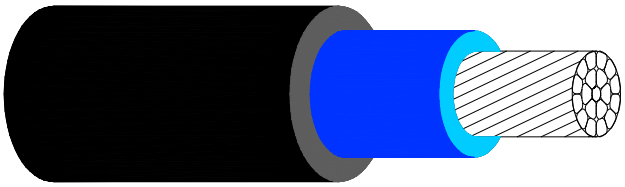
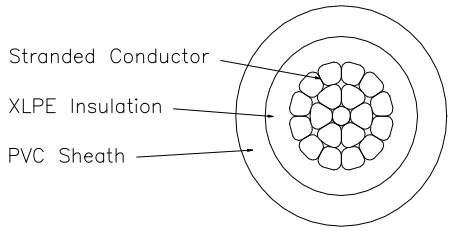
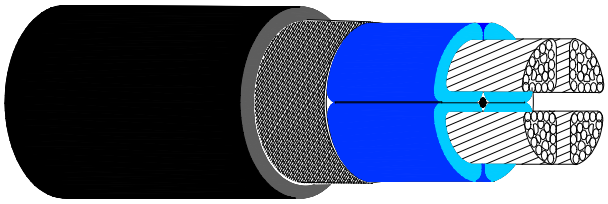
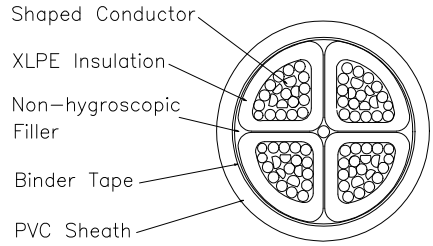
0.6 / 1 (1.2) kV XLPE INSULATED UNARMOURED PVC SHEATHED CABLES









DESCRIPTION

Single core and multi-core cables with copper or aluminium conductor, XLPE insulated and PVC sheathed. Cables are rated at 0.6 / 1 (1.2) kV and conform to IEC 60502.

CONSTRUCTION

1 **Conductor**

Plain circular, compacted or shaped stranded copper or aluminium conductor, conform to IEC 60228 class 2.

2 **Insulation**

XLPE (cross-linked polyethylene) rated at 90 °C.

3 **Colours for core identification**

Single core - natural (black on request)
Two core - red, black
Three core - red, yellow and blue
Four core - red, yellow, blue and black
Five core - red, yellow, blue, black and green/yellow

4 **Assembly**

Two, three, four or five insulated conductors are laid up together, if necessary filled with non-hygroscopic material compatible with the insulation. The filling may be omitted provided the outer shape of the cables remains practically circular and no adhesion occurs between cores and sheath.

5 **Sheath**

PVC type ST2 to IEC 60502, colour black.

APPLICATIONS

These cables are designated for general use including underground burial, where they are not likely to suffer mechanical damage.

NOTE : Cables complying with BS5467 and customer`s specification are available upon request.

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE
XLPE / PVC CABLE

0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
					Copper	Aluminium
mm²		mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	1.4	5.8	50	-
2.5	r.m.	0.7	1.4	6.2	62	-
4	r.m.	0.7	1.4	6.8	81	-
6	r.m.	0.7	1.4	7.3	105	-
10	r.m.	0.7	1.4	8.3	151	-
16	c.c.	0.7	1.4	9.0	211	111
25	c.c.	0.9	1.4	10.6	315	156
35	c.c.	0.9	1.4	11.8	414	193
50	c.c.	1.0	1.4	13.2	542	243
70	c.c.	1.1	1.4	15.1	757	325
95	c.c.	1.1	1.5	17.0	1025	426
120	c.c.	1.2	1.5	18.8	1281	521
150	c.c.	1.4	1.6	20.8	1562	633
185	c.c.	1.6	1.6	23.0	1940	774
240	c.c.	1.7	1.7	25.8	2522	989
300	c.c.	1.8	1.8	28.5	3144	1217
400	c.c.	2.0	1.9	31.9	4006	1530
500	c.c.	2.2	2.0	35.5	5042	1906
630	c.c.	2.4	2.2	40.0	6460	2420
800	r.m.	2.6	2.3	46.9	8300	3107
1000	r.m.	2.8	2.4	52.0	10397	3850

TWO CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE
XLPE / PVC CABLE

0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
					Copper	Aluminium
mm²		mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	1.8	9.7	119	-
2.5	r.m.	0.7	1.8	10.5	148	-
4	r.m.	0.7	1.8	11.6	192	-
6	r.m.	0.7	1.8	12.7	247	-
10	r.m.	0.7	1.8	14.6	354	-
16	c.c.	0.7	1.8	16.1	487	282
25	c.c.	0.9	1.8	19.4	727	403
35	c.c.	0.9	1.8	21.7	955	505
50	s.m.	1.0	1.8	20.9	1116	507
70	s.m.	1.1	1.8	23.9	1553	672
95	s.m.	1.1	1.9	26.8	2093	872
120	s.m.	1.2	2.0	29.7	2629	1078
150	s.m.	1.4	2.2	33.1	3220	1324
185	s.m.	1.6	2.3	36.8	4012	1634
240	s.m.	1.7	2.5	41.3	5216	2088
300	s.m.	1.8	2.6	45.3	6482	2551
400	s.m.	2.0	2.9	51.0	8318	3254

Note : r.m. - circular stranded conductor

c.c. - compacted circular stranded conductor

s.m. - shaped stranded conductor, circular conductors can be produced on request

THREE CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE
XLPE / PVC CABLE

0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
					Copper	Aluminium
mm²		mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	1.8	10.1	141	-
2.5	r.m.	0.7	1.8	11.0	180	-
4	r.m.	0.7	1.8	12.2	240	-
6	r.m.	0.7	1.8	13.4	314	-
10	r.m.	0.7	1.8	15.4	461	-
16	c.c.	0.7	1.8	17.0	649	342
25	c.c.	0.9	1.8	20.6	982	495
35	c.c.	0.9	1.8	23.1	1303	628
50	s.m.	1.0	1.8	24.1	1633	719
70	s.m.	1.1	1.9	27.9	2299	978
95	s.m.	1.1	2.0	31.4	3104	1272
120	s.m.	1.2	2.1	34.8	3902	1576
150	s.m.	1.4	2.3	38.8	4782	1938
185	s.m.	1.6	2.4	43.2	5966	2399
240	s.m.	1.7	2.6	48.6	7761	3070
300	s.m.	1.8	2.8	53.4	9653	3757
400	s.m.	2.0	3.0	60.1	12387	4792

FOUR CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE
XLPE / PVC CABLE

0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
					Copper	Aluminium
mm²		mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	1.8	10.9	168	-
2.5	r.m.	0.7	1.8	11.9	217	-
4	r.m.	0.7	1.8	13.2	294	-
6	r.m.	0.7	1.8	14.6	394	-
10	r.m.	0.7	1.8	16.9	586	-
16	c.c.	0.7	1.8	18.6	832	423
25	c.c.	0.9	1.8	22.6	1268	619
35	c.c.	0.9	1.8	25.4	1690	790
50	s.m.	1.0	1.8	27.1	2180	961
70	s.m.	1.1	2.0	31.6	3086	1325
95	s.m.	1.1	2.1	35.7	4163	1721
120	s.m.	1.2	2.3	39.8	5253	2151
150	s.m.	1.4	2.4	44.1	6414	2623
185	s.m.	1.6	2.6	49.3	8030	3274
240	s.m.	1.7	2.8	55.4	10434	4179
300	s.m.	1.8	3.0	61.3	13008	5146
400	s.m.	2.0	3.3	68.9	16647	6520

Note : r.m. - circular stranded conductor

c.c. - compacted circular stranded conductor

s.m. - shaped stranded conductor, circular conductors can be produced on request

FOUR CORES WITH REDUCED NEUTRAL -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / PVC CABLE

0.6 / 1 (1.2) kV

Phase		Neutral		Phase	Neutral				
Nominal cross-sectional area	Conductor Shape	Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation		Nominal thickness of sheath	Approx. overall diameter	Approx. cables weight	
								Copper	Aluminium
mm²		mm²		mm	mm	mm	mm	Kg / Km	Kg / Km
10	r.m.	6	r.m.	0.7	0.7	1.8	17.3	560	-
16	s.m.	10	r.m.	0.7	0.7	1.8	18.9	780	-
25	s.m.	16	r.m.	0.9	0.7	1.8	21.7	1165	580
35	s.m.	16	r.m.	0.9	0.7	1.8	24.1	1515	740
50	s.m.	25	r.m.	1.0	0.9	1.8	27.1	1945	870
70	s.m.	35	r.m.	1.1	0.9	1.9	31.7	2840	1300
95	s.m.	50	r.m.	1.1	1.0	2.1	35.8	3650	1390
120	s.m.	70	r.m.	1.2	1.1	2.2	39.8	4850	1780
150	s.m.	70	r.m.	1.4	1.1	2.3	44.4	5660	2390
185	s.m.	95	r.m.	1.6	1.1	2.5	49.4	7045	2885
240	s.m.	120	r.m.	1.7	1.2	2.7	55.8	9115	3630
300	s.m.	150	r.m.	1.8	1.4	2.9	61.7	11300	4440
400	s.m.	185	r.m.	2.0	1.6	3.1	68.8	14580	5825

Note : r.m. - circular stranded conductor

s.m. - shaped stranded conductor, circular conductors can be produced on request

FIVE CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / PVC CABLE

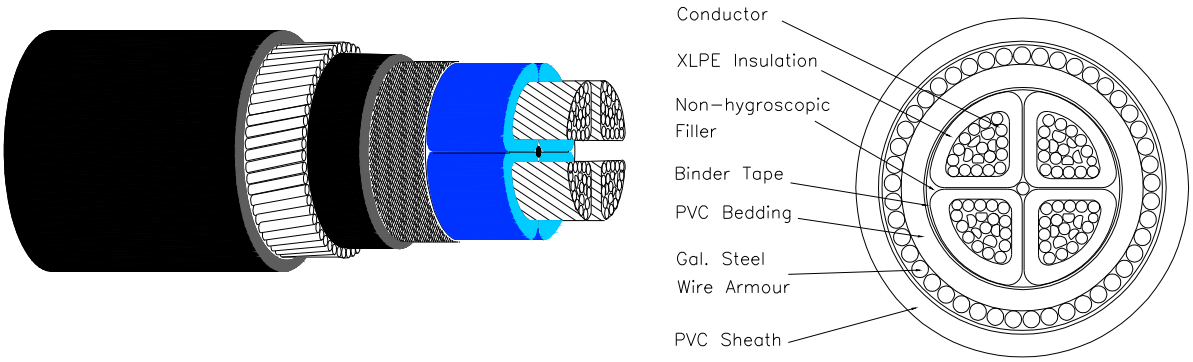
0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
					Copper	Aluminium
mm²		mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	1.8	11.8	194	-
2.5	r.m.	0.7	1.8	12.9	254	-
4	r.m.	0.7	1.8	14.4	347	-
6	r.m.	0.7	1.8	15.9	464	-
10	r.m.	0.7	1.8	18.4	695	-
16	r.m.	0.7	1.8	20.4	1026	514
25	c.c.	0.9	1.8	24.8	1569	758
35	c.c.	0.9	1.8	28.0	2087	962
50	c.c.	1.0	1.9	32.3	2790	1267
70	c.c.	1.1	2.1	37.8	3930	1728
95	c.c.	1.1	2.2	42.8	5317	2264

Note : r.m. - circular stranded conductor

c.c. - compacted circular stranded conductor

0.6 / 1 (1.2) kV XLPE INSULATED ARMOURED PVC SHEATHED CABLES



DESCRIPTION

Single core and multi-core cables with copper or aluminium conductor, XLPE insulated, armoured and PVC sheathed. Cables are rated at 0.6 / 1 (1.2) kV and conform to IEC 60502.

CONSTRUCTION

1 **Conductor**
Plain circular, compacted or shaped stranded copper or aluminium conductor, conform to IEC 60228 class 2.

2 **Insulation**
XLPE (cross-linked polyethylene) rated at 90°C.

3 **Colours for core identification**
Single core - natural (black on request)
Two core - red, black
Three core - red, yellow and blue
Four core - red, yellow, blue and black
Five core - red, yellow, blue, black and green/yellow

4 **Assembly**
Two, three, four or five insulated conductors are laid up together, if necessary filled with non-hygroscopic material compatible with the insulation and covered with a layer of PVC bedding which may be an integral part of the filling.

5 **Armour**
Single Core -- Aluminium wire shall be applied over the PVC bedding.
Multi Cores -- Galvanized steel wire shall be applied over the PVC bedding.

6 **Sheath**
PVC type ST2 to IEC 60502 colour black.

APPLICATIONS

These cables are most suitable for underground burial where there is a risk of mechanical damage.

NOTE : Cables complying with BS5467 and customer`s specification are available upon request.

SINGLE CORE -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / PVC / AWA / PVC CABLE

0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal diameter of aluminium wire	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
						Copper	Aluminium
mm²		mm	mm	mm	mm	Kg / Km	Kg / Km
16	c.c.	0.7	0.9	1.8	13.6	357	257
25	c.c.	0.9	0.9	1.8	15.2	482	323
35	c.c.	0.9	0.9	1.8	16.4	597	376
50	c.c.	1.0	1.25	1.8	18.5	788	489
70	c.c.	1.1	1.25	1.8	20.4	1032	600
95	c.c.	1.1	1.25	1.8	22.1	1319	720
120	c.c.	1.2	1.6	1.8	25.1	1657	897
150	c.c.	1.4	1.6	1.8	26.9	1960	1031
185	c.c.	1.6	1.6	1.8	29.1	2375	1209
240	c.c.	1.7	1.6	1.9	31.9	3004	1471
300	c.c.	1.8	1.6	1.9	34.4	3655	1728
400	c.c.	2.0	2.0	2.1	39.2	4725	2249
500	c.c.	2.2	2.0	2.2	42.8	5836	2700
630	c.c.	2.4	2.0	2.3	47.1	7325	3285
800	r.m.	2.6	2.5	2.5	55.6	9555	4362
1000	r.m.	2.8	2.5	2.7	60.9	11798	5251

TWO CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / PVC / SWA / PVC CABLE

0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal diameter of steel wire	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
						Copper	Aluminium
mm²		mm	mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	0.9	1.8	13.5	347	-
2.5	r.m.	0.7	0.9	1.8	14.3	394	-
4	r.m.	0.7	0.9	1.8	15.4	463	-
6	r.m.	0.7	0.9	1.8	16.5	543	-
10	r.m.	0.7	1.25	1.8	19.1	804	-
16	c.c.	0.7	1.25	1.8	20.6	980	775
25	c.c.	0.9	1.6	1.8	24.6	1467	1143
35	c.c.	0.9	1.6	1.8	26.9	1782	1332
50	s.m.	1.0	1.6	1.8	26.1	1910	1301
70	s.m.	1.1	1.6	2.0	29.5	2488	1607
95	s.m.	1.1	2.0	2.1	33.6	3410	2189
120	s.m.	1.2	2.0	2.2	36.5	4053	2502
150	s.m.	1.4	2.0	2.3	39.7	4789	2893
185	s.m.	1.6	2.5	2.5	46	6186	3808
240	s.m.	1.7	2.5	2.7	50.5	7645	4517
300	s.m.	1.8	2.5	2.8	54.9	9205	5274
400	s.m.	2.0	2.5	3.1	60.6	11356	6292

Note : r.m. - circular stranded conductor

c.c. - compacted circular stranded conductor

s.m. - shaped stranded conductor, circular conductors can be produced on request

THREE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / PVC / SWA / PVC CABLE

0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal diameter of steel wire	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
						Copper	Aluminium
mm²		mm	mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	0.9	1.8	13.9	378	-
2.5	r.m.	0.7	0.9	1.8	14.8	437	-
4	r.m.	0.7	0.9	1.8	16.0	525	-
6	r.m.	0.7	0.9	1.8	17.2	627	-
10	r.m.	0.7	1.25	1.8	19.9	937	-
16	c.c.	0.7	1.25	1.8	21.5	1171	864
25	c.c.	0.9	1.6	1.8	25.8	1769	1282
35	c.c.	0.9	1.6	1.8	28.3	2179	1504
50	s.m.	1.0	1.6	1.9	29.5	2563	1649
70	s.m.	1.1	2.0	2.0	34.5	3637	2316
95	s.m.	1.1	2.0	2.2	38.2	4621	2789
120	s.m.	1.2	2.0	2.3	41.6	5557	3231
150	s.m.	1.4	2.5	2.5	48.0	7099	4255
185	s.m.	1.6	2.5	2.6	52.4	8492	4925
240	s.m.	1.7	2.5	2.8	58.2	10683	5992
300	s.m.	1.8	2.5	3.0	63.2	12865	6969
400	s.m.	2.0	2.5	3.2	69.7	15936	8341

FOUR CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / PVC / SWA / PVC CABLE

0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal diameter of steel wire	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
						Copper	Aluminium
mm²		mm	mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	0.9	1.8	14.7	422	-
2.5	r.m.	0.7	0.9	1.8	15.7	495	-
4	r.m.	0.7	0.9	1.8	17.0	601	-
6	r.m.	0.7	1.25	1.8	19.1	844	-
10	r.m.	0.7	1.25	1.8	21.4	1104	-
16	c.c.	0.7	1.6	1.8	23.8	1544	1135
25	c.c.	0.9	1.6	1.8	27.8	2128	1479
35	c.c.	0.9	1.6	1.9	30.8	2665	1765
50	s.m.	1.0	1.6	2.0	32.7	3232	2013
70	s.m.	1.1	2.0	2.2	38.4	4605	2844
95	s.m.	1.1	2.0	2.3	42.5	5877	3435
120	s.m.	1.2	2.5	2.5	49.0	7621	4519
150	s.m.	1.4	2.5	2.6	53.3	8990	5199
185	s.m.	1.6	2.5	2.8	58.5	10909	6153
240	s.m.	1.7	2.5	3.0	65.0	13722	7467
300	s.m.	1.8	2.5	3.2	70.9	16610	8748
400	s.m.	2.0	3.15	3.5	80.2	21661	11534

Note : r.m. - circular stranded conductor

c.c. - compacted circular stranded conductor

s.m. - shaped stranded conductor, circular conductors can be produced on request

FOUR CORES WITH REDUCED NEUTRAL -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE

XLPE / PVC / SWA / PVC CABLE

0.6 / 1 (1.2) kV

Phase		Neutral		Phase	Neutral					
Nominal cross-sectional area	Conductor Shape	Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation		Nominal diameter of steel wire	Nominal thickness of sheath	Approx. overall diameter	Approx. cables weight	
									Copper	Aluminium
mm²		mm²		mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	s.m.	10	r.m.	0.7	0.7	0.8	1.8	25.2	1275	-
25	s.m.	16	r.m.	0.9	0.7	1.6	1.8	28.0	1880	1295
35	s.m.	16	r.m.	0.9	0.7	1.6	1.8	30.5	2415	1640
50	s.m.	25	r.m.	1.0	0.9	1.6	1.9	33.7	2960	1888
70	s.m.	35	r.m.	1.1	0.9	2.0	2.1	39.5	4330	2790
95	s.m.	50	r.m.	1.1	1.0	2.0	2.2	43.7	5415	3290
120	s.m.	70	r.m.	1.2	1.1	2.0	2.3	49.1	7150	4255
150	s.m.	70	r.m.	1.4	1.1	2.5	2.5	53.7	7675	4405
185	s.m.	95	r.m.	1.6	1.1	2.5	2.7	58.9	9930	5770
240	s.m.	120	r.m.	1.7	1.2	2.5	2.9	65.5	12390	6905
300	s.m.	150	r.m.	1.8	1.4	2.5	3.0	71.3	14845	7985
400	s.m.	185	r.m.	2.0	1.6	2.5	3.3	80.9	19700	10945

Note : r.m. - circular stranded conductor

s.m. - shaped stranded conductor, circular conductors can be produced on request

FIVE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE

XLPE / PVC / SWA / PVC CABLE

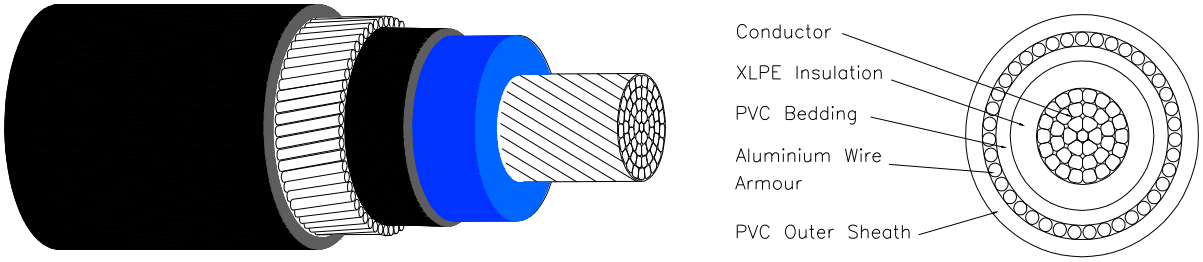
0.6 / 1 (1.2) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal diameter of steel wire	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
						Copper	Aluminium
mm²		mm	mm	mm	mm	Kg / Km	Kg / Km
1.5	r.m.	0.7	0.9	1.8	15.6	471	-
2.5	r.m.	0.7	0.9	1.8	16.7	556	-
4	r.m.	0.7	1.25	1.8	18.9	794	-
6	r.m.	0.7	1.25	1.8	20.4	953	-
10	r.m.	0.7	1.25	1.8	22.9	1260	-
16	c.c.	0.7	1.6	1.8	25.6	1806	1294
25	c.c.	0.9	1.6	1.8	30.0	2510	1699
35	c.c.	0.9	1.6	1.9	33.4	3155	2030
50	c.c.	1.0	2.0	2.1	39.1	4342	2819
70	c.c.	1.1	2.0	2.3	44.6	5741	3539
95	c.c.	1.1	2.5	2.4	52.0	7835	4782

Note : r.m. - circular stranded conductor

c.c. - compacted circular stranded conductor

1.9 / 3.3 (3.6) kV XLPE INSULATED ARMOURED PVC SHEATHED CABLES



DESCRIPTION

Single core and multi-core cables with copper or aluminium conductor, XLPE insulated, armoured and PVC sheathed. Cables are rated at 1.9 / 3.3 (3.6) kV and conform to IEC 60502.

CONSTRUCTION

1 **Conductor**
Plain circular, compacted stranded copper or aluminium conductor, confrom to IEC 60228 class 2.

2 **Insulation**
XLPE (cross-linked polyethylene) rated at 90°C.

3 **Colours for core identification**
Single core - Natural
Three core - red, yellow and blue

4 **Assembly**
Three insulated conductors are laid up together, if necessary, filled with non-hygroscopic material compatible with the insulation and covered with layer of PVC bedding which may be an integral part of the filling.

5 **Armour**
Single Core -- Aluminium wire shall be applied over the PVC bedding.
Multi Cores -- Galvanized steel wire shall be applied over the PVC bedding.

6 **Sheath**
PVC type ST2 to IEC 60502 colour black.

APPLICATIONS

These cables are most suitable for underground burial where there is a risk of mechanical damage.

NOTE : Cables complying with BS5467 and customer`s specification are available upon request.

SINGLE CORE -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / PVC / AWA / PVC CABLE

1.9 / 3.3 (3.6) kV

Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal diameter of aluminium wire	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
						Copper	Aluminium
mm²		mm	mm	mm	mm	Kg / Km	Kg / Km
10	r.m.	2.0	0.9	1.8	15.5	367	304
16	c.c.	2.0	0.9	1.8	16.2	439	339
25	c.c.	2.0	1.25	1.8	18.1	598	439
35	c.c.	2.0	1.25	1.8	19.3	720	499
50	c.c.	2.0	1.25	1.8	20.5	867	568
70	c.c.	2.0	1.25	1.8	22.2	1108	676
95	c.c.	2.0	1.6	1.8	24.8	1445	846
120	c.c.	2.0	1.6	1.8	26.2	1714	958
150	c.c.	2.0	1.6	1.8	27.6	2008	1079
185	c.c.	2.0	1.6	1.8	29.4	2404	1238
240	c.c.	2.0	1.6	1.9	31.9	3037	1490
300	c.c.	2.0	1.6	2.0	34.3	3691	1750
400	c.c.	2.0	2.0	2.1	38.4	4708	2226
500	c.c.	2.2	2.0	2.2	41.9	5788	2659
630	c.c.	2.4	2.0	2.3	46.1	7311	3251
800	r.m.	2.6	2.5	2.5	52.2	9390	4197
1000	r.m.	2.8	2.5	2.7	60.9	11799	5252

THREE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / PVC / SWA / PVC CABLE

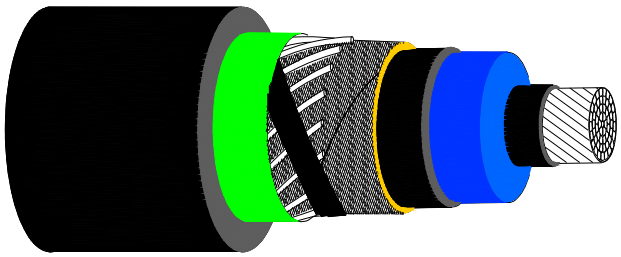
1.9 / 3.3 (3.6) kV

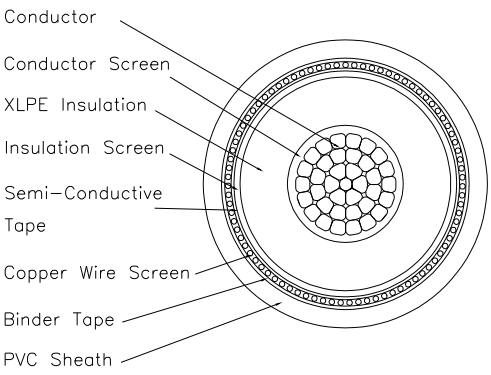
Nominal cross-sectional area	Conductor Shape	Nominal thickness of insulation	Nominal diameter of steel wire	Nominal thickness of sheath	Approx. overall diameter	Approx. cable weight	
						Copper	Aluminium
mm²		mm	mm	mm	mm	Kg / Km	Kg / Km
10	r.m.	2.0	1.6	1.8	26.2	1418	1224
16	c.c.	2.0	1.6	1.8	27.8	1678	1371
25	c.c.	2.0	1.6	1.9	30.7	2116	1629
35	c.c.	2.0	1.6	1.9	33.2	2540	1865
50	c.c.	2.0	2.0	2.1	37.8	3422	2508
70	c.c.	2.0	2.0	2.2	41.6	4293	2972
95	c.c.	2.0	2.0	2.3	44.8	5273	3441
120	c.c.	2.0	2.5	2.4	50.6	6731	4416
150	c.c.	2.0	2.5	2.5	53.8	7768	4924
185	c.c.	2.0	2.5	2.7	57.9	9192	5625
240	c.c.	2.0	2.5	2.8	63.6	11472	6738
300	c.c.	2.0	2.5	3.0	68.8	13711	7773
400	c.c.	2.0	2.5	3.2	75.0	16756	9161

Note : r.m. - circular stranded conductor

c.c. - compacted circular stranded conductor

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE FOR VOLTAGES 6.6 KV UP TO AND INCLUDING 33KV TO IEC 60502





DESCRIPTION

Circular compacted stranded copper or aluminium conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath.

CONSTRUCTION

1 **Conductor**
Plain circular compacted stranded copper or aluminium conductor to IEC 60228 class 2.

2 **Conductor screen**
Extruded layer of semiconductive compound.

3 **Insulation**
XLPE (cross-linked polyethylene) rated at 90°C.

Insulation screen

4a. **Non-metallic part**
Extruded layer of semiconductive compound.

4b. **Metallic part**
Copper wire screen (SCW) or Copper tape screen (SCT)

5 **Outer sheath**
PVC type ST2 to IEC 60502 colour black.

APPLICATIONS

For installation on trays, ducts or direct burial.

NOTE : Cables complying with BS 6622 and customer's specification are available upon request.

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCW / PVC CABLE (WITH COPPER WIRE SCREENED)

3.8 / 6.6 (7.2) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Nominal cross-sectional area of metallic screen	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
						Copper	Aluminium
mm²	mm	mm	mm²	mm	mm	Kg / Km	Kg / Km
16	4.6	3.0	16	1.5	19	560	460
25	5.8	3.0	16	1.5	20	682	513
35	7.0	3.0	16	1.6	21	806	574
50	8.1	3.0	16	1.6	22	933	635
70	9.7	3.0	16	1.7	24	1174	743
95	11.5	3.0	16	1.7	26	1456	858
120	12.9	3.0	16	1.8	28	1729	973
150	14.3	3.0	25	1.8	29	2095	1167
185	16.1	3.0	25	1.9	31	2492	1328
240	18.4	3.0	25	2.0	34	3113	1567
300	20.6	3.0	25	2.0	36	3735	1796
400	23.3	3.0	35	2.2	39	4712	2232
500	26.2	3.2	35	2.3	42	5765	2638
630	29.8	3.2	35	2.4	46	7214	3158
800	33.7	3.2	50	2.5	50	9114	3926

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

3.8 / 6.6 (7.2) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
			Approx. thickness of copper tape			Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	4.6	3.0	0.1	1.5	16	424	324
25	5.8	3.0	0.1	1.5	18	539	380
35	7.0	3.0	0.1	1.6	19	663	443
50	8.1	3.0	0.1	1.6	20	805	506
70	9.7	3.0	0.1	1.7	22	1049	618
95	11.5	3.0	0.1	1.7	24	1335	737
120	12.9	3.0	0.1	1.8	25	1610	855
150	14.3	3.0	0.1	1.8	27	1897	968
185	16.1	3.0	0.1	1.9	29	2297	1132
240	18.4	3.0	0.1	2.0	31	2922	1376
300	20.6	3.0	0.1	2.0	34	3550	1611
400	23.3	3.0	0.1	2.1	36	4422	1942
500	26.2	3.2	0.1	2.2	40	5479	2353
630	29.8	3.2	0.1	2.3	44	6934	2878
800	33.7	3.2	0.1	2.5	48	8725	3537

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCW / PVC CABLE (WITH COPPER WIRE SCREENED)

6.35 / 11 (12) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Nominal cross-sectional area of metallic screen	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
						Copper	Aluminium
mm²	mm	mm	mm²	mm	mm	Kg / Km	Kg / Km
16	4.6	3.4	16	1.5	20	583	483
25	5.8	3.4	16	1.6	21	707	548
35	7.0	3.4	16	1.6	22	821	600
50	8.1	3.4	16	1.7	23	972	673
70	9.7	3.4	16	1.7	25	1204	773
95	11.5	3.4	16	1.8	27	1501	903
120	12.9	3.4	16	1.8	28	1763	1007
150	14.3	3.4	25	1.9	30	2145	1217
185	16.1	3.4	25	1.9	32	2530	1366
240	18.4	3.4	25	2.0	34	3153	1608
300	20.6	3.4	25	2.1	37	3796	1857
400	23.3	3.4	35	2.2	40	4760	2280
500	26.2	3.4	35	2.3	43	5790	2664
630	29.8	3.4	35	2.4	47	7259	3203
800	33.7	3.4	50	2.5	51	9159	3971

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

6.35 / 11 (12) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
			Approx. thickness of copper tape			Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	4.6	3.4	0.1	1.5	17	449	349
25	5.8	3.4	0.1	1.6	19	574	416
35	7.0	3.4	0.1	1.6	20	691	471
50	8.1	3.4	0.1	1.6	21	834	536
70	9.7	3.4	0.1	1.7	23	1081	649
95	11.5	3.4	0.1	1.8	25	1380	782
120	12.9	3.4	0.1	1.8	26	1646	890
150	14.3	3.4	0.1	1.9	28	1947	1019
185	16.1	3.4	0.1	1.9	29	2337	1172
240	18.4	3.4	0.1	2.0	32	2965	1419
300	20.6	3.4	0.1	2.1	34	3612	1673
400	23.3	3.4	0.1	2.2	37	4488	2008
500	26.2	3.4	0.1	2.3	40	5525	2399
630	29.8	3.4	0.1	2.4	45	7003	2947
800	33.7	3.4	0.1	2.5	49	8773	3585

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCW / PVC CABLE (WITH COPPER WIRE SCREENED)

8.7 / 15 (17.5) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Nominal cross-sectional area of metallic screen	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
						Copper	Aluminium
mm²	mm	mm	mm²	mm	mm	Kg / Km	Kg / Km
25	5.8	4.5	16	1.7	23	790	632
35	7.0	4.5	16	1.7	24	909	688
50	8.1	4.5	16	1.7	26	1053	754
70	9.7	4.5	16	1.8	27	1303	872
95	11.5	4.5	16	1.8	29	1594	995
120	12.9	4.5	16	1.9	31	1875	1119
150	14.3	4.5	25	1.9	32	2248	1320
185	16.1	4.5	25	2.0	34	2655	1490
240	18.4	4.5	25	2.1	37	3288	1742
300	20.6	4.5	25	2.1	39	3921	1982
400	23.3	4.5	35	2.3	42	4914	2435
500	26.2	4.5	35	2.4	45	5957	2830
630	29.8	4.5	35	2.5	50	7442	3386
800	33.7	4.5	50	2.6	54	9358	4169

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

8.7 / 15 (17.5) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
			Approx. thickness of copper tape			Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
25	5.8	4.5	0.1	1.6	21	653	494
35	7.0	4.5	0.1	1.7	22	784	563
50	8.1	4.5	0.1	1.7	23	931	632
70	9.7	4.5	0.1	1.8	25	1184	753
95	11.5	4.5	0.1	1.8	27	1479	881
120	12.9	4.5	0.1	1.9	29	1763	1007
150	14.3	4.5	0.1	1.9	30	2056	1127
185	16.1	4.5	0.1	2.0	32	2466	1301
240	18.4	4.5	0.1	2.1	34	3104	1558
300	20.6	4.5	0.1	2.1	37	3742	1803
400	23.3	4.5	0.1	2.2	40	4629	2149
500	26.2	4.5	0.1	2.3	43	5676	2549
630	29.8	4.5	0.1	2.4	47	7168	3112
800	33.7	4.5	0.1	2.6	51	8976	3787

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCW / PVC CABLE (WITH COPPER WIRE SCREENED)

12.7 / 22 (24) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Nominal cross-sectional area of metallic screen	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
						Copper	Aluminium
mm²	mm	mm	mm²	mm	mm	Kg / Km	Kg / Km
35	7.0	5.5	16	1.8	27	998	777
50	8.1	5.5	16	1.8	28	1146	847
70	9.7	5.5	16	1.9	30	1403	972
95	11.5	5.5	16	1.9	31	1699	1101
120	12.9	5.5	16	2.0	33	1986	1231
150	14.3	5.5	25	2.0	34	2364	1436
185	16.1	5.5	25	2.1	36	2778	1613
240	18.4	5.5	25	2.1	39	3402	1856
300	20.6	5.5	25	2.2	41	4060	2122
400	23.3	5.5	35	2.3	44	5044	2564
500	26.2	5.5	35	2.4	47	6096	2969
630	29.8	5.5	35	2.5	52	7594	3538
800	33.7	5.5	50	2.7	56	9548	4360

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

12.7 / 22 (24) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
			Approx. thickness of copper tape			Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
35	7.0	5.5	0.1	1.8	24	877	656
50	8.1	5.5	0.1	1.8	26	1027	729
70	9.7	5.5	0.1	1.8	27	1275	843
95	11.5	5.5	0.1	1.9	29	1588	990
120	12.9	5.5	0.1	2.0	31	1878	1122
150	14.3	5.5	0.1	2.0	32	2176	1247
185	16.1	5.5	0.1	2.1	34	2593	1428
240	18.4	5.5	0.1	2.1	36	3222	1677
300	20.6	5.5	0.1	2.2	39	3886	1947
400	23.3	5.5	0.1	2.3	42	4782	2302
500	26.2	5.5	0.1	2.4	45	5840	2713
630	29.8	5.5	0.1	2.5	49	7348	3291
800	33.7	5.5	0.1	2.6	53	9145	3957

SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCW / PVC CABLE (WITH COPPER WIRE SCREENED)

19 / 33 (36) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Nominal cross-sectional area of metallic screen	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
						Copper	Aluminium
mm²	mm	mm	mm²	mm	mm	Kg / Km	Kg / Km
50	8.1	8.0	16	2.0	33	1405	1107
70	9.7	8.0	16	2.0	35	1662	1231
95	11.5	8.0	16	2.1	37	1989	1391
120	12.9	8.0	16	2.1	38	2273	1517
150	14.3	8.0	25	2.2	40	2680	1752
185	16.1	8.0	25	2.2	42	3091	1926
240	18.4	8.0	25	2.3	44	3754	2208
300	20.6	8.0	25	2.4	47	4434	2495
400	23.3	8.0	35	2.5	49	5442	2962
500	26.2	8.0	35	2.6	52	6520	3393
630	29.8	8.0	35	2.7	57	8055	3999
800	33.7	8.0	50	2.8	61	10018	4830

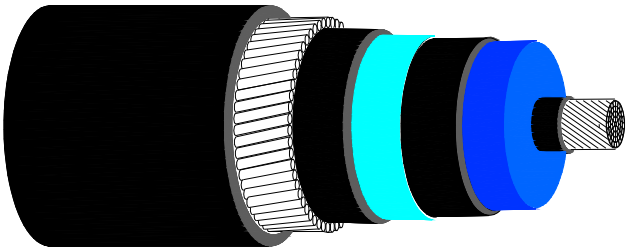
SINGLE CORE -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

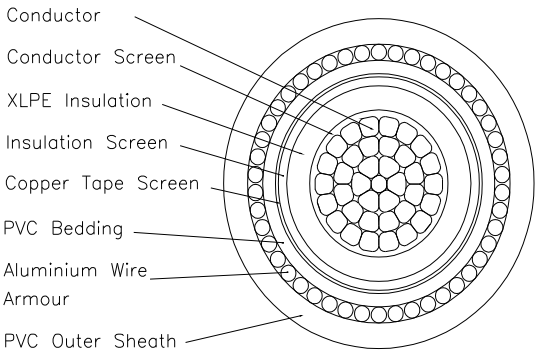
XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

19 / 33 (36) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
			Approx. thickness of copper tape			Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
50	8.1	8.0	0.1	2.0	31	1297	999
70	9.7	8.0	0.1	2.0	33	1558	1127
95	11.5	8.0	0.1	2.1	35	1888	1290
120	12.9	8.0	0.1	2.1	36	2176	1420
150	14.3	8.0	0.1	2.2	38	2502	1574
185	16.1	8.0	0.1	2.2	39	2917	1752
240	18.4	8.0	0.1	2.3	42	3585	2039
300	20.6	8.0	0.1	2.4	44	4269	2330
400	23.3	8.0	0.1	2.5	47	5190	2710
500	26.2	8.0	0.1	2.6	50	6274	3148
630	29.8	8.0	0.1	2.7	55	7819	3763
800	33.7	8.0	0.1	2.8	59	9651	4463

SINGLE CORE -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE FOR VOLTAGES 6.6 KV UP TO AND INCLUDING 33KV TO IEC 60502





DESCRIPTION

Circular compacted stranded copper or aluminium conductor, XLPE insulated, with copper wire or copper tape screen and PVC outer sheath.

CONSTRUCTION

1 **Conductor**
Plain circular compacted stranded copper or aluminium conductor to IEC 60228 class 2.

2 **Conductor screen**
Extruded layer of semiconductive compound.

3 **Insulation**
XLPE (cross-linked polyethylene) rated at 90°C.

Insulation screen

4a. **Non-metallic part**
Extruded layer of semiconductive compound.

4b. **Metallic part**
Copper tape screen (SCT)

5 **Bedding**
Extruded layer of PVC ST2 compound.

6 **Armour**
Aluminium wires shall be applied helically over the PVC bedding.

7 **Outer sheath**
PVC type ST2 to IEC 60502 colour black.

APPLICATIONS

For installation on trays, ducts or direct burial.

NOTE : Cables complying with BS 6622 and customer's specification are available upon request.

SINGLE CORE -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC / AWA / PVC CABLE (WITH COPPER TAPE SCREENED)

3.8 / 6.6 (7.2) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of aluminium wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	4.6	3.0	0.1	1.6	1.8	23	782	682
25	5.8	3.0	0.1	1.6	1.8	24	919	760
35	7.0	3.0	0.1	1.6	1.8	25	1054	834
50	8.1	3.0	0.1	1.6	1.8	27	1218	920
70	9.7	3.0	0.1	1.6	1.9	28	1495	1064
95	11.5	3.0	0.1	1.6	1.9	30	1811	1213
120	12.9	3.0	0.1	1.6	2.0	32	2115	1359
150	14.3	3.0	0.1	2.0	2.1	34	2528	1599
185	16.1	3.0	0.1	2.0	2.1	36	2946	1782
240	18.4	3.0	0.1	2.0	2.2	38	3630	2084
300	20.6	3.0	0.1	2.0	2.2	41	4301	2363
400	23.3	3.0	0.1	2.0	2.4	44	5255	2775
500	26.2	3.2	0.1	2.5	2.5	48	6560	3434
630	29.8	3.2	0.1	2.5	2.6	52	8130	4074
800	33.7	3.2	0.1	2.5	2.7	57	10010	4822

SINGLE CORE -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC / AWA / PVC CABLE (WITH COPPER TAPE SCREENED)

6.35 / 11 (12) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of aluminium wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	4.6	3.4	0.1	1.6	1.8	24	822	722
25	5.8	3.4	0.1	1.6	1.8	25	961	802
35	7.0	3.4	0.1	1.6	1.8	26	1098	877
50	8.1	3.4	0.1	1.6	1.8	27	1261	962
70	9.7	3.4	0.1	1.6	1.9	29	1540	1109
95	11.5	3.4	0.1	1.6	2.0	31	1873	1275
120	12.9	3.4	0.1	2.0	2.0	33	2247	1491
150	14.3	3.4	0.1	2.0	2.1	35	2580	1652
185	16.1	3.4	0.1	2.0	2.1	36	3001	1836
240	18.4	3.4	0.1	2.0	2.2	39	3687	2141
300	20.6	3.4	0.1	2.0	2.3	41	4382	2443
400	23.3	3.4	0.1	2.5	2.4	45	5483	3003
500	26.2	3.4	0.1	2.5	2.5	48	6590	3463
630	29.8	3.4	0.1	2.5	2.6	53	8200	4144
800	33.7	3.4	0.1	2.5	2.8	57	10132	4944

SINGLE CORE -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC / AWA / PVC CABLE (WITH COPPER TAPE SCREENED)

8.75 / 15 (17.5) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of aluminium wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
25	5.8	4.5	0.1	1.6	1.8	27	1080	921
35	7.0	4.5	0.1	1.6	1.9	29	1234	1014
50	8.1	4.5	0.1	1.6	1.9	30	1401	1103
70	9.7	4.5	0.1	1.6	2.0	32	1688	1257
95	11.5	4.5	0.1	2.0	2.1	34	2111	1513
120	12.9	4.5	0.1	2.0	2.1	36	2412	1656
150	14.3	4.5	0.1	2.0	2.2	37	2752	1824
185	16.1	4.5	0.1	2.0	2.2	39	3188	2024
240	18.4	4.5	0.1	2.0	2.3	42	3875	2330
300	20.6	4.5	0.1	2.0	2.4	44	4579	2640
400	23.3	4.5	0.1	2.5	2.5	48	5709	3229
500	26.2	4.5	0.1	2.5	2.6	51	6849	3723
630	29.8	4.5	0.1	2.5	2.7	56	8456	4400
800	33.7	4.5	0.1	2.5	2.8	60	10362	5174

SINGLE CORE -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC / AWA / PVC CABLE (WITH COPPER TAPE SCREENED)

12.7 / 22 (24) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of aluminium wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
35	7.0	5.5	0.1	1.6	1.9	30	1351	1131
50	8.1	5.5	0.1	2.0	2.0	32	1615	1316
70	9.7	5.5	0.1	2.0	2.1	34	1909	1478
95	11.5	5.5	0.1	2.0	2.1	36	2250	1652
120	12.9	5.5	0.1	2.0	2.2	37	2573	1817
150	14.3	5.5	0.1	2.0	2.2	39	2900	1971
185	16.1	5.5	0.1	2.0	2.3	41	3352	2187
240	18.4	5.5	0.1	2.0	2.4	43	4057	2511
300	20.6	5.5	0.1	2.5	2.5	47	4945	3006
400	23.3	5.5	0.1	2.5	2.6	50	5912	3432
500	26.2	5.5	0.1	2.5	2.7	53	7064	3938
630	29.8	5.5	0.1	2.5	2.8	58	8711	4655
800	33.7	5.5	0.1	2.5	2.9	62	10623	5435

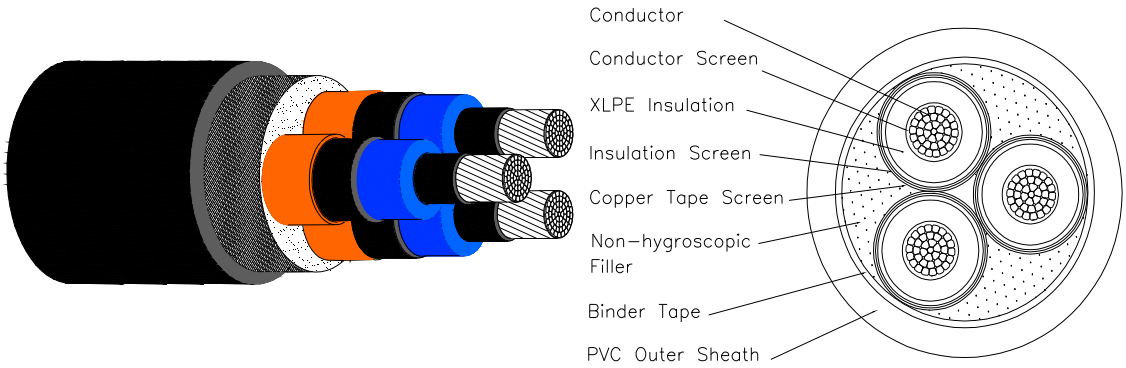
SINGLE CORE -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC / AWA / PVC CABLE (WITH COPPER TAPE SCREENED)

19 / 33 (36) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of aluminium wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
50	8.1	8.0	0.1	2.0	2.2	38	1993	1694
70	9.7	8.0	0.1	2.0	2.2	39	2293	1862
95	11.5	8.0	0.1	2.0	2.3	41	2658	2060
120	12.9	8.0	0.1	2.0	2.4	43	2996	2240
150	14.3	8.0	0.1	2.5	2.4	45	3498	2570
185	16.1	8.0	0.1	2.5	2.5	47	3978	2814
240	18.4	8.0	0.1	2.5	2.6	50	4714	3168
300	20.6	8.0	0.1	2.5	2.6	52	5461	3522
400	23.3	8.0	0.1	2.5	2.8	55	6480	4000
500	26.2	8.0	0.1	2.5	2.9	59	7662	4536
630	29.8	8.0	0.1	2.5	3.0	63	9361	5305
800	33.7	8.0	0.1	2.5	3.1	67	11299	6111

THREE CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE FOR VOLTAGES 6.6 KV UP TO AND INCLUDING 33KV TO IEC 60502



DESCRIPTION

Circular compacted stranded copper or aluminium conductor, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers and extruded with PVC outer sheath.

CONSTRUCTION

1 **Conductor**
Plain circular compacted stranded copper or aluminium conductor to IEC 60228 class 2.

2 **Conductor screen**
Extruded layer of semiconductive compound.

3 **Insulation**
XLPE (cross-linked polyethylene) rated at 90°C.

Insulation screen

4a. **Non-metallic part**
Extruded layer of semiconductive compound.

4b. **Metallic part**
Copper tape screen (SCT).

5 **Colour for core identification**
Red, yellow and blue tapes shall be applied between non metallic and metallic part of insulation screen.

6 **Assembly**
Three screened cores are laid up together, if necessary filled with non-hygroscopic material compatible with insulation and covered with a layer of PVC sheath.

7 **Outer sheath**
PVC types ST2 to IEC 60502 colour black.

APPLICATIONS

These cables are generally suitable for direct burial or for installation on trays or ducts. Where there is a risk of mechanical damage, armoured cables should be used.

NOTE : Cables complying with BS 6622 and customer's specification are available upon request.

THREE CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

3.8 / 6.6 (7.2) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
						Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	4.6	3.0	0.1	2.1	33	1393	1086
25	5.8	3.0	0.1	2.1	35	1769	1282
35	7.0	3.0	0.1	2.2	38	2162	1487
50	8.1	3.0	0.1	2.3	41	2640	1728
70	9.7	3.0	0.1	2.4	44	3417	2097
95	11.5	3.0	0.1	2.6	49	4385	2555
120	12.9	3.0	0.1	2.7	52	5263	2950
150	14.3	3.0	0.1	2.8	55	6211	3371
185	16.1	3.0	0.1	2.9	59	7485	3922
240	18.4	3.0	0.1	3.1	65	9506	4777
300	20.6	3.0	0.1	3.2	70	11556	5623
400	23.3	3.0	0.1	3.4	76	14372	6783

THREE CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

6.35 / 11 (12) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
						Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	4.6	3.4	0.1	2.1	35	1484	1178
25	5.8	3.4	0.1	2.2	37	1883	1397
35	7.0	3.4	0.1	2.3	40	2284	1609
50	8.1	3.4	0.1	2.4	43	2769	1856
70	9.7	3.4	0.1	2.5	46	3557	2237
95	11.5	3.4	0.1	2.6	50	4513	2683
120	12.9	3.4	0.1	2.7	54	5398	3085
150	14.3	3.4	0.1	2.8	57	6354	3513
185	16.1	3.4	0.1	3.0	61	7666	4102
240	18.4	3.4	0.1	3.1	66	9670	4941
300	20.6	3.4	0.1	3.3	71	11765	5833
400	23.3	3.4	0.1	3.5	78	14598	7010

THREE CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

8.7 / 15 (17.5) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
			Approx. thickness of copper tape			Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
25	5.8	4.5	0.1	2.4	43	2213	1727
35	7.0	4.5	0.1	2.5	45	2633	1958
50	8.1	4.5	0.1	2.6	48	3137	2224
70	9.7	4.5	0.1	2.7	52	3953	2633
95	11.5	4.5	0.1	2.8	55	4937	3107
120	12.9	4.5	0.1	2.9	59	5845	3533
150	14.3	4.5	0.1	3.0	62	6826	3985
185	16.1	4.5	0.1	3.1	66	8137	4574
240	18.4	4.5	0.1	3.3	71	10212	5482
300	20.6	4.5	0.1	3.4	76	12308	6376
400	23.3	4.5	0.1	3.7	83	15223	7635

THREE CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

12.7 / 22 (24) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
			Approx. thickness of copper tape			Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
35	7.0	5.5	0.1	2.6	50	2963	2288
50	8.1	5.5	0.1	2.7	52	3483	2570
70	9.7	5.5	0.1	2.8	56	4323	3003
95	11.5	5.5	0.1	3.0	60	5360	3530
120	12.9	5.5	0.1	3.1	64	6292	3980
150	14.3	5.5	0.1	3.2	67	7293	4453
185	16.1	5.5	0.1	3.3	71	8631	5067
240	18.4	5.5	0.1	3.4	76	10706	5976
300	20.6	5.5	0.1	3.6	81	12872	6939
400	23.3	5.5	0.1	3.8	87	15789	8201

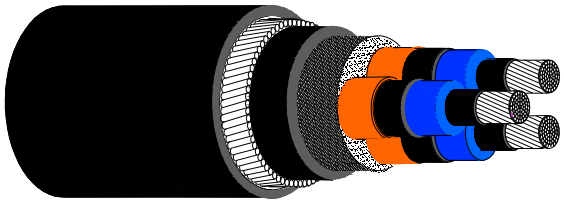
THREE CORES -- XLPE INSULATED UNARMOURED PVC SHEATHED CABLE

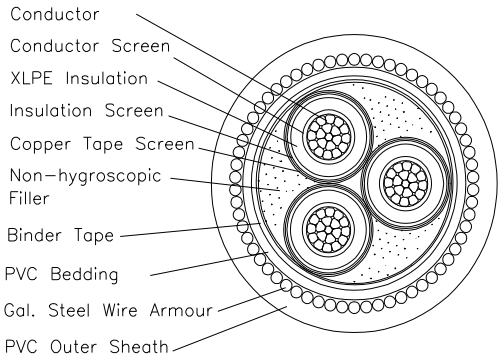
XLPE / SCT / PVC CABLE (WITH COPPER TAPE SCREENED)

19 / 33 (36) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
						Copper	Aluminium
mm²	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
50	8.1	8.0	0.1	3.1	64	4521	3608
70	9.7	8.0	0.1	3.2	68	5420	4100
95	11.5	8.0	0.1	3.3	72	6494	4664
120	12.9	8.0	0.1	3.4	75	7478	5165
150	14.3	8.0	0.1	3.5	78	8530	5689
185	16.1	8.0	0.1	3.7	82	9970	6406
240	18.4	8.0	0.1	3.8	88	12131	7401
300	20.6	8.0	0.1	4.0	93	14380	8448
400	23.3	8.0	0.1	4.2	99	17402	9814

THREE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE FOR VOLTAGES 6.6 KV UP TO AND INCLUDING 33KV TO IEC 60502





DESCRIPTION

Circular compacted stranded copper or aluminium conductor, XLPE insulated, copper tape screened, three cores assembled together with non-hygroscopic polypropylene fillers, covered with extruded PVC bedding , armoured and PVC outer sheath.

CONSTRUCTION

1 **Conductor**
Plain circular compacted stranded copper or aluminium conductor to IEC 60228 class 2.

2 **Conductor screen**
Extruded layer of semiconductive compound.

3 **Insulation**
XLPE (cross-linked polyethylene) rated at 90°C.

Insulation screen

4a. **Non-metallic part**
Extruded layer of semiconductive compound.

4b. **Metallic part**
Copper tape screen (SCT).

5 **Colour for core identification**
Red, yellow and blue tapes shall be applied between non metallic and metallic part of insulation screen.

6 **Assembly**
Three screened cores are laid up together, if necessary, filled with non-hygroscopic material compatible with insulation and covered with a layer of PVC sheath.

7 **Bedding**
Extruded layer of PVC ST2 compound.

8 **Armour**
Galvanized steel wires shall be applied helically over the PVC bedding.

9 **Outer sheath**
PVC types ST2 to IEC 60502 colour black.

APPLICATIONS

These cables are generally suitable for direct burial or for installation on trays or ducts. Where there is a risk of mechanical damage, armoured cables should be used.

NOTE : Cables complying with BS 6622 and customer's specification are available upon request.

Galvanized steel tapes applied helically over the PVC bedding is available upon request.

THREE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / SCT / PVC / SWA / PVC CABLE (WITH COPPER TAPE SCREENED)
3.8 / 6.6 (7.2) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of steel wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	4.6	3.0	0.1	2.0	2.3	40	2982	2675
25	5.8	3.0	0.1	2.5	2.4	44	3889	3403
35	7.0	3.0	0.1	2.5	2.5	47	4434	3760
50	8.1	3.0	0.1	2.5	2.6	50	5086	4173
70	9.7	3.0	0.1	2.5	2.7	54	6068	4749
95	11.5	3.0	0.1	2.5	2.9	58	7272	5442
120	12.9	3.0	0.1	2.5	3.0	61	8381	6068
150	14.3	3.0	0.1	2.5	3.1	65	9533	6692
185	16.1	3.0	0.1	2.5	3.2	69	11047	7484
240	18.4	3.0	0.1	3.15	3.4	76	14244	9514
300	20.6	3.0	0.1	3.15	3.6	81	16760	10827
400	23.3	3.0	0.1	3.15	3.8	88	20029	12441

THREE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / SCT / PVC / SWA / PVC CABLE (WITH COPPER TAPE SCREENED)
6.35 / 11 (12) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of steel wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
16	4.6	3.4	0.1	2.0	2.4	42	3161	2854
25	5.8	3.4	0.1	2.5	2.5	46	4107	3621
35	6.9	3.4	0.1	2.5	2.6	48	4659	3984
50	8.1	3.4	0.1	2.5	2.7	51	5319	4406
70	9.7	3.4	0.1	2.5	2.8	55	6336	5016
95	11.5	3.4	0.1	2.5	2.9	59	7500	5670
120	12.9	3.4	0.1	2.5	3.0	63	8617	6304
150	14.3	3.4	0.1	2.5	3.1	66	9805	6965
185	16.1	3.4	0.1	2.5	3.3	70	11334	7771
240	18.4	3.4	0.1	3.15	3.5	77	14597	9867
300	20.6	3.4	0.1	3.15	3.6	82	17089	11157
400	23.3	3.4	0.1	3.15	3.9	89	20417	12828

THREE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / SCT / PVC / SWA / PVC CABLE (WITH COPPER TAPE SCREENED)
8.7 / 15 (17.5) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of steel wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
25	5.8	4.5	0.1	2.5	2.6	51	4740	4253
35	7.0	4.5	0.1	2.5	2.7	54	5269	4595
50	8.1	4.5	0.1	2.5	2.9	57	5976	5063
70	9.7	4.5	0.1	2.5	3.0	61	7069	5749
95	11.5	4.5	0.1	2.5	3.1	65	8264	6434
120	12.9	4.5	0.1	2.5	3.2	68	9407	7094
150	14.3	4.5	0.1	3.15	3.4	73	11405	8564
185	16.1	4.5	0.1	3.15	3.5	77	13064	9500
240	18.4	4.5	0.1	3.15	3.6	83	15540	10810
300	20.6	4.5	0.1	3.15	3.8	88	18046	12113
400	23.3	4.5	0.1	3.15	4.0	95	21448	13860

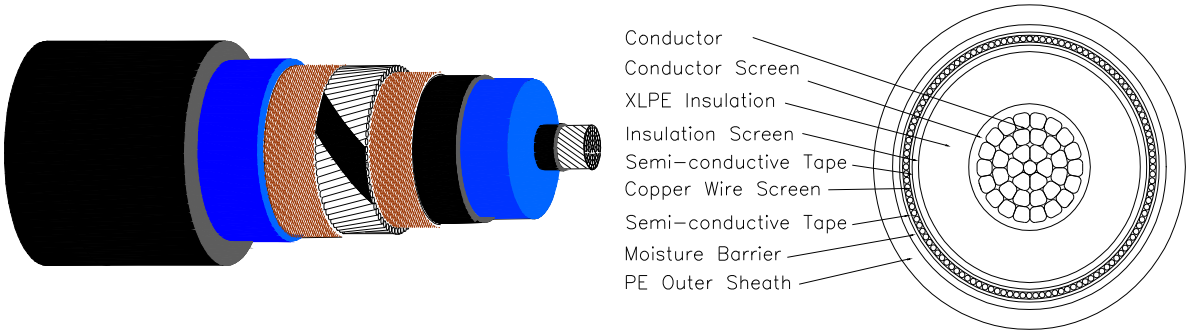
THREE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / SCT / PVC / SWA / PVC CABLE (WITH COPPER TAPE SCREENED)
12.7 / 22 (24) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening Approx. thickness of copper tape	Nominal diameter of steel wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
							Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
35	7.0	5.5	0.1	2.5	2.9	58	5905	5230
50	8.1	5.5	0.1	2.5	3.0	61	6606	5693
70	9.7	5.5	0.1	2.5	3.1	65	7697	6378
95	11.5	5.5	0.1	2.5	3.2	69	8947	7117
120	12.9	5.5	0.1	3.15	3.4	74	11021	8708
150	14.3	5.5	0.1	3.15	3.5	77	12195	9354
185	16.1	5.5	0.1	3.15	3.6	82	13882	10318
240	18.4	5.5	0.1	3.15	3.8	87	16436	11707
300	20.6	5.5	0.1	3.15	4.0	93	18982	13050
400	23.3	5.5	0.1	3.15	4.2	99	22485	14896

THREE CORES -- XLPE INSULATED ARMOURED PVC SHEATHED CABLE
XLPE / SCT / PVC / SWA / PVC CABLE (WITH COPPER TAPE SCREENED)
19 / 33 (36) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Metallic Screening	Nominal diameter of steel wire	Nominal thickness of PVC sheath	Approx. overall diameter of cable	Approximate weight of cable	
			Approx. thickness of copper tape				Copper	Aluminium
mm²	mm	mm	mm	mm	mm	mm	Kg / Km	Kg / Km
35	7.0	8.0	0.1	3.15	3.3	72	8422	7748
50	8.1	8.0	0.1	3.15	3.4	75	9250	8337
70	9.7	8.0	0.1	3.15	3.6	79	10466	9146
95	11.5	8.0	0.1	3.15	3.7	83	11858	10028
120	12.9	8.0	0.1	3.15	3.8	86	13124	10811
150	14.3	8.0	0.1	3.15	3.9	90	14460	11619
185	16.1	8.0	0.1	3.15	4.0	94	16116	12552
240	18.4	8.0	0.1	3.15	4.2	100	18825	14095
300	20.6	8.0	0.1	3.15	4.4	105	21466	15533
400	23.3	8.0	0.1	3.15	4.6	111	24969	17381

SINGLE CORE -- XLPE INSULATED UNARMOURED PE SHEATHED CABLE FOR VOLTAGE 76 / 132 (145) KV



DESCRIPTION

Circular compacted stranded copper or aluminium conductor, XLPE insulated, with copper wire screen and PE outer sheath. Complies with Tenaga Nasional Berhad (TNB) Specification.

CONSTRUCTION

1 **Conductor**
Plain circular compacted stranded copper or aluminium conductor to IEC 60228 class 2.

2 **Conductor screen**
Extruded semi-conductive cross-linked polyethylene compound.

3 **Insulation**
Extruded superclean XLPE (cross-linked polyethylene)

Insulation screen

4a. **Non-metallic part**
Extruded semi-conductive cross-linked polyethylene compound. It is firmly bonded to the insulation by virtue of the simultaneous cross linking of insulation.

The conductor screen, insulation and insulation screen are extruded by simultaneous triple extrusion process.

4b. **Metallic part**
Concentric round uncoated copper wires shall be applied helically and shall be capable of carrying an earth fault current of 25kA for 3 seconds.

5 **Radial moisture barrier**
Laminated Aluminium Tape shall be applied longitudinally.

6 **Outer sheath**
Extruded black PE containing an effective termite repellent.

APPLICATIONS

For installation on trays, ducts or direct burial.

SINGLE CORE -- XLPE INSULATED UNARMOURED PE SHEATHED CABLE

XLPE / SCW / PE CABLE (WITH COPPER WIRE SCREENED)

76 / 132 (145) kV

Nominal cross-sectional area of conductor	Nominal diameter of conductor	Nominal thickness of XLPE insulation	Nominal cross-sectional area of metallic screen	Nominal thickness of PE sheath	Approx. overall diameter of cable	Approximate weight of cable
						Copper
mm²	mm	mm	mm²	mm	mm	Kg / Km
300	20.6	20	300	4.0	85	10099
400	23.3	20	300	4.0	88	11117
500	26.2	20	300	4.0	90	12301
630	29.8	20	300	4.0	94	13956
800	33.7	20	300	4.0	98	15930

CURRENT CARRYING CAPACITY

The Current Carrying Capacity given in the following tables are based on the assumption shown below :

1) Maximum Conductor Temperature : ----------90°C
2) Maximum Ambient Temperature : In Air (Voltage up to 1.9 / 3.3 (3.6) kV) 30°C
   (Voltage 6.6 kV up to and including 33 kV) 25°C
   In Ground ---------- 15°C
3) Ground Thermal Resistivity : ----------1.2°Cm/W
4) Laying Depth : For Voltage up to 1 KV ---------- 0.5M
   For Higher Voltage above 1 KV ---------- 0.8M
5) Spacing Between Cables Laid : In Flat Formation ---------- 2 times of cable overall diameter
   In Trefoil ---------- with cable touching
6) For other conditions, the rating factors included should be applied

Table 1a CURRENT RATINGS FOR 0.6 / 1 (1.2) kV ARMOURED XLPE CABLE

Conductor Size (mm^2)	In Air				In Ground			
	Single Core*		2 Core	3 or 4 Core	Single Core*		2 Core	3 or 4 Core
	Trefoil (A)	Flat (A)	(A)	(A)	Trefoil (A)	Flat (A)	(A)	(A)
Copper Conductor								
16	-	-	115	99	-	-	141	119
25	-	-	152	131	-	-	183	152
35	-	-	188	162	-	-	219	182
50	222	288	228	197	231	242	259	217
70	285	358	291	251	284	295	317	266
95	346	425	354	304	340	350	381	319
120	402	485	410	353	386	395	433	363
150	463	549	472	406	431	434	485	406
185	529	618	539	463	485	482	547	458
240	625	715	636	546	558	545	632	529
300	720	810	732	628	623	597	708	592
400	815	848	847	728	691	637	799	667
500	918	923	-	-	765	688	-	-
630	1027	992	-	-	841	737	-	-
800	1119	1042	-	-	888	760	-	-
1000	1214	1110	-	-	942	797	-	-
Aluminium Conductor								
16	-	-	85	74	-	-	108	91
25	-	-	112	98	-	-	138	116
35	-	-	138	120	-	-	165	139
50	162	215	166	145	177	185	196	165
70	207	270	211	185	218	227	241	203
95	252	324	254	224	260	270	288	244
120	292	372	-	264	296	306	-	278
150	337	424	-	305	331	339	-	311
185	391	477	-	350	374	380	-	353
240	465	554	-	418	433	435	-	409
300	540	626	-	488	486	483	-	461

* Single core cables with aluminium wire armour

Table 1b CURRENT RATINGS FOR 0.6 / 1 (1.2) kV UNARMOURED XLPE CABLE

Conductor Size (mm²)	In Air			
	Single Core[a]		2 Core	3 or 4 Core
	Trefoil (A)	Flat (A)	(A)	(A)
Copper Conductor				
16	-	-	115	100
25	-	-	149	127
35	-	-	185	158
50	209	274	225	192
70	270	351	289	246
95	330	426	352	298
120	385	495	410	346
150	445	570	473	399
185	511	651	542	456
240	606	769	641	538
300	701	886	741	621
400	820	1065	865	741
500	936	1228	-	-
630	1069	1423	-	-
800	1214	1581	-	-
1000	1349	1775	-	-
Aluminium Conductor				
16	-	-	91	77
25	-	-	108	97
35	-	-	135	120
50	159	210	164	146
70	206	271	211	187
95	253	332	257	227
120	296	387	-	263
150	343	448	-	304
185	395	515	-	347
240	471	611	-	409
300	544	708	-	471

[a] Single core cables with aluminium wire armour

Table 2a CURRENT RATING AND VOLTAGE DROP FOR 0.6 / 1 (1.2) kV XLPE INSULATED CABLE

Conductor Size	2 Core cable, d.c. or single-phase a.c.		3 or 4 Core cable, 3 phase a.c.	
	Rating	Volt drop	Rating	Volt drop
(mm²)	(A)	(mV / A/m)	(A)	(mV / A/m)
Clipped direct (ambient temperature 30°C,Conductor temperature 90°C)				
1.5	27	31	23	27
2.5	36	19	31	16
4	49	12	42	10
6	62	7.9	53	6.8
10	85	4.7	73	4.0
16	110	2.9	94	2.5
In free air				
1.5	29	31	25	27
2.5	39	19	33	16
4	52	12	44	10
6	66	7.9	56	6.8
10	90	4.7	78	4.0
16	115	2.9	99	2.5

Table 2b VOLTAGE DROP FOR 0.6 / 1 (1.2) kV XLPE INSULATED CABLE

Conductor Size	Copper				Aluminium			
	Single core[a]		2 Core	3 or 4 Core	Single core[a]		2 Core	3 or 4 Core
	Trefoil	Flat[b]			Trefoil	Flat[b]		
(mm²)	(mV / A/m)	(mV / A/m)	(mV / A/m)	(mV / A/m)	(mV/A/m)	(mV/A/m)	(mV/A/m)	(mV / A/m)
16	-	-	2.9	2.5	-	-	4.8	4.2
25	-	-	1.9	1.65	-	-	3.1	2.7
35	-	-	1.35	1.15	-	-	2.2	1.95
50	0.87	0.90	1.00	0.87	1.4	1.4	1.65	1.45
70	0.62	0.70	0.69	0.60	0.98	1.05	1.15	0.97
95	0.47	0.58	0.52	0.45	0.74	0.83	0.84	0.72
120	0.39	0.51	0.42	0.37	0.60	0.70	-	0.58
150	0.33	0.45	0.35	0.30	0.49	0.60	-	0.47
185	0.28	0.41	0.29	0.26	0.41	0.53	-	0.39
240	0.24	0.37	0.24	0.21	0.34	0.46	-	0.31
300	0.21	0.34	0.21	0.185	0.29	0.41	-	0.26
400	0.195	0.33	0.19	0.165	-	-	-	-
500	0.180	0.31	-	-	-	-	-	-
630	0.170	0.29	-	-	-	-	-	-
800	0.165	0.26	-	-	-	-	-	-
1000	0.155	0.24	-	-	-	-	-	-

[a] Data for aluminium wire armoured cables, 3 phase circuit

[b] Twice cable diameter spacing between cores

Table 3 CURRENT RATINGS FOR 1.9 / 3.3 (3.6) kV ARMOURED XLPE CABLE

Conductor Size	In Air			In Ground		
	Single Core[a]			Single Core[a]		
	Trefoil	Flat	3 Core	Trefoil	Flat	3 Core
(mm²)	(A)	(A)	(A)	(A)	(A)	(A)
Copper Conductor						
16	-	-	108	-	-	114
25	-	-	143	-	-	147
35	-	-	170	-	-	175
50	230	287	204	222	230	207
70	288	357	257	271	279	254
95	353	434	315	324	331	305
120	411	492	365	366	369	345
150	468	553	415	409	409	387
185	534	622	476	460	454	436
240	630	715	560	528	512	502
300	717	793	640	589	560	563
400	817	851	734	651	595	633
500	924	929	-	720	641	-
630	1041	1007	-	789	684	-
800	1131	1054	-	831	703	-
1000	1227	1121	-	880	735	-
Aluminium Conductor						
16	-	-	82	-	-	87
25	-	-	108	-	-	113
35	-	-	128	-	-	134
50	173	217	155	170	176	158
70	216	270	194	208	215	194
95	264	328	237	248	256	233
120	308	377	276	282	288	265
150	350	424	313	315	320	297
185	402	483	360	355	359	336
240	475	561	425	410	409	389
300	544	631	489	460	453	439

[a] Single core cables with aluminium wire armour

Table 4 CURRENT RATINGS FOR 3.8 / 6.6 (7.2) kV TO 8.7 / 15 (17.5) kV ARMOURED XLPE CABLE

Conductor Size	In Air			In Ground		
	Single Core[a]			Single Core[a]		
	Trefoil	Flat	3 Core	Trefoil	Flat	3 Core
(mm²)	(A)	(A)	(A)	(A)	(A)	(A)
Copper Conductor						
25[b]	-	-	145	-	-	140
35[b]	-	-	175	-	-	170
50[b]	235	295	220	220	230	210
70	285	370	270	270	280	255
95	360	455	330	320	335	300
120	415	520	375	360	380	340
150	470	600	430	410	430	380
185	540	690	490	460	485	430
240	640	820	570	530	560	490
300	740	940	650	600	640	540
400	840	1100	740	680	730	600
500	990	1280	-	750	830	-
630	1110	1500	-	830	940	-
800	1270	1720	-	920	1070	-
Aluminium Conductor						
25[b]	-	-	115	-	-	115
35[b]	-	-	140	-	-	135
50[b]	180	230	170	170	175	160
70	225	290	210	210	215	195
95	280	350	250	250	260	230
120	320	410	295	280	295	265
150	365	465	330	320	330	300
185	425	530	385	360	375	335
240	500	640	450	415	440	380
300	580	730	510	475	495	-
400	670	860	590	540	570	435
500	790	1010	-	610	650	490
630	910	1190	-	680	750	-
800	1060	1330	-	770	860	-

[a] Copper wire screened, unarmoured

[b] Not applicable to all voltages. See dimension tables for availability

Table 5 CURRENT RATINGS FOR 12.7 / 22 (24) kV TO 19 / 33 (36) kV ARMOURED XLPE CABLE

Conductor Size (mm²)	In Air			In Ground		
	Single Core[a]			Single Core[a]		
	Trefoil (A)	Flat (A)	3 Core (A)	Trefoil (A)	Flat (A)	3 Core (A)
Copper Conductor						
35	-	-	180	-	-	170
50	245	295	225	220	230	210
70	300	365	275	270	280	255
95	360	450	330	320	335	295
120	425	520	380	360	380	335
150	485	590	430	410	430	375
185	550	670	490	460	485	420
240	650	800	570	530	560	480
300	740	920	650	600	640	530
400	850	1070	740	690	730	590
500	980	1250	-	760	830	-
630	1130	1450	-	850	950	-
800	1280	1710	-	930	1070	-
Aluminium Conductor						
35	-	-	145	-	-	135
50	190	230	175	170	175	160
70	235	285	215	210	215	195
95	280	345	260	250	260	230
120	330	400	300	280	295	260
150	375	455	335	320	330	290
185	430	520	390	360	375	330
240	510	620	460	415	440	380
300	580	710	520	475	495	425
400	680	840	600	550	570	480
500	790	980	-	610	650	-
630	920	1060	-	690	750	-
800	1060	1370	-	770	860	-

[a] Copper wire screened, unarmoured

Table 6 METRIC CONDUCTOR SIZES AND RESISTANCES (at 20°C)

Conductor size	Minimum number of wires in the conductor						Maximum d.c. resistance		
	Circular conductor		Circular compacted stranded		Shaped conductor		Plain Copper	Metal Coated Copper	Aluminium*
(mm²)	Cu	Al	Cu	Al	Cu	Al	(Ohm / Km)	(Ohm / Km)	(Ohm / Km)
0.5	7	-	-	-	-	-	36.0	36.7	-
0.75	7	-	-	-	-	-	24.5	24.8	-
1	7	-	-	-	-	-	18.1	18.2	-
1.5	7	-	6	-	-	-	12.1	12.2	-
2.5	7	-	6	-	-	-	7.41	7.56	-
4	7	7	6	-	-	-	4.61	4.70	7.41
6	7	7	6	-	-	-	3.08	3.11	4.61
10	7	7	6	-	-	-	1.83	1.84	3.08
16	7	7	6	6	-	-	1.15	1.16	1.91
25	7	7	6	6	6	6	0.727	0.734	1.20
35	7	7	6	6	6	6	0.524	0.529	0.868
50	19	19	6	6	6	6	0.387	0.391	0.641
70	19	19	12	12	12	12	0.268	0.270	0.443
95	19	19	15	15	15	15	0.193	0.195	0.320
120	37	37	18	15	18	15	0.153	0.154	0.253
150	37	37	18	15	18	15	0.124	0.126	0.206
185	37	37	30	30	30	30	0.0991	0.100	0.164
240	61	61	34	30	34	30	0.0754	0.0762	0.125
300	61	61	34	30	34	30	0.0601	0.0607	0.100
400	61	61	53	53	53	53	0.0470	0.0475	0.0778
500	61	61	53	53	53	53	0.0366	0.0369	0.0605
630	91	91	53	53	53	53	0.0283	0.0286	0.0469
800	91	91	53	53	-	-	0.0221	0.0224	0.0367
1,000	91	91	53	53	-	-	0.0176	0.0177	0.0291

* includes metal-coated and metal clad

Except where stated, the data is in accordance with IEC 60228 and BS 6360

RATING FACTORS FOR CABLES IN AIR

Table 7.1 -a RATING FACTORS FOR VOLTAGE UP TO 1.9 / 3.3 (3.6) kV

Ambient Air Temperature	20°C	25°C	30°C	35°C	40°C	45°C	50°C
Rating Factor	1.09	1.04	1.00	0.96	0.91	0.87	0.82

Table 7.1 -b RATING FACTORS FOR VOLTAGE 6.6 kV UP TO AND INCLUDING 132kV

Ambient Air Temperature	20°C	25°C	30°C	35°C	40°C	45°C	50°C
Rating Factor	1.05	1.00	0.95	0.91	0.86	0.80	0.75

RATING FACTORS FOR CABLES IN GROUND

Table 7.2 RATING FACTORS FOR GROUND TEMPERATURE

Ambient Ground Temperature	10°C	15°C	20°C	25°C	30°C	35°C	40°C	45°C
Rating Factor	1.03	1.00	0.97	0.93	0.89	0.85	0.81	0.77

Table 7.3 RATING FACTORS FOR SOIL THERMAL RESISTIVITY

Conductor Size (mm²)	Soil Thermal Resistivity (Km/W)						
	0.8	0.9	1.0	1.5	2.0	2.5	3.0
Single core cables							
Up to 150	1.16	1.11	1.07	0.91	0.81	0.73	0.67
From 185 to 400	1.17	1.12	1.07	0.90	0.80	0.72	0.66
From 500 to 1200	1.18	1.13	1.08	0.90	0.79	0.71	0.65
Multi core cables							
Up to 16	1.09	1.06	1.04	0.95	0.86	0.79	0.74
From 25 to 150	1.14	1.10	1.07	0.93	0.84	0.76	0.70
From 185 to 400	1.16	1.11	1.07	0.92	0.82	0.74	0.68

Table 7.4 RATING FACTORS FOR DEPTH OF LAYING
(to centre of cable or trefoil group of cables)

Depth of Laying (m)	0.6 / 1 (1.2) kV Cables			1.9/3.3 (3.6) kV to 19/33 (36) kV Cables	
	up to 50mm²	70mm² to 300mm²	above 300mm²	up to 300mm²	above 300mm²
0.50	1.00	1.00	1.00	1.00	1.00
0.60	0.99	0.98	0.97	1.00	1.00
0.80	0.97	0.96	0.94	1.00	1.00
1.00	0.95	0.94	0.92	0.98	0.97
1.25	0.94	0.92	0.90	0.96	0.95
1.50	0.93	0.91	0.89	0.95	0.94
1.75	0.92	0.89	0.87	0.94	0.92
2.00	0.91	0.88	0.86	0.92	0.90
2.50	0.90	0.87	0.85	0.91	0.89
3.0 or above	0.89	0.86	0.83	0.90	0.88

Table 7.5 GROUP RATING FACTORS FOR CIRCUITS OF THREE SINGLE CORE CABLES, IN TREFOIL AND LAID FLAT TOUCHING, HORIZONTAL FORMATION

Cable voltage (kV)	Number of circuits	Spacing of circuits (between centres of cable groups)					
		Touching					
		Trefoil	Laid flat	0.15m*	0.3m	0.45m	0.6m
0.6 / 1	2	0.77	0.80	0.82	0.88	0.90	0.93
	3	0.65	0.68	0.72	0.79	0.83	0.87
	4	0.59	0.63	0.67	0.75	0.81	0.85
	5	0.55	0.58	0.63	0.72	0.78	0.83
	6	0.52	0.56	0.60	0.70	0.77	0.82
	7	0.50	0.54	0.58	0.68	0.76	0.81
	8	0.48	0.52	0.56	0.66	0.75	0.79
	9	0.46	0.50	0.54	0.64	0.74	0.78
	10	0.44	0.48	0.52	0.62	0.73	0.77
1.9 / 3.3 to 12.7 / 22	2	0.78	0.80	0.81	0.85	0.88	0.90
	3	0.66	0.69	0.71	0.76	0.80	0.83
	4	0.60	0.63	0.65	0.72	0.76	0.80
	5	0.55	0.58	0.61	0.68	0.73	0.77
	6	0.52	0.55	0.58	0.66	0.72	0.76
	7	0.49	0.52	0.55	0.63	0.69	0.74
	8	0.46	0.49	0.51	0.60	0.66	0.72
	9	0.43	0.46	0.48	0.56	0.63	0.70
	10	0.40	0.43	0.45	0.53	0.61	0.68
19 / 33	2	0.79	0.81	0.81	0.85	0.88	0.90
	3	0.67	0.70	0.71	0.76	0.80	0.83
	4	0.62	0.65	0.65	0.72	0.76	0.80
	5	0.57	0.60	0.60	0.68	0.73	0.76
	6	0.54	0.57	0.57	0.66	0.72	0.76

*This spacing will not be possible for some of the larger diameter cables

Table 7.6 GROUP RATING FACTORS FOR MULTICORE CABLES IN HORIZONTAL FORMATION

Cable voltage (kV)	Number of cables in group	Spacing of circuits (between centres of cable groups)				
		Touching	0.15m	0.3m	0.45m	0.6m
0.6 / 1	2	0.81	0.87	0.91	0.93	0.94
	3	0.70	0.78	0.84	0.87	0.90
	4	0.63	0.74	0.81	0.86	0.89
	5	0.59	0.70	0.78	0.83	0.87
	6	0.55	0.67	0.76	0.82	0.86
	7	0.52	0.64	0.74	0.79	0.83
	8	0.50	0.62	0.72	0.77	0.81
	9	0.48	0.60	0.70	0.75	0.79
	10	0.46	0.58	0.68	0.73	0.77
1.9 / 3.3 to 12.7 / 22	2	0.80	0.85	0.89	0.90	0.92
	3	0.69	0.75	0.80	0.84	0.86
	4	0.63	0.70	0.77	0.80	0.84
	5	0.57	0.66	0.73	0.78	0.81
	6	0.55	0.63	0.71	0.76	0.80
	7	0.53	0.60	0.68	0.74	0.78
	8	0.50	0.57	0.66	0.72	0.76
	9	0.48	0.55	0.64	0.70	0.74
	10	0.46	0.53	0.62	0.68	0.73
19 / 33	2	0.80	0.83	0.87	0.89	0.91
	3	0.70	0.73	0.78	0.82	0.85
	4	0.64	0.68	0.74	0.78	0.82
	5	0.59	0.63	0.70	0.75	0.79
	6	0.56	0.60	0.68	0.74	0.78

Table 8.1 ELECTRICAL CHARACTERISTICS

0.6 / 1 (1.2) kV ARMOURED XLPE CABLE

Conductor size	Single core cables*				Multicore cables		
	A.C. resistance at 90°C		Reactance (50Hz)		A.C. resistance at 90°C		Reactance
	Copper	Aluminium	Trefoil	Flat#	Copper	Aluminium	(50Hz)
(mm²)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)
16	1.47	2.45	-	-	1.47	2.45	0.081
25	0.907	1.54	-	-	0.927	1.54	0.079
35	0.668	1.11	-	-	0.668	1.11	0.077
50	0.494	0.822	0.106	0.164	0.494	0.822	0.076
70	0.342	0.568	0.103	0.161	0.342	0.568	0.075
95	0.247	0.411	0.098	0.156	0.247	0.411	0.073
120	0.197	0.325	0.096	0.154	0.197	0.325	0.073
150	0.160	0.265	0.096	0.154	0.160	0.265	0.073
185	0.128	0.211	0.096	0.154	0.128	0.211	0.073
240	0.0989	0.162	0.092	0.150	0.0989	0.162	0.072
300	0.0802	0.130	0.090	0.148	0.0802	0.130	0.072
400	0.0640	-	0.090	0.148	0.0640	-	-
500	0.0515	-	0.089	0.146	0.0515	-	-
630	0.0420	-	0.086	0.144	0.0420	-	-
800	0.0363	-	0.086	0.144	0.0363	-	-
1000	0.0316	-	0.084	0.142	0.0316	-	-

Table 8.2 ELECTRICAL CHARACTERISTICS

1.9 / 3.3 (3.6) kV ARMOURED XLPE CABLE

Conductor size	Single core cables*					3 core cables			
	A.C. resistance at 90°C		Reactance (50Hz)			A.C. resistance at 90°C		Reactance	
	Copper	Aluminium	Trefoil	Flat#	Capacitance	Copper	Aluminium	(50Hz)	Capacitance
(mm²)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(uF/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(uF/km)
16	-	-	-	-	-	1.47	2.42	0.104	0.18
25	-	-	-	-	-	0.927	1.54	0.095	0.22
35	-	-	-	-	-	0.668	1.11	0.092	0.25
50	0.494	0.822	0.116	0.172	0.31	0.494	0.822	0.088	0.27
70	0.342	0.568	0.110	0.165	0.36	0.342	0.568	0.084	0.31
95	0.247	0.411	0.104	0.160	0.42	0.247	0.411	0.081	0.35
120	0.195	0.325	0.104	0.159	0.45	0.195	0.325	0.079	0.38
150	0.160	0.265	0.100	0.156	0.49	0.160	0.265	0.077	0.42
185	0.128	0.211	0.098	0.154	0.54	0.128	0.211	0.076	0.46
240	0.098	0.162	0.094	0.150	0.63	0.098	0.162	0.074	0.51
300	0.0800	0.130	0.091	0.147	0.70	0.080	0.130	0.073	0.57
400	0.0640	-	0.090	0.147	0.77	-	-	-	-
500	0.0510	-	0.089	0.145	0.80	-	-	-	-
630	0.0420	-	0.086	0.143	0.84	-	-	-	-

*Aluminium wire armoured

#Twice cable diameter spacing between centres

Table 8.3 ELECTRICAL CHARACTERISTICS

3.8 / 6.6 (7.2) kV AND 6.35 / 11 (12) kV ARMOURED XLPE CABLE

Conductor size	Single core cables*					3 core cables			
	A.C. resistance at 90°C		Reactance (50Hz)			A.C. resistance at 90°C		Reactance	
	Copper	Aluminium	Trefoil	Flat#	Capacitance	Copper	Aluminium	(50Hz)	Capacitance
(mm²)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(uF/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(uF/km)
3.8 / 6.6 (7.2) kV									
16	-	-	-	-	-	1.47	2.45	0.126	0.26
25	-	-	-	-	-	0.927	1.54	0.117	0.30
35	-	-	-	-	-	0.668	1.11	0.109	0.33
50	0.494	0.822	0.121	0.181	0.34	0.493	0.822	0.105	0.36
70	0.342	0.568	0.115	0.174	0.38	0.343	0.568	0.100	0.41
95	0.247	0.411	0.109	0.167	0.43	0.247	0.411	0.095	0.46
120	0.196	0.325	0.105	0.162	0.47	0.196	0.325	0.092	0.50
150	0.159	0.265	0.102	0.159	0.51	0.159	0.265	0.090	0.55
185	0.128	0.211	0.099	0.156	0.56	0.128	0.211	0.087	0.60
240	0.0982	0.162	0.096	0.153	0.61	0.0986	0.162	0.085	0.65
300	0.0791	0.130	0.094	0.151	0.62	0.0798	0.130	0.084	0.67
400	0.0632	0.102	0.092	0.149	0.65	0.0641	0.102	0.082	0.70
500	0.0510	0.0804	0.089	0.147	0.69	-	-	-	-
630	0.0417	0.0639	0.086	0.144	0.78	-	-	-	-
6.35 / 11 (12) kV									
16	-	-	-	-	-	1.47	2.45	0.134	0.21
25	-	-	-	-	-	0.927	1.54	0.124	0.24
35	-	-	-	-	-	0.668	1.11	0.116	0.26
50	0.494	0.822	0.127	0.185	0.26	0.493	0.822	0.111	0.28
70	0.342	0.568	0.120	0.177	0.30	0.342	0.568	0.106	0.32
95	0.247	0.411	0.114	0.171	0.33	0.247	0.410	0.100	0.36
120	0.196	0.325	0.109	0.166	0.36	0.196	0.325	0.097	0.39
150	0.159	0.265	0.106	0.163	0.39	0.159	0.265	0.094	0.42
185	0.128	0.211	0.103	0.160	0.43	0.128	0.211	0.092	0.46
240	0.0981	0.161	0.099	0.156	0.48	0.0984	0.161	0.089	0.51
300	0.0791	0.130	0.096	0.153	0.52	0.0797	0.130	0.086	0.56
400	0.0632	0.102	0.093	0.150	0.58	0.0639	0.102	0.083	0.62
500	0.0510	0.0804	0.090	0.147	0.66	-	-	-	-
630	0.0417	0.0639	0.087	0.145	0.74	-	-	-	-

*Copper wire screened, unarmoured

#Twice cable diameter spacing between centres

Table 8.4 ELECTRICAL CHARACTERISTICS
8.7 / 15 (17.5) kV AND 12.7 / 22 (24) kV ARMOURED XLPE CABLE

Conductor size	Single core cables*					3 core cables			
	A.C. resistance at 90°C		Reactance (50Hz)			A.C. resistance at 90°C		Reactance	
	Copper	Aluminium	Trefoil	Flat#	Capacitance	Copper	Aluminium	(50Hz)	Capacitance
(mm²)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(uF/km)	(Ohm/km)	(Ohm/km)	(Ohm/km)	(uF/km)
8.7 / 15 (17.5) kV									
16	-	-	-	-	-	1.47	2.45	0.143	0.17
25	-	-	-	-	-	0.927	1.54	0.132	0.19
35	-	-	-	-	-	0.668	1.11	0.124	0.21
50	0.494	0.822	0.132	0.190	0.21	0.493	0.822	0.118	0.23
70	0.342	0.568	0.125	0.183	0.24	0.342	0.568	0.112	0.26
95	0.247	0.411	0.119	0.176	0.27	0.247	0.410	0.106	0.29
120	0.196	0.325	0.114	0.171	0.29	0.196	0.325	0.102	0.31
150	0.159	0.265	0.111	0.168	0.31	0.159	0.264	0.100	0.34
185	0.128	0.211	0.107	0.164	0.34	0.128	0.211	0.097	0.37
240	0.0979	0.161	0.103	0.160	0.38	0.0982	0.161	0.093	0.41
300	0.0790	0.130	0.100	0.156	0.41	0.0794	0.130	0.090	0.45
400	0.0630	0.102	0.097	0.153	0.46	0.0636	0.102	0.087	0.50
500	0.0507	0.0802	0.093	0.151	0.51	-	-	-	-
630	0.0413	0.0636	0.090	0.147	0.57	-	-	-	-
12.7 / 22 (24) kV									
16	-	-	-	-	-	-	-	-	-
25	-	-	-	-	-	0.927	1.54	0.139	0.17
35	-	-	-	-	-	0.668	1.11	0.130	0.18
50	0.494	0.822	0.137	0.192	0.18	0.493	0.822	0.124	0.20
70	0.342	0.568	0.130	0.185	0.21	0.342	0.568	0.118	0.22
95	0.247	0.411	0.123	0.178	0.23	0.247	0.410	0.111	0.24
120	0.196	0.325	0.118	0.173	0.25	0.196	0.325	0.107	0.26
150	0.159	0.265	0.115	0.170	0.27	0.159	0.264	0.104	0.28
185	0.128	0.211	0.111	0.165	0.29	0.127	0.211	0.101	0.31
240	0.098	0.161	0.106	0.616	0.32	0.098	0.161	0.097	0.34
300	0.079	0.130	0.103	0.158	0.35	0.079	0.130	0.094	0.37
400	0.063	0.102	0.0995	0.155	0.39	0.063	0.102	0.090	0.41
500	0.051	0.080	0.0959	0.152	0.43	-	-	-	-
630	0.041	0.064	0.0923	0.149	0.48	-	-	-	-

*Copper wire screened, unarmoured

#Twice cable diameter spacing between centres

Table 8.5 ELECTRICAL CHARACTERISTICS
19 / 33 (36) kV ARMOURED XLPE CABLE

Conductor size	Single core cables*					3 core cables			
	A.C. resistance at 90°C		Reactance (50Hz)			A.C. resistance at 90°C		Reactance	
(mm²)	Copper (Ohm/km)	Aluminium (Ohm/km)	Trefoil (Ohm/km)	Flat# (Ohm/km)	Capacitance (uF/km)	Copper (Ohm/km)	Aluminium (Ohm/km)	(50Hz) (Ohm/km)	Capacitance (uF/km)
70	0.342	0.568	0.143	0.194	0.16	0.342	0.568	0.129	0.15
95	0.247	0.411	0.136	0.189	0.18	0.247	0.410	0.122	0.17
120	0.196	0.325	0.13	0.184	0.19	0.196	0.324	0.117	0.18
150	0.160	0.265	0.127	0.178	0.20	0.159	0.265	0.114	0.20
185	0.127	0.211	0.122	0.174	0.22	0.127	0.211	0.110	0.21
240	0.0976	0.161	0.117	0.169	0.24	0.0978	0.161	0.106	0.25
300	0.0785	0.129	0.113	0.166	0.26	0.0789	0.129	0.102	0.27
400	0.0624	0.101	0.109	0.162	0.29	0.0629	0.102	0.098	0.30
500	0.0500	0.0797	0.104	0.158	0.32	-	-	-	-
630	0.0405	0.0630	1.00	0.155	0.35	-	-	-	-
800	0.0388	0.0509	0.095	0.151	0.40	-	-	-	-

*Copper wire screen unarmoured

#Twice cable diameter spacing between centres

Table 8.6 ELECTRICAL CHARACTERISTICS
76 / 132(145) kV SINGEL CORE UNARMOURED XLPE CABLE

Conductor size	Single core cables*				
	A.C. resistance at 90°C		Reactance (50Hz)		
(mm²)	Copper (Ohm/km)	Aluminium (Ohm/km)	Trefoil (Ohm/km)	Flat# (Ohm/km)	Capacitance (uF/km)
300	0.078	0.129	0.147	0.198	0.130
400	0.062	0.099	0.140	0.190	0.140
500	0.049	0.078	0.132	0.182	0.160
630	0.039	0.062	0.127	0.173	0.170
800	0.032	0.050	0.121	0.165	0.195

*Copper wire screen unarmoured

#Twice cable diameter spacing between centres

Table 9 TEMPERATURE CORRECTION FACTORS FOR CONDUCTOR RESISTANCE

Temperature of conductor (°C)	Factor to convert to 20°C	Reciprocal to convert from 20°C
5	1.064	0.940
6	1.059	0.944
7	1.055	0.948
8	1.050	0.952
9	1.046	0.956
10	1.042	0.960
11	1.037	0.964
12	1.033	0.968
13	1.029	0.972
14	1.025	0.976
15	1.020	0.980
16	1.016	0.984
17	1.012	0.988
18	1.008	0.992
19	1.004	0.996
20	1.000	1.000
21	0.996	1.004
22	0.992	1.008
23	0.988	1.012
24	0.984	1.016
25	0.980	1.020
26	0.977	1.024
27	0.973	1.028
28	0.969	1.032
29	0.965	1.036
30	0.962	1.040
31	0.958	1.044
32	0.954	1.048
33	0.951	1.052
34	0.947	1.056
35	0.943	1.060
40	0.926	1.080
45	0.909	1.100
50	0.893	1.120
55	0.877	1.140
60	0.862	1.160
65	0.847	1.180
70	0.833	1.200
75	0.820	1.220
80	0.806	1.240
85	0.794	1.260
90	0.781	1.280

PUBLICATIONS REFERRED TO

IEC 60038	IEC Standard Voltages
IEC 60060	High Voltage Test Techniques
IEC 60183	Guide To The Selection Of High Voltage Cables
IEC 60228	Conductors Of Insulated Cables
IEC 60230	Impulse Test On Cables And Their Accessories
IEC 60287	Electric Cables -- Calculation Of The Current Rating
IEC 60332	Test On Electric Cables Under Fire Conditions
IEC 60502	Power Cables With Extruded Insulation And Their Accessories For Rated Voltages From 1 kV (Um = 1.2 kV) Up To 30 kV (Um = 36 kV)
IEC 60724	Short Circuit Temperature Limits Of Electric Cables With Rated Voltage Of 1kV (Um = 1.2 kV) And 3 kV (Um = 3.6 kV)
IEC 60811	Common Test Methods For Insulating And Sheathing Materials Of Electric Cables And Optical Cables.
IEC 60840	Power Cables With Extruded Insulation And Their Accessories For Rated Voltages Above 30 kV (Um = 36 kV) Up To 150 kV (Um = 170 kV)
IEC 60885	Electrical Test Methods For Electric Cables
IEC 60986	Short Circuit Temperature Limits Of Electric Cables With Rated Voltages From 6 kV (Um = 7.2 kV) Up To 30 kV (Um = 36 kV)