

## Technical Offer For Cables Generally to BS 5467

### General Information:

-Short Description:	CU/XLPE/SWA/PVC
-Voltage:	0.6 / 1 (1.2) Kv
-Conductor:	Stranded Plain Copper Conductor according to IEC 60228 Class 2/Compacted for 10mm <sup>2</sup> and 16mm <sup>2</sup>
-Insulation / Temperature:	Cross Linked Polyethylene according to IEC 60502-1 (XLPE) / 90°C
-Bedding Before Armouring:	PVC Sheathing Flame Retardant IEC 60332-1 / 90°C / Black
-Armouring:	Galvanized Steel Wires
-Sheathing Material / Temp. / Color:	PVC Sheathing Flame Retardant IEC 60332-1 / 90°C / Black

### Cable Marking for cables up to and including 5 cores:

= EL SEWEDY CABLES = BASEC BS 5467 H No. of cores x size mm<sup>2</sup> CU/XLPE/SWA/PVC ELECTRIC CABLE 600/1000 V Manufacturing Year Meter Marking  
For cables with outer diameter > 15 mm, An other line will be Printed as follow "= EL SEWEDY CABLES = ELECTRIC CABLE 600/1000 V BS 5467"

### Cable Marking for cables more than 5 cores:

= EL SEWEDY CABLES = BASEC BS 5467 No. of cores x size mm<sup>2</sup> CU/XLPE/SWA/PVC ELECTRIC CABLE 600/1000 V AUX Manufacturing Year Meter Marking  
For cables with outer diameter > 15 mm, An other line will be Printed as follow "= EL SEWEDY CABLES = ELECTRIC CABLE 600/1000 V AUX BS 5467"

**Printing Type:** Embossed

### Core Identification:

- 2 Cores: Brown, Blue
- 4 Cores: Blue, Brown, Black, Grey
- 5 Cores: Blue, Brown, Black, Grey, G/Y
- > 5 Cores: White Coloured Cores With Black Numbers
- Polypropylene binder tape(s) and/or fillers may be used when necessary according to manufacturing process

### Packing:

- Cable shall be supplied in lengths as indicated in technical schedule on non returnable 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 ± 5% on each reel for 19 cores cables and above, and 1000 m ± 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

### Cable Properties:

- Outer sheath will be flame retardant according IEC 60332 Part 1

### Tests:

- Routine tests generally to BS 5467 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 be occurred, The applied Voltage and duration will be according to BS 5467
- Hot Set Test for XLPE insulation according to IEC 60502-1

### 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 must be protected from direct solar radiation and other thermal sources in the neighborhood.		

### Specifications:

No. of Cores	Size (mm <sup>2</sup> )	Approx. Outer Diam. (mm)	Approx. Cable Weight (Kg/Km)	Min. Bending Radius (mm)	Max. Conductor DC Resistance at 20 °C (Ω/Km)	Conductor AC Resistance at Max. Operating Temp. and 50Hz (Ω/Km)
2	1.5	10.9	235	87	12.1	15.43
2	2.5	12.4	298	99	7.41	9.45
2	4	13.5	358	108	4.61	5.88
2	6	14.7	440	118	3.08	3.93
2	10	16	560	128	1.83	2.33
2	16	18.7	834	150	1.15	1.47
4	1.5	12.1	290	97	12.1	15.43
4	2.5	13.9	380	111	7.41	9.45
4	4	15.1	476	121	4.61	5.88
4	6	17.5	692	140	3.08	3.93
4	10	18.9	882	151	1.83	2.33
4	16	21.3	1198	170	1.15	1.47
5	1.5	13.1	335	105	12.1	15.43
5	2.5	14.8	443	118	7.41	9.45
5	4	16.4	556	131	4.61	5.88
5	6	18.7	803	150	3.08	3.93
5	10	20.3	1029	162	1.83	2.33
5	16	24.3	1558	194	1.15	1.47
7	1.5	14.2	376	114	12.1	15.43
7	2.5	16.1	498	129	7.41	9.45
12	1.5	18.3	638	146	12.1	15.43
12	2.5	21	840	168	7.41	9.45
19	1.5	20.6	831	165	12.1	15.43
19	2.5	25.1	1292	201	7.41	9.45
27	1.5	25	1227	200	12.1	15.43
27	2.5	29.2	1681	234	7.41	9.45

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