

Cross Reference

BPTM Raychem/Tyco



UPMBTFR

UNION POLYMER FLAME RETARDANT BUS BAR INSULATION TUBING (6kV TO 24kV)



Flame retardant

Medium wall cross linked polyolefin

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 24kV
- Heat shrink ratio: 2.5 to 1
- Standard color: Red; Other colors available on request
- Flame retardant; 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
25/10	1.0	25	0.4	10	0.10	2.50
30/12	1.2	30	0.5	12	0.10	2.65
40/16	1.6	40	0.6	16	0.10	2.65
50/20	2.0	50	0.8	20	0.10	2.65
65/25	2.6	65	1.0	25	0.11	2.85
75/30	3.0	75	1.2	30	0.11	2.85
85/35	3.3	85	1.4	35	0.11	2.85
100/40	4.0	100	1.6	40	0.11	2.85
120/50	4.8	120	2.0	50	0.11	2.85
150/60	6.0	150	2.4	60	0.11	2.90
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	≥11 MPa
	Breakdown elongation	ASTM D2671	≥400%
Aging (136°C /168hrs)	Tensile strength	ASTM D2671	≥10 MPa
	Breakdown elongation	ASTM D2671	≥300%
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	1.15~1.25
	Thermal endurance	IEC 216	105°C
	Water absorption (23°C/336hrs)	ASTM D570	≤0.5%
	Low temperature flexibility (-40°C/4hrs)	ASTM D2671	No cracking
	Heat shock (200°C /4hrs)	ASTM D2671	No drop, No flow, No cracking
Electrical	Volume resistivity	ASTM D2671	≥10 ¹² Ω.cm
	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
	Flammability	ASTM D2863	OI≥27
	Copper corrosion(158°C /168hrs)	IEC 60684-3	Pass

ORDERING

Please specify:

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

Order Example: UPMBTFR, 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