

U₀/U(U_m)=38/66(72.5)KV-SINGLE-CORE CABLE

ALUMINIUM CONDUCTORS/ 15 mm XLPE INSULATION THICKNESS /LEAD screen /HDPE SHEATHED

Nominal cross-sectional area	Overall diameter Φ approx	Net weight approx	Max resistance		short circuit current of conductor for 1 sec.	charging current	Capacitance	Inductance		Voltage drop at 50 HZ cos. ϕ 0.8	
			DC at 20°C	AC at 90°C				trefoil	flat	trefoil	flat
mm ²	mm	kg/km	Ω /KM	Ω /KM	ka/km	Amp/km	μ f/km	mh/km	mh/km	V/A/km	V/A/km
150	60.9	6872	0.2060	0.2650	13.80	1.44	0.121	0.458	0.504	0.548	0.571
185	63.7	7373	0.1640	0.2110	17.02	1.59	0.134	0.434	0.480	0.471	0.495
240	66.2	7885	0.1250	0.1620	22.08	1.73	0.145	0.417	0.463	0.404	0.427
300	68.7	8410	0.1000	0.1300	27.60	1.87	0.156	0.402	0.448	0.358	0.381
400	71.2	9043	0.0778	0.1000	36.80	2.00	0.168	0.389	0.435	0.315	0.339
500	75.2	9864	0.0605	0.0800	46.00	2.22	0.186	0.371	0.417	0.283	0.306
630	78.7	10753	0.0469	0.0621	57.96	2.40	0.201	0.359	0.405	0.255	0.278
800	82.7	11876	0.0367	0.0495	73.60	2.61	0.219	0.346	0.392	0.233	0.256
1000	90.7	13500	0.0291	0.0376	92.00	3.03	0.254	0.326	0.372	0.209	0.232
1200	94.2	14649	0.0247	0.0325	110.40	3.21	0.269	0.319	0.365	0.199	0.222

IN EGYPT 17 mm XLPE INSULATION THICKNESS

U₀/U(U_m)=38/66(72.5)KV-SINGLE-CORE CABLE

ALUMINIUM CONDUCTORS/ 15 mm XLPE INSULATION THICKNESS /CU screen /HDPE SHEATHED

Nominal cross-sectional area	Overall diameter Φ approx	Net weight approx	Max resistance		short circuit current of conductor for 1 sec.	charging current	Capacitance	Inductance		Voltage drop at 50 HZ cos. ϕ 0.8	
			DC at 20°C	AC at 90°C				trefoil	flat	trefoil	flat
mm ²	mm	kg/km	Ω /KM	Ω /KM	ka/km	Amp/km	μ f/km	mh/km	mh/km	V/A/km	V/A/km
150	59.6	3435	0.2060	0.2650	13.80	1.44	0.121	0.454	0.500	0.546	0.569
185	62.4	3707	0.1640	0.2110	17.02	1.59	0.134	0.430	0.476	0.469	0.493
240	64.9	4014	0.1250	0.1620	22.08	1.73	0.145	0.413	0.459	0.402	0.425
300	67.4	4334	0.1000	0.1300	27.60	1.87	0.156	0.398	0.444	0.356	0.379
400	69.9	4762	0.0778	0.1000	36.80	2.00	0.168	0.385	0.431	0.314	0.337
500	73.9	5256	0.0605	0.0800	46.00	2.22	0.186	0.368	0.414	0.281	0.304
630	77.4	5859	0.0469	0.0621	57.96	2.40	0.201	0.355	0.401	0.253	0.276
800	81.4	6654	0.0367	0.0495	73.60	2.61	0.219	0.343	0.389	0.232	0.255
1000	89.4	7623	0.0291	0.0376	92.00	3.03	0.254	0.323	0.369	0.207	0.231
1200	92.9	8484	0.0247	0.0325	110.40	3.21	0.269	0.316	0.362	0.198	0.221

IN EGYPT 17 mm XLPE INSULATION THICKNESS

U_o/U(U_m)=38/66(72.5)KV-SINGLE-CORE CABLE -ALUMINIUM CONDUCTORS

Current carrying capacity

Nominal cross-sectional area	cables in ground at 25 °C				cables in air 35 °C			cables in ground at 35 °C				cables in air 45 °C		
	solid-bonded sheaths		cross-bonded sheaths		solid-bonded sheaths		cross bonded sheaths	solid-bonded sheaths		cross-bonded sheaths		solid-bonded sheaths		cross-bonded sheaths
	trefoil touching	axial space 0.15m	axial space 0.15m	axial space 0.45m	trefoil touching	axial space 0.15m	axial space 0.15m	trefoil touching	axial space 0.15m	axial space 0.15m	axial space 0.45m	trefoil touching	axial space 0.15m	axial space 0.15m
mm ²	trefoil	flat	flat	flat	trefoil	flat	flat	trefoil	flat	flat	flat	trefoil	flat	flat
150	292	302	310	339	367	404	410	269	278	285	312	330	364	369
185	331	341	352	386	421	463	472	305	314	324	355	379	417	425
240	383	391	408	448	494	544	559	352	360	375	412	445	490	503
300	431	437	461	508	565	621	643	397	402	424	467	509	559	579
400	492	491	528	584	656	719	753	453	452	486	537	590	647	678
500	560	551	603	669	761	829	879	515	507	555	615	685	746	791
630	635	612	688	766	879	950	1025	584	563	633	705	791	855	923
800	712	672	778	873	1008	1081	1191	655	618	716	803	907	973	1072
1000	783	728	895	1050	1116	1188	1335	720	670	823	966	1004	1069	1202
1200	835	764	1010	1120	1208	1278	1463	768	703	929	1030	1087	1150	1317

Thermal resistivity of soil 1.2 °C m/w

Depth of laying 1 m