

GSC Series Tubes



GMB / GHB Series Tubes

HEAT SHRINK BUS BAR TUBE

Bus Tube is heat shrinkable tube designed to insulate busbar systems up to 36KV & to protect against accidental flashover. The tubes are manufactured from high quality non tracking crosslinked polyolefin material. Meets ANSI C37.20.2 standards for MV switchgear application up to 36 KV.

TECHNICAL SPECIFICATION

Physical

TEST DESCRIPTION	RECORDED VALUE	TEST METHOD
1. Tensile Strength	12 N/mm ² (MPa) (min.)	ASTM D638
2. Ultimate Elongation	300% (min.)	ASTM D638
3. Water Absorption	0.5% (max.)	ASTM D570
4. Density	1.20 ± 0.2 gm/cm ³	ASTM D792
5. Hardness	45 ± 10 shore D	ASTM D2240

Thermal

1. Accelerated ageing	120°C for 500 hrs	ASTM D2671
a. Tensile Strength	10 N/mm ² (Mpa) (min.)	ASTM D638
b. Ultimate Elongation	250 % (min.)	ASTM D638
2. Low Temp. Flexibility (-40°C for 4 hrs)	No Cracking	ASTM D2671
3. Heat Shock (250°C for 30 min.)	No cracking or flowing	ESI 09-11
4. Shrink Temperature	125°C	IEC 216
5. Continuous Temp. Limit	-40° to +115°C	IEC 216

Electrical

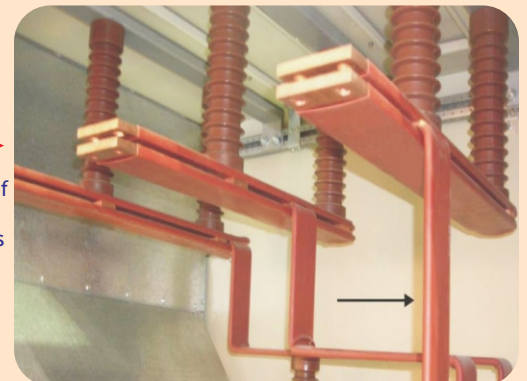
1. Dielectric Strength	22 KV/mm. (min.)	ASTM D149
2. Volume Resistivity	1 x 10 ¹⁴ Ohm.cm min	ASTM D257
3. Dielectric constant	5 (max.)	ASTM D150
4. Resistant to track & erosion	No Tracking, erosion or flame failure up to 3.25 KV for 20 min.	ASTM D2303

FEATURES & BENEFITS :-

- ❖ Reduce Busbar clearance.
- ❖ Prevent Busbar from chemical corrosion effected by strong acid, alkali, salt etc.
- ❖ Solve the problem of insulation among Busbar in Bus Duct.
- ❖ Halogen free, flame retardant.
- ❖ High dielectric strength.
- ❖ Highly Flexible for use on straight or angled bars without creasing.

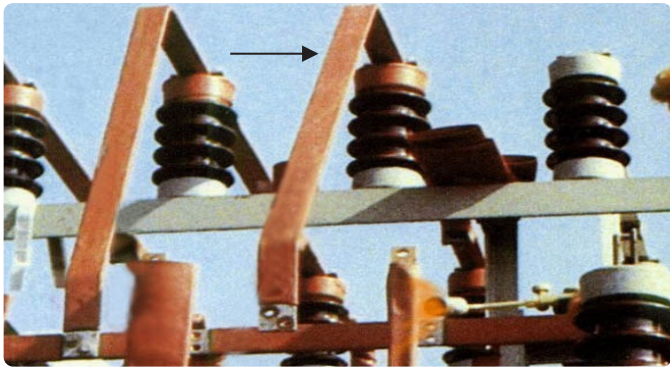
Technical Qualification Report : QR 1016

Application of Heat Shrink Bus Bar Tubes



CLEARANCE WITH INSULATION

VOLTAGE	MEDIUM WALL TUBE (GMB)		HEAVY WALL TUBE (GHB)		UN-INSULATED BUS BARS (mm)
	PH. TO PH (mm)	PH TO GR. (mm)	PH TO PH. (mm)	PH TO GR. (mm)	
12 KV	65	75	35	45	120
17.5 KV	85	105	55	65	160
24 KV	115	150	70	100	220
36 KV	200	285	140	190	320



BUS BAR SELECTION CHART

Thin Wall Tube [Up to 3.3KV]

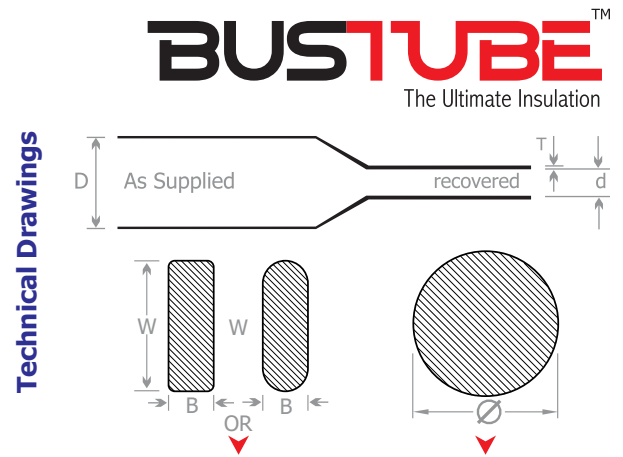
Gala Size	D	d	T ($\pm 10\%$)	Reel length	Rectangular Bars (W+B)		Round Bar \varnothing	
	mm (min.)	mm (max.)	mm		min.	max.	min.	max.
GSC 16/8	16	8	0.69	100	16	18	10	12
GSC 20/10	20	10	0.78	100	22	25	14	16
GSC 30/15	30	15	0.86	50	33	38	21	24
GSC 40/20	40	20	0.96	50	44	52	28	33
GSC 50/25	50	25	0.96	25	53	65	34	41
GSC 60/30	60	30	0.96	25	64	75	41	48
GSC 70/35	70	35	1.10	25	72	90	46	57
GSC 80/40	80	40	1.27	25	86	100	55	64
GSC 100/50	100	50	1.40	25	104	125	66	80
GSC 150/75	150	75	1.40	25	151	190	96	121
GSC 180/90	180	90	1.50	25	179	236	114	150

Medium Wall Tube [Upto 24KV]

GMB 16/6	16	6	2.0	30	11	18	7	12
GMB 25/8	25	8	2.5	25	16	30	10	20
GMB 30/12	30	12	2.5	25	25	38	16	25
GMB 40/16	40	16	2.5	25	33	50	21	32
GMB 50/20	50	20	2.5	25	38	63	24	40
GMB 65/25	65	25	2.7	25	53	82	34	52
GMB 75/28	75	28	3.0	25	63	94	40	60
GMB 85/32	85	32	3.0	25	69	107	44	68
GMB 100/38	100	38	3.0	25	83	126	53	80
GMB 120/45	120	45	3.0	15	104	150	66	96
GMB 150/60	150	60	3.0	25	132	200	84	127
GMB 180/72	180	72	3.0	25	151	226	96	144
GMB 210/84	210	84	3.0	20	239	257	152	164
GMB 250/100	250	100	3.0	20	264	314	168	200

Heavy Wall Tube [Upto 36KV]

GHB 25/8	25	8	3.7	25	20	28	13	20
GHB 30/12	30	12	4.0	25	28	33	18	25
GHB 40/16	40	16	4.0	25	35	45	22	32
GHB 50/20	50	20	4.0	25	45	54	29	40
GHB 65/25	65	25	4.0	25	50	62	32	43
GHB 75/28	75	28	4.0	20	53	69	34	47
GHB 85/32	85	32	4.0	20	69	100	44	68
GHB 100/40	100	40	4.2	20	83	102	53	72
GHB 120/58	120	58	4.2	15	94	125	60	85
GHB 150/60	150	60	4.2	15	122	168	78	105
GHB 180/70	180	70	4.2	15	160	196	102	125
GHB 205/85	205	85	4.2	15	239	250	152	164
GHB 250/120	250	120	4.2	15	264	314	168	200



BUSTUBE™
The Ultimate Insulation