

6/10KV Power Cables Three Cores Cables to IEC 60502

Three Core 6/10KV (Um=7.2KV) Dimensional Data

Nom. Cross-Section Area	Nom. Insulation Thickness	Copper Tape Thickness	Copper Wire Screen Area*	Unarmoured Cables				Steel Round-Wire Armoured Cables					
				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	2.2	36	1410	1110	1.2	2.0	2.4	42	3000	2700
25	3.4	0.1	16	2.3	39	1800	1320	1.3	2.5	2.5	46	3900	3430
35	3.4	0.1	16	2.3	41	2170	1500	1.3	2.5	2.6	49	4430	3770
50	3.4	0.1	16	2.4	44	2630	1730	1.4	2.5	2.7	52	5080	4190
70	3.4	0.1	16	2.6	48	3400	2110	1.5	2.5	2.8	56	6050	4750
95	3.4	0.1	16	2.7	52	4310	2510	1.5	2.5	2.9	60	7180	5380
120	3.4	0.1	16	2.8	55	5150	2890	1.6	2.5	3.0	63	8230	5960
150	3.4	0.1	25	2.9	58	6100	3300	1.7	2.5	3.1	67	9380	6580
185	3.4	0.1	25	3.0	62	7310	3810	1.7	3.15	3.3	72	11610	8110
240	3.4	0.1	25	3.2	69	9290	4680	1.8	3.15	3.5	79	14110	9510
300	3.4	0.1	25	3.3	73	11240	5450	1.9	3.15	3.7	84	16420	10630
400	3.4	0.1	35	3.6	81	14040	6660	2.0	3.5	3.9	92	20620	12880
500	3.4	0.1	35	3.7	88	17830	8450	2.1	3.5	4.0	99.	25090	16530
630	3.4	0.1	35	3.9	96	20030	10895	2.2	3.5	4.1	109	30880	19670

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

Nom. Cross-Section Area	Steel Flat Wire Armoured Cables						Double Steel Tape Armoured Cables					
	Nom. Bedding Thickness	Armour Wire Size	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight		Nom. Bedding Thickness	No of Steel tapes x nom tape thickness	Nom. Sheath Thickness	Approx. Overall Diameter	Approx. Weight	
					CU	AL					CU	AL
mm ²	mm	mm	mm	mm	kg/km		mm	mm	mm	mm	kg/km	
16	1.2	0.8	2.2	39.7	2795	2515	1.2	2x0.5	2.3	40.5	2680	2395
25	1.3	0.8	2.2	42.7	3305	2885	1.3	2x0.5	2.4	43.7	3195	2775
35	1.3	0.8	2.3	45.2	3835	3215	1.3	2x0.5	2.5	46.2	3720	3100
50	1.4	0.8	2.4	47.8	4325	3570	1.4	2x0.5	2.6	48.8	4200	3445
70	1.5	0.8	2.5	51.8	5320	4185	1.5	2x0.5	2.7	52.8	5185	4050
95	1.5	0.8	2.7	56.1	6450	4875	1.5	2x0.5	2.8	56.9	6280	4700
120	1.6	0.8	2.8	59.7	7545	5510	1.6	2x0.5	2.9	60.5	7360	5325
150	1.7	0.8	2.9	63.1	8610	6150	1.7	2x0.5	3.0	63.9	8420	5950
185	1.7	0.8	3.0	67.4	10120	6995	1.7	2x0.5	3.1	68.2	9910	6780
240	1.8	0.8	3.2	73.0	12430	8205	1.8	2x0.5	3.3	73.8	12200	7970
300	1.9	0.8	3.3	78.3	14775	9455	1.9	2x0.5	3.4	79.1	14530	9200
400	2.0	0.8	3.5	85.2	17950	11190	2.0	2x0.8	3.7	87.7	18600	11850
500	2.1	0.8	3.7	92.8	21970	13270	2.1	2x0.8	3.9	95.3	22680	13990
630	2.2	0.8	4.0	102.7	27480	16160	2.2	2x0.8	4.1	105.0	28200	16910

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 Per Core 1 sec	Short Circuit Rating of Copper Wire Screen Per Core 1 sec	Reactance	Inductance
mm ²	μΩ/m	μΩ/m	kA	pF/m	mA/m	kA	kA	μΩ/m	nH/m
16	1150/1910	1470/2420	2.2/1.4	186	0.40	2.6	0.5	131	410
25	727/1200	927/1538	3.6/2.3	216	0.43	2.6	0.5	123	390
35	524/868	668/1113	5.0/3.2	237	0.47	2.6	0.6	115	370
50	387/641	494/822	6.8/4.4	266	0.52	2.6	0.6	109	350
70	268/443	343/568	9.8/6.3	298	0.60	2.6	0.7	103	330
95	193/320	248/410	13.3/8.5	334	0.67	2.6	0.7	99	320
120	153/253	196/325	17.2/11.0	365	0.73	2.6	0.8	96	310
150	124/206	159/265	21.2/13.5	392	0.78	4.3	0.8	93	300
185	99.1/164	128/211	26.6/17.0	430	0.86	4.3	0.9	90	290
240	75.4/125	98/161	34.9/22.3	476	0.95	4.3	0.9	87	280
300	60.1/100	80/130	43.8/28.0	524	1.05	4.3	1.0	85	270
400	47.0/77.8	64/102	57.3/36.6	580	1.16	5.8	1.1	81	260
500	36.6/60.5	51/81	72.3/46.2	630	1.26	5.8	1.2	78	250
630	28.3/46.9	42/64	91.2/58.3	690	1.36	5.8	1.3	76	240