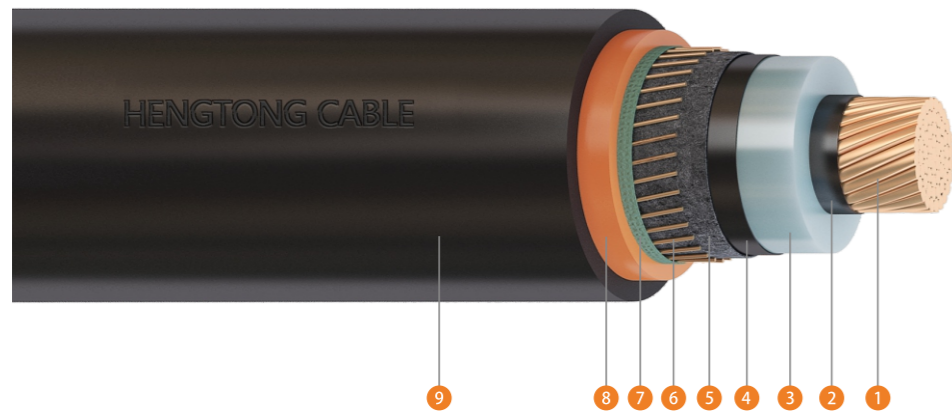


6.35/11kV Single Core Cu/XLPE/CWS/PVC/HDPE



- 1 Compacted Cu conductor
- 2 Conductor screen
- 3 XLPE insulation
- 4 Insulation screen
- 5 Semi conductive water-blocking tape
- 6 Copper wire screen
- 7 Non-hygroscopic tape
- 8 PVC inner sheath
- 9 HDPE outer sheath

Properties:

Rated voltage	6.35/11kV
Max. operating temperature of conductor	90°C
Max. short-circuit operation temperature of conductor (5s Max. duration)	250°C
Ambient temperature range for operating	from -40°C to +50°C
Relative air humidity at temperature lower than +35°C	up to 95%
Min. temperature for installing without preheating	+0°C
Standard	AS/NZS 1429.1
Fault Level	up to 10kA/s or customer requirements

Application:

Cables are designed for fixed installation, for laying in the ground, for indoor application and in cable ducts.

Structural Parameters:

Nominal conductor area mm ²	Approx. diameter of conductor mm	Nominal thickness of insulation mm	Nominal diameter over insulation mm	Nominal screen area mm ²	No. & diameter of screen wire No./mm	Nominal diameter over wire screen mm	Nominal thickness of outer sheath		Approx. overall diameter of cable mm	Approx. weight of cable kg/km	Max. allowable pulling force of conductor kN	Min. bending radius	
							Inner layer mm	Outer layer mm				During installation mm	Installed mm
16	4.8	3.4	14.5	15.3	27/0.85	17.1	1.0	1.0	23.5	688	1.1	580	350
25	6.0	3.4	15.7	23.8	42/0.85	18.3	1.0	1.0	24.7	884	1.8	610	360
35	7.0	3.4	16.7	34.0	40/1.04	19.7	1.0	1.0	26.0	1099	2.5	650	390
50	8.1	3.4	17.8	49.5	28/1.5	21.7	1.0	1.0	28.1	1396	3.5	700	420
70	9.8	3.4	19.5	68.9	39/1.5	23.4	1.0	1.0	29.8	1814	4.9	740	440
95	11.4	3.4	21.1	68.9	39/1.5	25.0	1.0	1.0	31.4	2094	6.7	780	470
120	12.9	3.4	22.6	68.9	39/1.5	26.5	1.0	1.0	32.9	2355	8.4	820	490
150	14.4	3.4	24.1	68.9	39/1.5	28.0	1.0	1.0	34.4	2645	10.5	850	510
185	16.0	3.4	25.7	68.9	39/1.5	29.6	1.0	1.0	36.0	3018	13.0	890	530
240	18.4	3.4	28.1	68.9	39/1.5	32.0	1.0	1.1	38.4	3598	16.8	950	570
300	20.6	3.4	30.3	68.9	39/1.5	34.2	1.0	1.1	40.6	4206	21.0	1010	600
400	23.4	3.4	33.1	68.9	39/1.5	37.0	1.1	1.1	43.4	5035	28.0	1080	650
500	26.2	3.4	36.3	68.9	39/1.5	40.2	1.1	1.2	46.5	6112	35.0	1160	690
630	29.8	3.4	39.9	68.9	39/1.5	43.8	1.2	1.2	50.1	7510	44.1	1250	750
800	33.6	3.4	42.2	68.9	39/1.5	47.4	1.3	1.4	53.4	8993	54.4	1330	800
1000	38.5	3.4	47.1	68.9	39/1.5	52.3	1.4	1.5	58.7	10950	68.0	1460	880

Electrical Characteristics:

Nominal conductor area mm ²	Max. DC resistance of conductor at 20°C Ω/km	Max. AC resistance of conductor at 90°C			Fault current carrying of conductor for 1 second kA	Fault current carrying of screen for 1 second kA	Insulation resistance at 20°C MΩ/km	Conductor to screen capacitance μF/km	Charging current per phase A/km	Dielectric loss per phase W/km	Maximum dielectric stress kV/mm	Inductive reactance at 50Hz and 90°C			Screen DC resistance at 20°C Ω/km	Zero sequence resistance at 20°C Ω/km	Zero sequence reactance at 50Hz Ω/km
		Trefoil touching Ω/km	Flat touching Ω/km	Flat spaced Ω/km								Trefoil touching Ω/km	Flat touching Ω/km	Flat spaced Ω/km			
16	1.15	1.47	1.47	1.47	2.3	2.3	12700	0.190	0.379	9.63	2.75	0.159	0.173	0.217	1.24	2.39	0.0969
25	0.727	0.927	0.927	0.927	3.6	3.5	11200	0.216	0.430	10.9	2.62	0.148	0.163	0.206	0.796	1.52	0.0854
35	0.524	0.668	0.668	0.668	5.0	5.0	10200	0.237	0.472	12.0	2.54	0.142	0.156	0.200	0.558	1.08	0.0796
50	0.387	0.494	0.494	0.494	7.2	7.4	9300	0.260	0.518	13.2	2.47	0.137	0.152	0.195	0.383	0.770	0.0760
70	0.268	0.342	0.342	0.342	10.0	10.2	8100	0.295	0.589	15.0	2.39	0.129	0.144	0.187	0.275	0.543	0.0678
95	0.193	0.247	0.247	0.246	13.6	10.2	7300	0.329	0.656	16.7	2.33	0.123	0.137	0.181	0.275	0.468	0.0631
120	0.153	0.196	0.196	0.196	17.2	10.2	6700	0.360	0.718	18.2	2.28	0.118	0.133	0.176	0.275	0.428	0.0595
150	0.124	0.159	0.159	0.159	21.5	10.2	6100	0.391	0.780	19.8	2.24	0.114	0.128	0.172	0.275	0.399	0.0564
185	0.0991	0.128	0.127	0.127	26.5	10.2	5700	0.424	0.846	21.5	2.21	0.110	0.125	0.168	0.275	0.374	0.0537
240	0.0754	0.0978	0.0975	0.0971	34.3	10.2	5100	0.473	0.945	24.0	2.17	0.105	0.120	0.163	0.275	0.351	0.0504
300	0.0601	0.0789	0.0784	0.0779	42.9	10.2	4600	0.519	1.04	26.3	2.14	0.102	0.116	0.160	0.275	0.335	0.0478
400	0.0470	0.0629	0.0623	0.0615	57.2	10.2	4100	0.576	1.15	29.2	2.11	0.0980	0.113	0.156	0.275	0.322	0.0452
500	0.0366	0.0505	0.0497	0.0487	71.5	10.2	3700	0.641	1.28	32.5	2.09	0.0953	0.110	0.153	0.275	0.312	0.0437
630	0.0283	0.0411	0.0400	0.0387	90.1	10.2	3300	0.715	1.43	36.2	2.06	0.0919	0.106	0.150	0.275	0.304	0.0414
800	0.0221	0.0349	0.0349	0.0317	114.2	10.2	2800	0.890	1.09	38.4	2.02	0.0901	0.104	0.132	0.275	0.285	0.0392
1000	0.0176	0.0298	0.0298	0.0293	143.1	10.2	2400	0.985	1.19	40.2	1.95	0.0872	0.103	0.129	0.275	0.281	0.0370

Current Ratings:

Nominal conductor area mm ²	Continuous current-carrying capacity, A											
	In air					In ground			In underground ducts			
	Solid bond	Solid bond	Solid bond	Solid bond	Solid bond	Solid bond	Solid bond	Solid bond	Solid bond	Solid bond	Solid bond	Solid bond
16	114	134	106	112	81	116	118	113	103	104	101	91
25	149	174	138	145	104	149	150	145	130	130	129	116
35	181	210	169	179	125	178	179	174	155	155	154	140
50	215	250	200	214	150	209	209	204	180	180	180	166
70	269	309	250	268	184	250	249	249	215	213	216	204
95	324	369	301	320	219	296	290	295	254	245	255	241
120	370	420	349	370	256	334	325	335	284	274	289	279
150	415	469	394	419	289	370	355	374	314	300	321	310
185	473	527	449	479	325	413	393	420	348	329	359	350
240	549	603	525	563	375	468	439	483	393	365	410	403
300	618	672	599	639	439	518	479	539	433	398	458	463
400	703	752	688	735	498	573	523	605	474	433	510	519
500	788	833	783	838	559	628	567	674	522	468	569	580
630	878	915	888	949	624	684	608	748	562	498	622	643
800	988	1018	1008	1088	728	743	652	822	618	538	693	733
1000	1148	1128	1208	1288	853	838	703	958	658	568	752	854