

## Medium CABLES 18/30 (36) kV

Single & Three Cores Copper Conductors,  
XLPE Insulated and PVC Sheathed  
(CU/XLPE/PVC)

### Description

- Stranded circular compacted Copper conductor, semiconducting layer as conductor screen, XLPE insulated, semiconducting layer as non metallic insulation screen, Copper tape or wire as metallic insulation screen, three cores assembled together with non hygroscopic Polypropylene fillers, wrapped with binder tape and PVC sheathed.
- Cables are produced according to IEC 60502 or BS 6622.

### Application

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



Nominal Cross Sectional Area	Max. Conductor Resistance		Operating Capacitance	Inductance		Current Rating				Approx. Overall Diameter	Approx. Weight
	DC at 20 °C	AC at 90 °C		Trefoil	Flat	Laid in Ground		Laid in Free Air			
						Trefoil	Flat	Trefoil	Flat		
mm <sup>2</sup>	Ω/km	Ω/km	μf/km	mh/km	mh/km	A	A	A	A	mm	kg/km

#### Single Core Cable

50	0.3870	0.4937	0.138	0.465	0.649	197	206	209	255	32.1	1325
70	0.2680	0.3420	0.156	0.436	0.621	242	252	262	319	33.9	1575
95	0.1930	0.2465	0.167	0.422	0.607	287	299	317	384	35.3	1855
120	0.1530	0.1956	0.180	0.406	0.591	326	339	366	443	36.7	2140
150	0.1240	0.1588	0.192	0.395	0.580	364	375	416	498	38.5	2525
185	0.0991	0.1272	0.208	0.378	0.563	411	422	478	570	40.2	2930
240	0.0754	0.0973	0.228	0.362	0.547	475	484	565	669	42.8	3540
300	0.0601	0.0781	0.252	0.350	0.535	535	542	650	765	45.6	4225
400	0.0470	0.0618	0.275	0.337	0.522	599	591	745	853	48.4	5165
500	0.0366	0.0490	0.306	0.324	0.509	674	659	859	975	52.0	6350
630	0.0283	0.0391	0.336	0.313	0.498	752	728	981	1103	55.7	7715
800	0.0221	0.0319	0.374	0.303	0.488	869	979	1160	1480	60.6	9660
1000	0.0176	0.0234	0.455	0.297	0.481	1084	1188	1515	1864	71.2	12135

#### Three Core Cables

50	0.3870	0.4938	0.138	0.436	-	197	-	206	-	63.0	3990
70	0.2680	0.3423	0.156	0.410	-	241	-	257	-	67.1	4835
95	0.1930	0.2469	0.167	0.395	-	286	-	309	-	69.9	5705
120	0.1530	0.1961	0.180	0.381	-	325	-	356	-	73.1	6645
150	0.1240	0.1595	0.192	0.368	-	364	-	405	-	76.3	7645
185	0.0991	0.1282	0.208	0.353	-	410	-	463	-	82.2	9385
240	0.0754	0.0986	0.228	0.338	-	475	-	546	-	85.8	10865
300	0.0601	0.0799	0.252	0.327	-	535	-	626	-	91.8	13115
400	0.0470	0.0629	0.276	0.310	-	572	-	669	-	100.0	16935

- This data is applicable for 6.35 / 11 kV cables.
- The above amapacity are caleulated based on double end bonding.
- The amapacity for single core sizes 800 & 1000mm<sup>2</sup> was based on a single end bonding.
- The above data is approximate and subjected to manufacturing tolerance.