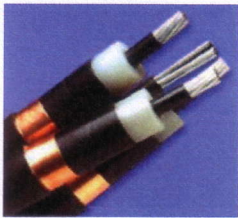


AERIAL BUNCHED CABLE



Aerial Bunched Cable (ABC) is a very novel concept for Over Head power distribution. When compared to the conventional bare conductor over head distribution system, ABC provides higher safety and reliability, lower power losses and ultimate system economy by reducing installation, maintenance and operative cost. This system is ideal for rural distribution and especially attractive for installation in difficult terrains such as hilly areas, forest areas, coastal areas etc.

HT AERIAL BUNCHED CABLES

While specifically talking about HT Aerial Bunched Cables, these are basically three single cored unarmored cables laid around a weight carrying conductor which also serves as an earth or neutral conductor.

TYPICAL CONSTRUCTION DETAILS (H.T. ABC):

POWER CORES

Conductor: Composed of H2/H4 grade Aluminum to class 2 grade of IS 8130 or IEC 60228 or other equivalent standards. It can be from 35 mm² to 300 mm².

Conductor Screen: (applicable for cables above 3.3 kV grade)

Extruded semi conducting layer as per IS 7098 (Part 2) or IEC 60502 or any other equivalent international standard.

Insulation: Typically this may be XLPE insulation as per IS 7098 (Part 2) or IEC 60502 which gives both material property as well as thickness level required.

Insulation screen: Wherever applicable (mostly 6.6 kV onwards) it comprises of an extruded layer of semi conducting material followed by a metallic tape (mostly copper).

Jacket: ST2 grade PVC to IS 5831.

MESSENGER WIRE

This typically consists of either strands of Aluminum alloy wire to IS 398 (Part) or galvanized steel wire to BS 183 as chosen by the customer. It may have a jacket similar to Power cores.

Core identification: By printing numbers 1, 2, 3 on the jackets of Power cores and 0 on the jacket of messenger core.

We can supply the cable to other international standards like IEC, BS, etc or to customers own specifications and needs



SELF SUPPORTING
GERMAN SYSTEM



SUPPORTING CORE
FRENCH SYSTEM

TECHNICAL DATA

ELECTRICAL PROPERTIES

Cable Size mm ²	Current Rating Amps (Note 1)	Short Circuit Rating kA (Note 2)	Conductor Resistance @ 20°C Ohm/km	Conductor Resistance (ac) @ 80°C Ohm/km	Self Supporting System		Supporting Core System		
					Inductive Reactance @ 50Hz (Ohm/km)	Impedance (z) @ 50Hz At 80°C (Ohm/km)	Supporting Core Size mm ²	Inductive Reactance @ 50Hz (Ohm/km)	Impedance (Z) @ 50Hz @ 80°C (Ohm/km)
25	105	2,3	1,200	1,490	0,096	1,493	54,6	0,101	1,493
35	144	3,2	0,868	1,078	0,096	1,082	54,6	0,097	1,082
50	183	4,6	0,641	0,796	0,090	0,801	54,6	0,089	0,801
70	228	6,4	0,443	0,550	0,089	0,557	54,6	0,086	0,557
95	277	8,5	0,320	0,397	0,086	0,406	54,6	0,081	0,405
120	322	11,0	0,253	0,314	0,084	0,325	70	0,079	0,324
150	350	13,8	0,206	0,256	0,082	0,269	95	0,079	0,268