

## Medium CABLES 18/30 (36) kV

Single & Three Cores Aluminium Conductors,  
XLPE Insulated and PVC Sheathed  
(AL/XLPE/PVC)

### Description

- Stranded circular compacted Aluminium 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	0.6410	0.8220	0.138	0.465	0.649	153	160	162	198	32.0	1025
70	0.4430	0.5681	0.156	0.436	0.621	188	196	204	248	33.6	1140
95	0.3200	0.4105	0.167	0.422	0.607	222	233	246	299	35.3	1270
120	0.2530	0.3247	0.180	0.406	0.591	254	265	284	346	36.7	1400
150	0.2060	0.2645	0.192	0.395	0.580	283	295	324	391	38.5	1630
185	0.1640	0.2107	0.208	0.378	0.563	321	333	373	449	40.2	1790
240	0.1250	0.1610	0.228	0.362	0.547	372	385	443	530	42.7	2050
300	0.1000	0.1291	0.252	0.350	0.535	421	433	511	608	45.3	2320
400	0.0778	0.1009	0.275	0.337	0.522	478	483	593	693	48.4	2775
500	0.0605	0.0791	0.306	0.324	0.509	544	545	693	802	52.0	3215
630	0.0469	0.0621	0.336	0.313	0.498	617	612	803	921	55.6	3765
800	0.0367	0.0495	0.374	0.303	0.488	715	786	954	1188	60.6	4515
1000	0.0291	0.0376	0.455	0.297	0.481	862	937	1205	1468	71.2	5790

#### Three Core Cables

50	0.6410	0.8220	0.138	0.436	-	153	-	160	-	62.8	3095
70	0.4430	0.5683	0.156	0.410	-	187	-	200	-	66.4	3525
95	0.3200	0.4107	0.167	0.395	-	222	-	240	-	69.9	3985
120	0.2530	0.3250	0.180	0.381	-	253	-	277	-	73.1	4435
150	0.2060	0.2649	0.192	0.368	-	283	-	314	-	76.3	4960
185	0.1640	0.2114	0.208	0.353	-	320	-	361	-	80.4	5555
240	0.1250	0.1618	0.228	0.338	-	371	-	427	-	85.5	6390
300	0.1000	0.1302	0.252	0.327	-	420	-	491	-	91.1	7350
400	0.0778	0.1013	0.276	0.310	-	457	-	554	-	100.9	9575

- 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 & 1000mm2 was based on a single end bonding.
- The above data is approximate and subjected to manufacturing tolerance.