



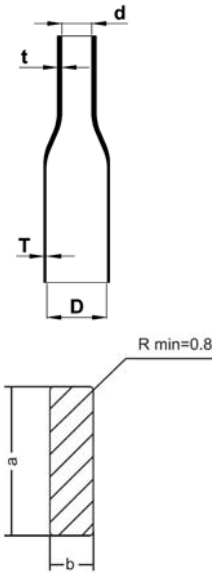
Features/Applications

GREMTUBE® GBBH is a heavy wall, halogen free, irradiated polyolefin heat shrink tubing. GREMTUBE® GBBH offers high resistance to tracking and arcing (up to 36kV). GREMTUBE® GBBH enhances the insulation properties of bus bars in switchgears and substations where zero halogen properties are required.

Various

Standard colour: Orange. ²

Dimensions



GBBH Normal size (mm)	a+b		d Max (mm)	D Min (mm)	t Min for 36kV Shrink on The Bus Bar (mm)	Standard Length (m/spool)
	Min (mm)	Max (mm)				
25/10	15	25	10	18	2.5	15
30/12	22	35	15	25	2.5	15
40/16	28	45	20	30	2.5	15
50/20	38	55	25	40	2.5	15
65/25	45	65	35	50	2.5	15
85/35	55	90	40	60	2.5	15
100/40	70	110	50	80	2.5	15
120/50	90	140	60	95	2.5	15
150/60	105	180	70	120	2.5	15
175/75	130	210	85	140	2.5	15
210/85	140	260	95	170	2.5	15

Clearance reduction guide Bus Bar Type	Application Product	Min. Clearance Required (mm)			
		Test Value		Advice Value	
		Electrode To Electrode	Electrode To Ground	Electrode To Electrode	Electrode To Ground
Round sectional Up to 36kV	GBBH	160	220	200	270
Rectangle sectional Up to 36kV	GBBH	180	260	220	285

Property		Test Method	Values
Physical	Tensile strength <4.0mm/0.18 inch wall	ASTM D 2671	> 14 Mpa
	>4.0mm/0.18 inch wall		> 12 Mpa
	Density	ASTM D2671	1.1 to 1.15
	Tensile strength after aging	ASTM D 2671/136°, 168 hrs.	≥ 12 Mpa
	Thermal Endurance	-	105°C
	Elongation at break	ASTM D 2671	≥ 500%
	Elongation at break after aging	ASTM D 2671 (136°/168 hrs.)	≥ 400%
	Low Temperature Flexibility 4hrs at -40°C	ASTM D 2671	no cracking
	Heat Shock 4hrs at 200°C	ASTM D 2671	No Drop No Flow
	Electrical	Dielectric strength 2mm/0.08 inch wall	ASTM D 2671
2.5mm/0.10 inch wall		> 20kV/mm	
3mm/0.10 inch wall		> 17kV/mm	
Volume resistance		ASTM D 2671	≥ 10 ¹⁴ Ω.cm
Chemical	Tracking and erosion resistance	ASTM 2303	After 1hr at 2.5kV no tracking
	Flammability (oxygen index)	IEC 2863	≥25
	Water absorption	ASTM D570 (23°C/336hrs)	<0.2%
	Resistance to selected fluids 168hrs at 23°C		
	Tensile Strength	IEC 60684-2	>8Mpa
	Ultimate elongation		>250%
	Copper corrosion 158°C for 168hrs	IEC 60684-3	Pass
	Long term aging 3000hrs at 120°C	IEC 60684-2	>175°C
	Elongation at break		
	Colour fastness to light	IEC 60684-3	Contrast between exposed and unexposed parts - The colour does not change

Recommended storage conditions: Keep in cool, dry, ventilated storage (maximum temperature of 35°C) and in closed containers.



Whilst every attempt is made to provide data that is as accurate as possible the values provided should be treated as a guide only. It remains the responsibility of the user to test the product and determine suitability. GREMTEK shall not be held responsible for any loss or defect resulting from incorrect, improper or inappropriate use of this product.