

6/10KV Power Cables Single Core Cables to IEC 60502

Single Core 6/10KV (Um=12KV) Dimensional Data

Nom. Cross-Section Area				Unarmored Cables				Aluminum Wire Armored Cables					
	Nom. Insulation Thickness	Copper Tape Thickness	Copper Wire Screen Area*	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight		Nom. Bedding Thickness	Armour Wire Size	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight	
						CU	AL					CU	AL
mm ²	mm	mm	mm ²	mm	mm	kg/km		mm	mm	mm	mm	kg/km	
16	3.4	0.1	16	1.8	18	450	350	1.2	1.6	1.8	24	770	670
25	3.4	0.1	16	1.8	20	560	400	1.2	1.6	1.8	25	910	750
35	3.4	0.1	16	1.8	21	680	460	1.2	1.6	1.8	26	1040	820
50	3.4	0.1	16	1.8	22	810	520	1.2	1.6	1.8	28	1190	900
70	3.4	0.1	16	1.8	24	1050	620	1.2	1.6	1.9	29	1470	1040
95	3.4	0.1	16	1.8	25	1320	730	1.2	1.6	2.0	31	1780	1190
120	3.4	0.1	16	1.8	27	1580	840	1.2	2.0	2.0	34	2150	1410
150	3.4	0.1	25	1.9	28	1880	960	1.2	2.0	2.1	35	2480	1560
185	3.4	0.1	25	1.9	30	2250	1100	1.2	2.0	2.1	37	2890	1730
240	3.4	0.1	25	2.0	33	2870	1350	1.2	2.0	2.2	40	3570	2050
300	3.4	0.1	25	2.1	35	3490	1580	1.2	2.0	2.3	42	4230	2330
400	3.4	0.1	35	2.2	39	4350	1920	1.3	2.5	2.4	47	5320	2890
500	3.4	0.1	35	2.2	39.9	5235	2240	1.4	2.5	2.5	51	6510	3530
630	3.4	0.1	35	2.3	43.7	6675	2765	1.5	2.5	2.6	56	7960	4050

800	3.4	0.1	50	2.5	48.6	8225	3330	1.5	2.5	2.7	59	9670	4850
1000	3.4	0.1	50	2.6	52.9	10210	4030	1.6	2.5	2.9	63	11710	5570

* For capacitance & charging current values, multiply values shown by 1.2 for EPR insulated cables.

*Optional wire screen can be provided in combination of copper tapes. Nominal screen area, as stated in the table, can be supplied as standard.

Electrical Data

Nom. Cross-Section Area	D C Resistance CU / AL	A C Resistance CU / AL	Short Circuit Rating of Conductor CU / AL 1 sec	Capacitance	Charging Current	Short Circuit Rating of Copper Wire Screen 1 sec	Short Circuit Rating of Copper Tape Screen 1 sec	Reactance		Inductance		Impedance			
								Trefoil	Flat Spaced	Trefoil	Flat Spaced	Trefoil		Flat Spaced	
												CU	AL	CU	AL
mm ²	μΩ/m	μΩm	kA	pF/m	mA/m	kA	kA	μΩ/m		nH/m		μΩ/ m		μΩ/ m	
16	1150/1910	1460/2420	2.2/1.4	187	0.39	2.6	0.5	152	216	480	680	1462	2411	1478	2421
25	727/1200	927/1538	3.6/2.3	208	0.42	2.6	0.5	144	210	460	660	936	1544	952	1554
35	524/868	668/1113	5.0/3.2	229	0.46	2.6	0.6	136	200	440	640	679	1121	695	1131
50	387/641	494/822	6.8/4.4	252	0.50	2.6	0.6	131	195	420	620	511	834	527	844
70	268/443	343/568	9.8/6.3	288	0.58	2.6	0.7	122	188	390	600	364	583	386	597
95	193/320	248/410	13.3/8.5	323	0.65	2.6	0.7	122	182	390	580	272	427	300	446
120	153/253	196/325	17.2/11.0	353	0.71	2.6	0.8	116	172	370	550	225	345	257	367
150	124/206	159/265	21.2/13.5	380	0.76	4.3	0.8	110	166	350	530	193	287	229	313
185	99.1/164	128/211	26.6/17.0	416	0.83	4.3	0.9	107	166	340	530	165	237	206	267
240	75.4/125	98/161	34.9/22.3	460	0.92	4.3	0.9	104	163	330	520	140	191	185	226
300	60.1/100	80/130	43.8/28.0	506	1.01	4.3	1.0	100	157	320	500	126	163	174	203

400	47.0/77.8	64/102	57.3/36.6	561	1.12	5.8	1.1	94	154	300	490	113	141	164	184
500	36.6/60.5	51/81.0	72.3/46.2	619	1.24	5.8	1.2	91	151	290	480	105	124	158	171
630	28.3/46.9	42/64.0	91.2/58.3	698	1.37	5.8	1.3	91	148	290	470	97	110	151	160
800	22.1/36.7	35/55	114.4/75.0	780	1.39	8.2	1.4	88	144	280	470	92	101	147	153
1000	17.6/29.1	30/46	143.0/94.0	860	1.54	8.2	1.5	85	143	270	460	88	95	144	148

* For capacitance & charging current values, multiply values shown by 1.2 for EPR insulated cables.