

BUSBAR INSULATION AND COVERS

S1-10 Flame Retardant Busbar Insulation Heat Shrink Tube 6 to 24 kV

Flame retardant busbar insulation available in red yellow green and blue for phase identification up to 24 kV



Voltage Class	6 kV to 24 kV
Operating Temperature	-40 to 105 °C
Full Recovery Temperature	125 °C minimum
Shrink Ratio	2:1 and 2.5:1
Compliance	Environmentally friendly and RoHS
Colours	Red yellow green or blue

Introduction

Environmental friendly flame retardant polyolefin material, can be applied in 6kV to 24kV power switchgear, providing insulation enhancement, protection against flashover or accidental discharge. Especially suitable for switchgear with limited space, it can be used for circular and rectangular copper or aluminum busbars.

Features

- Operating temperature: -40 to 105°C
- Minimum full recovery temperature: 125°C
- Voltage class: 6kV to 24kV
- Environmental friendly, RoHS compliant
- Shrink ratio: 2:1 & 2.5:1
- Standard Color: Red, Yellow, Green or Blue

Technical Data

Property	Test Method	Requirement
Specific gravity	ASTM D2671	1.1-1.3
Thermal endurance	IEC 216	105°C minimum
Tensile Strength	ASTM D2671	≥10 MPa
Ultimate Elongation	ASTM D2671	≥300%
Heat Aging (136°C/168h) Tensile Strength Ultimate Elongation	ASTM D2671	≥8 MPa ≥200%
Long-term Heat Aging (100°C/3000h) Ultimate Elongation	IEC 60684-2	≥175%

Property	Test Method	Requirement
Fluid resistance (23°C/168h) Tensile Strength Ultimate Elongation	IEC 60684-2	≥8 MPa ≥200%
Water absorption (23°C/24h)	ASTM D2671	≤1.0%
Low-temperature flexibility (-40°C/4h)	ASTM D2671	No cracking
Heat shock (200°C/4h)	ASTM D2671	No cracking, dripping or flowing
Dielectric strength	ASTM D2671	≥16 kV/mm
Volume resistivity	ASTM D2671	≥1.0×10 ¹³ Ω·cm
Flammability	ASTM D2863	Oxygen index 27 min.
Color fastness to light	IEC 60684-3-283	Color stability, no change
Copper corrosion (150°C/168h)	IEC 60684-3-283	No corrosion

Dimensions

Size S1-10	As supplied (mm) Inner diameter D (min.)	After recovered (mm) Inner diameter d (max.)	Wall thickness t (nom.)	Standard length (m)
25/10	25	10	2.5	25
30/12	30	12	2.7	20 / 25
40/16	40	16	2.7	20 / 25
50/20	50	20	2.7	20 / 25
65/25	65	25	2.9	20 / 25
75/30	75	30	2.9	20 / 25
85/35	85	35	2.9	20 / 25
100/40	100	40	2.9	20 / 25
120/50	120	50	2.9	20 / 25
150/60	150	60	3.0	20 / 25
175/75	175	75	3.0	20 / 25
Products Slection				
Bus Bar Size (mm)	Single Layer Bus Bar	Double Layer Bus Bar		
20×3, 25×3	Φ25/10	Φ30/12		
30×3, 30×4	Φ30/12	Φ40/16		
30×10, 40×4	Φ40/16	Φ50/20		
40×10, 50×5, 50×6	Φ50/20	Φ65/25 (Φ75/30)		
50×8, 50×10, 60×6, 60×8	Φ65/25 (Φ75/30)	Φ75/30(Φ85/35)		
60×10, 80×6, 80×8, 80×10	Φ75/30(Φ85/35)	Φ100/40(Φ120/50)		
100×8, 100×10, 100×12	Φ100/40(Φ120/50)	Φ120/50		
150×12, 150×15	Φ150/60	Φ175/75		

Cross Reference

Tyco-Raychem: BPTM

Enquiries • enquiry@upolymer.com • WhatsApp +86 159 4096 9469 • Dalian United Polymer Material Co., Ltd., Shihe Industrial Park, Puwan New District, Dalian Liaoning 116101 China