

UNARMOURED SINGLE CORE CABLES

COPPER CONDUCTORS

STANDARD : IEC 60502-2

U₀/U(UM)=3.5/6(7.2)kV



- | | |
|---------------------|-------------------------------------|
| 1. Conductor | 4. Insulation Screen (Non-Metallic) |
| 2. Conductor Screen | 5. Insulation Screen (Metallic) |
| 3. XLPE Insulation | 6. Outer Sheath |

Item code (1)	Size	Diameter of Conductor (Approx.)	Nominal Insulation Thickness	Diameter over Insulation (Approx.)	Nominal Outer Sheath thickness		Overall Diameter (Approx.)		Weight of Cable (Approx.)	
					CUT	CUW	CUT	CUW	CUT	CUW
	mm ²	mm	mm	mm	mm	mm	mm	mm	kg/km	kg/km
10	25	5.9	2.5	12.5	1.5	1.5	18	20	525	725
11	35	6.9	2.5	13.5	1.5	1.6	19	21	650	825
12	50	8.1	2.5	14.7	1.6	1.6	21	22	775	950
13	70	9.7	2.5	16.3	1.6	1.6	22	24	1000	1175
14	95	11.4	2.5	18.0	1.7	1.7	24	26	1300	1475
15	120	12.9	2.5	19.5	1.7	1.8	26	27	1550	1750
16	150	14.3	2.5	20.9	1.8	1.8	27	29	1825	2100
17	185	16.0	2.5	22.6	1.8	1.9	29	31	2200	2400
18	240	18.4	2.6	25.2	1.9	1.9	32	33	2800	3000
19	300	20.4	2.8	27.6	2.0	2.0	34	36	3400	3600
20	400	23.2	3.0	30.8	2.1	2.2	38	40	4275	4675
21	500	26.7	3.2	34.7	2.2	2.3	42	44	5375	5800
22	630	30.4	3.2	38.4	2.3	2.4	46	48	6800	7075

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Size	Max. DC Resistance at 20°C	Inductance		Capacitance	Adiabatic Short Circuit Current for 1 second			Current Carrying Capacity (2)				Voltage Drop per phase
		Trefoil	Flat		Cond.	CUT	CUW	CUT		CUW		
								Direct Buried	In Air	Direct Buried	In Air	
mm ²	Ohm/km	mH/km	mH/km	mF/km	kA	kA	kA	Amps	Amps	Amps	Amps	V/A.Km
25	0.7270	0.444	0.760	0.26	3.575	0.341	2.000	164	158	166	162	0.842
35	0.5240	0.426	0.745	0.29	5.005	0.364	2.000	197	191	198	196	0.632
50	0.3870	0.408	0.720	0.32	7.150	0.392	2.000	232	230	234	235	0.488
70	0.2680	0.388	0.694	0.37	10.010	0.430	2.000	284	288	286	293	0.362
95	0.1930	0.378	0.679	0.39	13.585	0.469	2.000	340	352	341	358	0.283
120	0.1530	0.364	0.660	0.44	17.160	0.504	2.000	386	407	387	413	0.239

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150	0.1240	0.354	0.645	0.48	21.450	0.537	3.125	432	463	431	469	0.208
185	0.0991	0.343	0.630	0.52	26.455	0.576	3.125	488	532	485	537	0.180
240	0.0754	0.332	0.611	0.56	34.320	0.637	3.125	564	631	559	633	0.154
300	0.0601	0.324	0.596	0.58	42.900	0.693	3.125	633	721	626	722	0.137
400	0.0470	0.313	0.578	0.61	57.200	0.767	4.375	715	835	696	826	0.122
500	0.0366	0.306	0.564	0.64	71.500	0.858	4.375	805	965	777	943	0.111
630	0.0283	0.296	0.548	0.71	90.090	0.944	4.375	898	1102	860	1069	0.102

1. The code numbers to be read in conjunction with 02020101 at the beginning. Example for 150 mm² cable, the code number is 0202010116.

Code number for other types of insulation screen. Replace the 6th digit as follows:

2 for S + CUW, 3 for B + CUT, 4 for B + CUW

2. LAYING CONDITIONS :

Underground temperature of soil 20°C, Ground thermal resistivity 100°C cm/W, Ambient temperature 30°C. Depth of laying = 700 mm.