

Technical Offer For Cables Generally to BS 6724

General Information:

Short Description:	Cu/XLPE/SWA/LSOH
Voltage:	0.6 / 1 (1.2) Kv
Conductor:	Stranded Plain Copper Conductor according to IEC 60228 Class 2
Insulation / Temperature:	Cross Linked Polyethylene type GP8 to BS 7655-1.3 (XLPE) / 90°C
Bedding Before Armouring:	Extruded LSOH Compatible with cable operating temperature / 90°C / Black
Armouring:	Galvanized Steel Wires
Sheathing:	LSOH Sheathing type LTS1 to BS 7655-6.1 / 90°C / Black

Cable Marking: =EL SEWEDY CABLES= BASEC no. of cores x size CU/XLPE/SWA/LSOH ELECTRIC CABLE 600/1000 V BS 6724 2013

- For cables with outer diameter > 15 mm, An other line will be added as follow " ELECTRIC CABLE 600/1000 V BS 6724 "

Printing Type: Embossed

Core Identification:

- 2 core : Brown & Blue
- 3 core : Brown, Black & Grey
- 4 core : Blue, Brown, Black & Grey
- 5 core : G/Y, Blue, Brown, Black & Grey
- > 5 Cores : Black Coloured Cores With White Numbers
- Binder tapes may be used when necessary

Packing:

- Cable shall be supplied in lengths as indicated in technical schedule on non returnable fully lagged wooden reels up to the manufacturer.
- Both ends of the cable shall be sealed to prevent the ingress of moisture during transportation and storage.
- Each reel shall be marked with type, size and length of Cable, and weight.
- This information shall be written on metallic tag nailed properly to the flange.
- Cutting lengths is 500 m $\pm$ 5% on each reel for 19 cores cables and above, and 1000 m $\pm$ 5% for other cables.
- Metering on cable outer sheath will be started from "X" to "X+999" m for 1000m cutting lengths and to "X+499" m for 500m cutting lengths and so on.
- the metallic tag or label on the drum or coil will include the starting and ending meter marks.

Tests:

- Routine tests generally to BS 6724 are performed on the cables and test certificate will be supplied on request.
- Electrical Resistance of the conductors shall be tested on IEC 60228.
- Voltage Test: No breakdown of The insulation shall occur, The applied Voltage and duration will be 3.5 Kv AC for 5 min.
- Hot Set Test for XLPE insulation according to IEC 60502-1
- Flame Retardant: Outer Sheath will be tested according IEC 60332 Part 1

Electrical Data:

Maximum conductor operating temperature:	90	°C
Maximum conductor temperature during S.C:	250	°C
Laying conditions at trefoil formation are as below:		
-Soil thermal resistivity	120	°C.Cm/Watt
-Burial depth	0.5	m
-Ground temperature	35	°C
-Air temperature	40	°C
-Frequency	50	Hz
-Cables are protected from direct solar radiation and no other thermal sources in the neighborhood.		

Specifications:

No. of Cores	Size (mm2)	Approximate Outer Diameter (mm)	Approximate Cable Weight (Kg/Km)	Minimum Bending Radius (mm)	Maximum Conductor DC Resistance at 20 °C (Ω/Km)	Conductor AC Resistance at Max. Operating Temp. and 50Hz (Ω/Km)	Conductor S.C.C for 1 sec (KA)	Current Carrying Capacity (A)		
								Laid in Ground	Laid in Duct	Laid In Free Air
2	1.5	11	134	220	12.1	15.43	0.21	30	25	25
2	2.5	12.5	307	250	7.41	9.45	0.36	37	32	34
2	4	13.5	367	270	4.61	5.88	0.57	50	40	46
2	6	14.7	450	294	3.08	3.93	0.86	63	52	60
2	10	16.1	563	322	1.83	2.33	1.43	82	69	79
2	16	18.8	837	376	1.15	1.47	2.29	106	83	105
3	1.5	11.4	268	228	12.1	15.43	0.21	26	23	22
3	2.5	13	345	260	7.41	9.45	0.36	35	29	32
3	4	14.1	418	282	4.61	5.88	0.57	45	36	41
3	6	15.4	519	308	3.08	3.93	0.86	57	45	50
3	10	17.6	760	352	1.83	2.33	1.43	75	60	68
3	16	19.7	1003	394	1.15	1.47	2.29	97	75	89
4	1.5	12.1	301	242	12.1	15.43	0.21	26	23	22
4	2.5	13.9	395	278	7.41	9.45	0.36	35	29	32
4	4	15.1	488	302	4.61	5.88	0.57	45	36	41
4	6	17.5	705	350	3.08	3.93	0.86	57	45	50
4	10	18.9	894	378	1.83	2.33	1.43	75	60	68
4	16	21.3	1197	426	1.15	1.47	2.29	97	75	89
5	1.5	13.1	345	262	12.1	15.43	0.21	22	20	17
5	2.5	14.9	453	298	7.41	9.45	0.36	31	26	26
5	4	16.4	571	328	4.61	5.88	0.57	40	31	32
5	6	18.8	819	376	3.08	3.93	0.86	51	39	40
5	10	20.3	1045	406	1.83	2.33	1.43	66	51	53
5	16	24.3	1582	486	1.15	1.47	2.29	85	65	68
7	1.5	14.2	392	284	12.1	15.43	0.21	20	18	15
7	2.5	16.1	514	322	7.41	9.45	0.36	29	23	23
7	4	18.6	754	372	4.61	5.88	0.57	36	28	28
12	1.5	18.3	656	366	12.1	15.43	0.21	16	15	13
12	2.5	21	867	420	7.41	9.45	0.36	23	20	20
12	4	24.2	1261	484	4.61	5.88	0.57	30	23	24
19	1.5	20.6	858	412	12.1	15.43	0.21	12	12	10
19	2.5	25.2	1328	504	7.41	9.45	0.36	18	15	15
19	4	27.7	1698	554	4.61	5.88	0.57	23	15	19
27	1.5	25.1	1262	502	12.1	15.43	0.21	11	10	9
27	2.5	29.3	1718	586	7.41	9.45	0.36	16	13	13
27	4	32.6	2238	652	4.61	5.88	0.57	20	13	16
37	1.5	27.4	1526	548	12.1	15.43	0.21	9	8	7
37	2.5	32.2	2112	644	7.41	9.45	0.36	13	11	11
37	4	37.4	3087	748	4.61	5.88	0.57	17	11	13
48	1.5	30.8	1860	616	12.1	15.43	0.21	6	5	5
48	2.5	37.7	2909	754	7.41	9.45	0.36	10	9	8
48	4	42.1	3775	842	4.61	5.88	0.57	13	8	10

-The above data is approximate and subjected to manufacturing tolerance.

Prepared By
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