

Group – E : SI. No. - 1) LT XLPE Unarmored Cable (1 C x 70 mm²)

Guaranteed Technical Particulars

Sr. No.	Description	To be Specified by the Bidder
1	System voltage.	
2	Make of cable.	
3	Type of cable	
4	IS or other specification to which the cable is manufactured	
5	Conductor material and its grade	
6	i) Number of wires in each conductor in nos.	
	ii) Nominal dia of wire dia each conductor in No. X mm	
7	No. cores and nominal cross sectional area of each conductor in No. X sq. mm	
8	Shape of conductors.	
9	Core identification	
10	Material used for insulation	
11	Total thickness of insulation used over each conductor in mm.	
12	Specific insulation resistance of dielectric ohm-Cm.	
13	Maximum thermal resistivity of dielectric in electric measure (i.e. difference in C between opposite faces of a cm.cube of the dielectric to transfer 1 Watt of heat).	
14	Type width and thickness of screen – mm	
	a) Conductor	
	b) Insulation	
15	Type of extrusion / curing process	
16	Minimum thickness of Inner Sheath	
17	Material used for Inner Sheath	
18	Method of application of Inner Sheath	
19	Minimum thickness of Outer Sheath in mm.	
20	Material used for Outer Sheath	
21	Type and size (i.e. Nominal diameter of armour wire) of Armouring in sq. mm.	
22	Total cross sectional area of Armouring in sq. mm.	

23	Calculated diameter over laying up cores (Calculated as per fictitious method to IS 10462 Part-I) in mm.	
24	Calculated diameter of cable over inner sheath in mm. (calculated as per IS 10462 Part-I)	
25	Calculated diameter of cable over armouring (as per fictitious method to IS 10462 Part-I in mm.	
26	Approximate overall diameter of cable in mm.	
27	Approximate total weight of aluminium conductor in 1000 mtrs. Length of finished cable in kgs	
28	Max. thermal resistivity of outer sheath in electrical measure (i.e. difference in C between opposite face of cm. Cube of the dielectric to cause transfer of 1 watt of heat)	
29	Total length of cable for each drum in metres.	
30	Total weight of each drum length of cable in Kg.	
31	Total weight of each drum length of cable with drum	
32	Size of each drum	
33	No. of years the design of the cable offered is in service	
34	Continuous safe current carrying capacity for following conditions for a single cable –	
	a) Ground temperature	
	b) Thermal resistivity of soil 120 ⁰ C cm/w	
	c) Depth of laying 1070 mm.	
35	Continuous current rating in air at 40 ⁰ C	
36	Maximum permissible temperature rise of the conductor for continuous capacity	
37	Current density under conditions stipulated in 34 above	
	a) Duct	
	b) Air	
	c) Ground	
38	Insulation resistance – Meg. Ohms. Per 1000 Metres of finished cable at 20 ⁰ C.	
39	Conductor resistance-ohms per 1000 Metres of finished cable at 20 ⁰ C.	
40	Conductor reactance –ohms per 1000 Metres of finished cable at 20 ⁰ C	
41	Specific inductive capacity Micro –	
42	Impulse level	

43	Positive sequence impedance of cable per 1000 metres in ohms.	
44	Negative sequence impedance of cable per 1000 metres in ohms	
45	Zero sequence impedance of cable per 1000 metres in ohms	
46	Maximum allowable asymmetrical fault current to earth for 1 sec	
47	Maximum allowable symmetrical short circuit current for a duration of one second.	