



HEAT SHRINKABLE SLEEVES/TUBES

Heat Shrinkable Sleeves provide insulation enhancement to bus-bar systems up to 36kv and protect them against flashover and accidental induced discharge. The use of bus-bar tubing allows equipment designers the freedom to reduce air spacing between bus-bar, such as in manufacture of switchgear cabinets where space is at a premium.

Heat Shrinkable tubes are manufactured from high quality non-tracking, non-halogen, cross-linked based polymer which has excellent performance in high voltage environments & reduces the noxious and corrosive effects in fire situation.

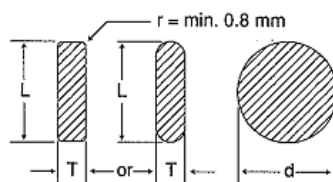
Features:-

- Reduce Bus-bar clearance.
- Solve the problem of insulation among Bus-bar in Bus Duct.
- Halogen free, flame retardant.
- High dielectric strength.
- High resistance to tracking, aging & corrosion.
- It can be offered in constant length.

Technical Data

Sr. No	Properties	Value	Standard
Physical			
1	Tensile Strength	11 N/mm ² (MPA)(min.)	ASTM D 412-06a
2	Ultimate Elongation	450% (Min.)	ASTM D 412-06a
3	Longitudinal Change	-10% (Max.)	ASTM D2671
4	Density	1.15 ± 0.2 gm/cm ³	ASTM D792
5	Hardness	45 ± 10 Shore D	ASTM D2240
6	Water Absorption	0.5 % (max.)	ASTM D570
Thermal			
7	Accelerated Ageing for 120°C for 400 Hrs		
	Tensile Strength	9 N/mm ² (Mpa) (min.)	ASTM D 412-06a
	Ultimate Elongation	300 % (Min.)	ASTM D 412-06a
8	Heat Shock (250°C for 30 Mins.)	No Cracking or flowing	ESI 09-11
9	Shrink Temperature	125°C	IEC 216
10	Continuous Temperature limit	-40°C to + 110°C	IEC 216
Electrical			
11	Dielectric Strength	23 KV/mm. (Min.)	ASTM D149
12	Volume Resistivity	7.7 x 10 ¹⁵ Ohm.cm	ASTM D257
13	Dielectric Constant	5 (Max.)	ASTM D150
Flammability			
14	Flammability	Pass	UL-94 (V-1)

Heat Shrink Sleeves Selection Chart



Size	Inside diameter as supplied D (mm), min.	Inside diameter after shrunk D1 (mm), max.	Suitable for Bus-bar	
			Rectangular bars L+T(mm)	Round bars d(mm)
15/6	15	6	12~18	7~12
25/8	25	10	15~24	10~16
30/12	30	12	22~38	16~25
40/16	40	16	30~45	20~30
50/20	50	20	36~65	25~40
65/25	65	26	52~70	35~45
75/30	75	30	55~95	40~60
85/35	85	34	60~100	45~65
100/40	100	40	70~130	50~80
120/50	120	48	90~165	70~100
150/60	150	60	105~160	80~130
180/70	180	70	125~235	90~150
210/85	210	85	140~260	95~170

Round sectional up to 24 kV

Rectangular sectional up to 24 kV

Rated Voltage (kV)	Minimum Clearance Required (mm)		Rated Voltage (kV)	Minimum Clearance Required (mm)	
	SMW			SMW	
	Electrode to Electrode	Electrode to Ground		Electrode to Electrode	Electrode to Ground
12	55	65	12	65	75
24	100	130	24	120	150
36	160	210	36	200	285

Round sectional up to 36 kV

Rectangular sectional up to 36 kV

Rated Voltage (kV)	Minimum Clearance Required (mm)		Rated Voltage (kV)	Minimum Clearance Required (mm)	
	SHW			SHW	
	Electrode to Electrode	Electrode to Ground		Electrode to Electrode	Electrode to Ground
12	30	40	12	40	50
24	60	90	24	70	110
36	100	160	36	145	190