Heat shrink ratio: 3 to 1
- Standard color: Black
- RoHS compliant
- Operating temperature: -40°C to 105°C; Shrink temperature: 125°C

### DIMENSIONS (HEAT SHRINK RATIO 3:1)

Product Order Number	Internal Diameter As Supplied		Internal Diameter Recovered		Wall Thickness (Nominal) Recovered	
	inch	mm	inch	mm	inch	mm
UPTBT-30/10	1.2	30	0.4	10	0.07	1.8
UPTBT-75/25	3.0	75	1.0	25	0.08	2.0
UPTBT-100/33	4.0	100	1.3	33	0.09	2.2
UPTBT-150/50	6.0	150	2.0	50	0.09	2.2
UPTBT-180/70	7.0	180	2.8	70	0.09	2.3

Standard length per spool: 100 FT (33 meters)

## TECHNICAL DATA

	Property	Test method	Values
<b>Physical</b>	Tensile strength	ASTM D2671	≥14 MPa
	Breakdown elongation	ASTM D2671	≥400%
Aging (136°C /168hrs)	Tensile strength	ASTM D2671	≥12 MPa
	Breakdown elongation	ASTM D2671	≥300%
Resistance to selected fluids (23°C/168hrs)	Tensile strength	IEC 60684-2	≥8 MPa
	Breakdown elongation	IEC 60684-2	≥250%
	Density	ASTM D2671	1.15~1.25
	Thermal endurance	IEC 216	125°C
	Water absorption (23°C/336hrs)	ASTM D570	≤1.0%
	Low temperature flexibility (-40°C/4hrs)	ASTM D2671	No cracking
	Heat shock (225°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 (130°C/168hrs)	Raychem method
	Halogen free	IEC 61249-2-21	Cl:900ppmmax.Br: 900ppmmax. Total (Cl + Br):1500ppm max.
<b>Electrical</b>	Volume resistivity	ASTM D2671	≥10 <sup>13</sup> Ω.cm
	Dielectric strength (in insulation oil)	ASTM D2671	≥18 KV/mm
<b>Chemical</b>	Flammability	ASTM D2863	OI ≥ 27
	Smoke index	IEC 61034	≤ 120
	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:** UPTBT-75/25, 200 spools, Unprinted

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*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*