

**600/1000 VOLTS SINGLE-CORE -SHEATHED CABLE  
WITH COPPER CONDUCTOR - PVC 70 °C**

Nominal cross-sectional area	Class of conductor	Thickness of insulation	Un-armoured			Armoured				
			Thickness of sheath	Mean overall diameter $\Phi$ approx	Net weight approx	Thickness of bedding sheath	Thickness of ALU tape	Thickness of sheath	Mean overall diameter $\Phi$ approx	Net weight approx
mm <sup>2</sup>		mm	mm	mm	kg/km	mm	mm	mm	mm	kg/km
1.5	1	0.8	1.1	4.9	40	-	-	-	-	-
	2	0.8	1.1	5.1	42	-	-	-	-	-
2	1	0.8	1.1	5.4	40	-	-	-	-	-
	2	0.8	1.1	5.6	42	-	-	-	-	-
2.5	1	0.8	1.1	5.6	55	-	-	-	-	-
	2	0.8	1.1	5.8	57	-	-	-	-	-
3	1	1	1.1	5.8	62	-	-	-	-	-
	2	1	1.1	6.1	64	-	-	-	-	-
4	1	1	1.1	6.0	73	-	-	-	-	-
	2	1	1.1	6.3	76	-	-	-	-	-
6	2	1	1.2	6.9	99	-	-	-	-	-
10	2	1	1.2	8.2	151	0.8	0.5	1.3	12.1	251
16	2	1	1.2	9.2	215	0.8	0.5	1.4	13.0	325
25	2	1.2	1.3	11.0	322	0.8	0.5	1.4	14.8	448
35	2	1.2	1.3	12.1	425	0.8	0.5	1.5	15.9	563
50	2	1.4	1.4	13.7	588	0.8	0.5	1.5	17.6	744
70	2	1.4	1.5	15.8	797	0.9	0.5	1.6	19.8	979
95	2	1.6	1.5	17.9	1063	0.9	0.5	1.7	22.0	1272
120	2	1.6	1.6	19.1	1306	0.9	0.5	1.7	23.2	1529
150	2	1.8	1.6	21.2	1621	1.0	0.5	1.8	25.3	1871
185	2	2	1.7	23.4	1990	1.0	0.5	1.8	27.7	2270
240	2	2.2	1.8	26.3	2555	1.1	0.5	1.9	30.7	2875
300	2	2.4	1.9	29.4	3178	1.1	0.5	2.0	33.9	3543
400	2	2.6	2.0	32.7	4170	1.2	0.5	2.2	37.4	4584
500	2	2.8	2.2	37.3	5177	1.3	0.5	2.3	42.1	5665
630	2	2.8	2.3	41.1	6451	1.3	0.5	2.4	46.0	7001
800	2	2.8	2.4	44.8	8099	1.4	0.5	2.6	49.9	8715

**600/1000 VOLTS SINGLE-CORE -SHEATHED CABLE  
WITH COPPER CONDUCTOR - PVC 70 °C**

Nominal cross-sectional area	Max resistance DC at 20°C	Max resistance AC at 70°C	Un-armoured					armoured		
			Current carrying capacity				Voltage drop at 50 HZ COS. φ 0.8	Current carrying capacity		Voltage drop at 50 HZ COS. φ 0.8
			Ground at 35°C		Air at 40°C			Ground at 35°C	Air at 40°C	
			Direct laid	Duct	Free	Pipe				
1.5	12.1	14.5	24	19	18	15	23.381	-	-	-
2	9.15	10.9	27	21	20	17	17.598	-	-	-
2.5	7.41	8.87	31	24	23	19	14.351	-	-	-
3	6.1	7.41	37	29	27	22	12.027	-	-	-
4	4.61	5.51	41	32	31	24	8.979	-	-	-
6	3.08	3.68	51	40	40	35	6.033	-	-	-
10	1.83	2.18	68	53	55	42	3.617	67	54	3.614
16	1.15	1.38	87	68	71	55	2.329	85	70	2.329
25	0.727	0.870	112	87	95	72	1.509	110	93	1.506
35	0.524	0.627	134	105	116	89	1.115	131	114	1.114
50	0.387	0.464	158	123	141	108	0.853	155	138	0.849
70	0.268	0.323	195	155	179	136	0.622	191	175	0.620
95	0.193	0.232	235	188	222	169	0.474	230	218	0.472
120	0.153	0.185	265	212	258	190	0.397	260	253	0.395
150	0.124	0.151	300	240	269	215	0.342	294	264	0.339
185	0.0991	0.1215	335	268	345	245	0.294	328	338	0.290
240	0.0754	0.0941	385	316	407	285	0.249	377	399	0.244
300	0.0601	0.0767	435	357	469	324	0.220	426	460	0.215
400	0.0470	0.0593	490	402	542	370	0.191	480	531	0.186
500	0.0366	0.0476	545	450	624	420	0.170	534	612	0.166
630	0.0283	0.0386	610	500	717	470	0.154	598	703	0.150
800	0.0221	0.0289	781	641	888	582.2	0.137	766	870	0.134

**600/1000 VOLTS SINGLE-CORE -SHEATHED CABLE  
WITH COPPER CONDUCTOR - XLPE 90 °C**

Nominal cross-sectional area	Class of conductor	Thickness of insulation	Un-armoured			Armoured				
			Thickness of sheath	Mean overall diameter $\Phi$ approx	Net weight approx	Thickness of bedding sheath	Thickness of ALU tape	Thickness of sheath	Mean overall diameter $\Phi$ approx	Net weight approx
mm <sup>2</sup>		mm	mm	mm	kg/km	mm	mm	mm	mm	kg/km
1.5	1	0.7	1.1	4.7	33	-	-	-	-	-
	2	0.7	1.1	4.9	35	-	-	-	-	-
2	1	0.7	1.1	5.2	42	-	-	-	-	-
	2	0.7	1.1	3.7	43	-	-	-	-	-
2.5	1	0.7	1.1	5.4	47	-	-	-	-	-
	2	0.7	1.1	5.6	49	-	-	-	-	-
3	1	0.7	1.1	5.2	53	-	-	-	-	-
	2	0.7	1.1	5.5	55	-	-	-	-	-
4	1	0.7	1.1	5.4	64	-	-	-	-	-
	2	0.7	1.1	5.7	66	-	-	-	-	-
6	2	0.7	1.2	6.3	86	-	-	-	-	-
10	2	0.7	1.2	7.6	135	0.8	0.5	1.3	11.5	213
16	2	0.7	1.2	8.6	197	0.8	0.5	1.4	12.4	314
25	2	0.9	1.3	10.4	299	0.8	0.5	1.4	14.2	436
35	2	0.9	1.3	11.5	399	0.8	0.5	1.5	15.3	550
50	2	1	1.4	12.9	556	0.8	0.5	1.5	16.8	727
70	2	1.1	1.5	15.2	761	0.9	0.5	1.6	19.2	965
95	2	1.1	1.5	16.9	1018	0.9	0.5	1.7	21.0	1248
120	2	1.2	1.6	18.3	1257	0.9	0.5	1.7	22.4	1510
150	2	1.4	1.6	20.4	1565	1.0	0.5	1.8	24.5	1851
185	2	1.6	1.7	22.6	1926	1.0	0.5	1.8	26.9	2249
240	2	1.7	1.8	25.3	2478	1.1	0.5	1.9	29.7	2848
300	2	1.8	1.9	28.2	3085	1.1	0.5	2.0	32.7	3508
400	2	2	2.0	31.5	4061	1.2	0.5	2.2	36.2	4547
500	2	2.2	2.2	36.1	5045	1.3	0.5	2.3	40.9	5625
630	2	2.4	2.3	40.3	6303	1.3	0.5	2.4	45.2	6973
800	2	2.6	2.4	44.4	7935	1.4	0.5	2.6	49.5	8700

**600/1000 VOLTS SINGLE-CORE -SHEATHED CABLE  
WITH COPPER CONDUCTOR - XLPE 90 °C**

Nominal cross-sectional area	Max resistance DC at 20°C	Max resistance AC at 90°C	Un-armoured					armoured		
			Current carrying capacity				Voltage drop at 50 HZ COS. φ 0.8	Current carrying capacity		Voltage drop at 50 HZ COS. φ 0.8
			Ground at 35°C		Air at 40°C			Ground at 35°C	Air at 40°C	
mm2	Ω/KM	Ω/KM	Direct laid	Duct	Free	Pipe	V/A/KM	Direct laid	Free	V/A/KM
1.5	12.1	15.4	30	23	22	19	24.818	-	-	-
2	9.15	11.5	34	27	25	22	18.556	-	-	-
2.5	7.41	9.45	40	31	29	24	15.276	-	-	-
3	6.1	8.52	44	34	33	28	13.794	-	-	-
4	4.61	5.88	50	39	38	32	9.563	-	-	-
6	3.08	3.93	63	49	48	40	6.426	-	-	-
10	1.83	2.33	83	65	66	54	3.851	81	65	3.882
16	1.15	1.47	107	83	88	70	2.468	105	86	2.496
25	0.727	0.927	137	107	116	92	1.596	134	114	1.619
35	0.524	0.668	165	129	143	112	1.177	162	140	1.199
50	0.387	0.494	195	152	175	134	0.896	191	172	0.916
70	0.268	0.343	238	188	222	168	0.651	233	218	0.668
95	0.193	0.248	286	226	274	205	0.496	280	269	0.512
120	0.153	0.197	327	258	326	237	0.413	320	319	0.428
150	0.124	0.16	363	290	367	265	0.354	356	360	0.368
185	0.0991	0.129	410	328	425	300	0.303	402	417	0.316
240	0.0754	0.100	474	379	500	360	0.255	465	490	0.267
300	0.0601	0.0815	532	426	580	410	0.224	521	568	0.236
400	0.047	0.0661	600	492	675	469	0.199	588	662	0.209
500	0.0366	0.0543	673	552	770	530	0.179	660	755	0.188
630	0.0283	0.0453	750	615	900	600	0.163	735	882	0.172
800	0.0221	0.0357	960	788	1152	768	0.147	941	1129	0.156

## 600/1000 VOLTS SINGLE-CORE -SHEATHED CABLE

### WITH ALUMINUM CONDUCTOR - PVC 70 °C

Nominal cross-sectional area	Class of conductor	Thickness of insulation	Un-armoured			Armoured				
			Thickness of sheath	Mean overall diameter $\Phi$ approx	Net weight approx	Thickness of bedding sheath	Thickness of ALU tape	Thickness of sheath	Mean overall diameter $\Phi$ approx	Net weight approx
mm <sup>2</sup>		mm	mm	mm	kg/km	mm	mm	mm	mm	kg/km
10	2	1	1.2	8.2	89	0.8	0.5	1.3	12.1	189
16	2	1	1.2	9.2	116	0.8	0.5	1.4	13.0	226
25	2	1.2	1.3	11.0	167	0.8	0.5	1.4	14.8	293
35	2	1.2	1.3	12.1	208	0.8	0.5	1.5	15.9	346
50	2	1.4	1.4	13.7	278	0.8	0.5	1.5	17.6	434
70	2	1.4	1.5	15.8	363	0.9	0.5	1.6	19.8	545
95	2	1.6	1.5	17.9	474	0.9	0.5	1.7	22.0	683
120	2	1.6	1.6	19.1	562	0.9	0.5	1.7	23.2	785
150	2	1.8	1.6	21.2	691	1.0	0.5	1.8	25.3	941
185	2	2	1.7	23.4	843	1.0	0.5	1.8	27.7	1123
240	2	2.2	1.8	26.3	1067	1.1	0.5	1.9	30.7	1387
300	2	2.4	1.9	29.4	1318	1.1	0.5	2.0	33.9	1683
400	2	2.6	2.0	32.7	1690	1.2	0.5	2.2	37.4	2104
500	2	2.8	2.2	37.3	2077	1.3	0.5	2.3	42.1	2565
630	2	2.8	2.3	41.1	2545	1.3	0.5	2.4	46.0	3095
800	2	2.8	2.4	44.8	3139	1.4	0.5	2.6	49.9	3755

## 600/1000 VOLTS SINGLE-CORE -SHEATHED CABLE

### WITH ALUMINUM CONDUCTOR - XLPE 90 °C

Nominal cross-sectional area	Class of conductor	Thickness of insulation	Un-armoured			Armoured				
			Thickness of sheath	Mean overall diameter $\Phi$ approx	Net weight approx	Thickness of bedding sheath	Thickness of ALU tape	Thickness of sheath	Mean overall diameter $\Phi$ approx	Net weight approx
mm <sup>2</sup>		mm	mm	mm	kg/km	mm	mm	mm	mm	kg/km
10	2	0.7	1.2	7.6	73	0.8	0.5	1.3	11.5	151
16	2	0.7	1.2	8.6	98	0.8	0.5	1.4	12.4	215
25	2	0.9	1.3	10.4	144	0.8	0.5	1.4	14.2	281
35	2	0.9	1.3	11.5	182	0.8	0.5	1.5	15.3	333
50	2	1	1.4	12.9	246	0.8	0.5	1.5	16.8	417
70	2	1.1	1.5	15.2	327	0.9	0.5	1.6	19.2	531
95	2	1.1	1.5	16.9	429	0.9	0.5	1.7	21.0	659
120	2	1.2	1.6	18.3	513	0.9	0.5	1.7	22.4	766
150	2	1.4	1.6	20.4	635	1.0	0.5	1.8	24.5	921
185	2	1.6	1.7	22.6	779	1.0	0.5	1.8	26.9	1102
240	2	1.7	1.8	25.3	990	1.1	0.5	1.9	29.7	1360
300	2	1.8	1.9	28.2	1225	1.1	0.5	2.0	32.7	1648
400	2	2	2.0	31.5	1581	1.2	0.5	2.2	36.2	2067
500	2	2.2	2.2	36.1	1945	1.3	0.5	2.3	40.9	2525
630	2	2.4	2.3	40.3	2397	1.3	0.5	2.4	45.2	3067
800	2	2.6	2.4	44.4	2975	1.4	0.5	2.6	49.5	3740

**600/1000 VOLTS SINGLE-CORE -SHEATHED CABLE  
WITH ALUMINUM CONDUCTOR - PVC 70 °C**

Nominal cross-sectional area	Max resistance DC at 20°C	Max resistance AC at 70°C	Un-armoured					armoured		
			Current carrying capacity				Voltage drop at 50 HZ COS. φ 0.8	Current carrying capacity		Voltage drop at 50 HZ COS. φ 0.8
			Ground at 35°C		Air at 40°C			Ground at 35°C	Air at 40°C	
mm2	Ω/KM	Ω/KM	Direct laid	Duct	Free	Pipe	V/A/KM	Direct laid	Free	V/A/KM
10	3.08	3.3	55	43	40	34	5.409	54	40	5.438
16	1.91	2.3	68	53	55	47	3.801	67	54	3.828
25	1.2	1.44	87	68	96	82	2.421	85	94	2.443
35	0.868	1.043	105	82	84	71	1.781	103	82	1.801
50	0.641	0.771	123	96	105	89	1.344	121	103	1.363
70	0.443	0.533	151	118	130	111	0.958	148	127	0.974
95	0.32	0.385	181	141	161	137	0.719	177	158	0.735
120	0.253	0.305	206	165	190	152	0.589	202	186	0.604
150	0.206	0.249	230	184	215	172	0.499	225	211	0.512
185	0.164	0.199	261	209	250	195	0.418	256	245	0.431
240	0.125	0.153	305	250	300	234	0.343	299	294	0.355
300	0.1	0.123	342	280	350	273	0.294	335	343	0.305
400	0.0778	0.0971	390	320	405	316	0.251	382	397	0.261
500	0.0605	0.0777	444	364	472	368	0.219	435	463	0.228
630	0.0469	0.0629	505	414	555	433	0.193	495	544	0.202
800	0.0367	0.0472	645	529	709	553	0.166	632	695	0.175

**600/1000 VOLTS SINGLE-CORE -SHEATHED CABLE**

**WITH ALUMINUM CONDUCTOR - XLPE 90 °C**

Nominal cross-sectional area	Max resistance DC at 20°C	Max resistance AC at 90°C	Un-armoured					armoured		
			Current carrying capacity				Voltage drop at 50 HZ COS. φ 0.8	Current carrying capacity		Voltage drop at 50 HZ COS. φ 0.8
			Ground at 35°C		Air at 40°C			Ground at 35°C	Air at 40°C	
mm2	Ω/KM	Ω/KM	Direct laid	Duct	Free	Pipe	V/A/KM	Direct laid	Free	V/A/KM
10	3.08	3.95	63	50	45	36	6.443	61	45	6.474
16	1.91	2.45	69	55	56	45	4.036	67	55	4.064
25	1.2	1.54	88	71	98	78	2.576	87	96	2.600
35	0.868	1.113	106	85	85	68	1.889	104	84	1.911
50	0.641	0.822	125	100	106	85	1.421	122	105	1.441
70	0.443	0.569	153	123	132	105	1.012	150	130	1.030
95	0.32	0.411	184	147	163	131	0.756	180	161	0.773
120	0.253	0.325	209	167	192	154	0.618	204	190	0.633
150	0.206	0.265	233	186	217	174	0.522	228	214	0.536
185	0.164	0.212	264	211	253	202	0.436	259	249	0.449
240	0.125	0.163	315	252	310	248	0.356	309	306	0.368
300	0.1000	0.1310	353	283	362	289	0.304	346	356	0.315
400	0.0778	0.1000	390	312	405	324	0.253	382	399	0.263
500	0.0605	0.0870	482	386	513	410	0.231	473	505	0.240
630	0.0469	0.0655	510	408	561	448	0.196	500	552	0.205
800	0.0367	0.0513	680	544	747	598	0.223	666	736	0.232