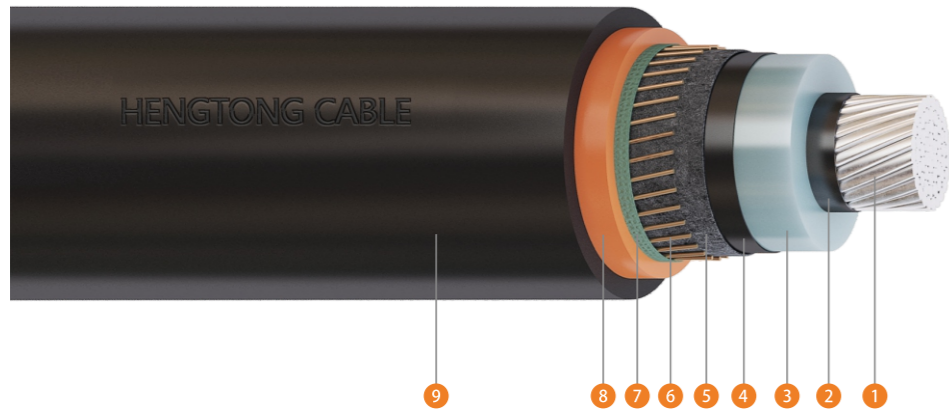


6.35/11kV Single Core Al/XLPE/CWS/PVC/HDPE



- 1 Compacted Al 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
25	6.0	3.4	15.7	15.9	28/0.85	18.3	1.0	1.0	24.7	654	1.0	610	370
35	7.0	3.4	16.7	22.1	39/0.85	19.3	1.0	1.0	25.7	767	1.4	640	380
50	8.1	3.4	17.8	31.5	22/1.35	21.4	1.0	1.0	27.8	931	2.0	690	410
70	9.8	3.4	19.5	44.4	31/1.35	23.1	1.0	1.0	29.5	1157	2.8	730	440
95	11.4	3.4	21.1	61.5	43/1.35	24.7	1.0	1.0	31.1	1434	3.8	770	460
120	12.9	3.4	22.6	68.7	48/1.35	26.2	1.0	1.0	32.6	1611	4.8	810	480
150	14.4	3.4	24.1	68.7	48/1.35	27.7	1.0	1.0	34.1	1726	6.0	850	510
185	16.0	3.4	25.7	68.7	48/1.35	29.3	1.0	1.0	35.7	1871	7.4	890	530
240	18.4	3.4	28.1	68.7	48/1.35	31.7	1.0	1.1	38.1	2092	9.6	950	570
300	20.6	3.4	30.3	68.7	48/1.35	33.9	1.0	1.1	40.3	2314	12.0	1000	600
400	23.4	3.4	33.1	68.7	48/1.35	36.7	1.1	1.1	43.1	2623	16.0	1070	640
500	26.2	3.4	36.3	68.7	48/1.35	39.9	1.1	1.2	46.3	3019	20.0	1150	690
630	29.8	3.4	39.9	68.7	48/1.35	43.5	1.2	1.2	49.9	3506	25.2	1240	740
800	33.8	3.4	43.9	68.7	48/1.35	47.5	1.3	1.3	53.9	4096	32.0	1340	800
1000	38.5	3.4	47.1	68.7	48/1.35	52.0	1.4	1.4	58.2	4695	39.0	1450	870

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 Ω/km			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 Ω/km			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	Flat touching	Flat spaced								Trefoil touching	Flat touching	Flat spaced			
25	1.20	1.54	1.54	1.54	2.4	2.4	11200	0.216	0.431	10.9	2.62	0.148	0.163	0.206	1.19	2.39	0.0880
35	0.868	1.11	1.11	1.11	3.3	3.3	10200	0.237	0.473	12.0	2.54	0.141	0.156	0.199	0.859	1.73	0.0785
50	0.641	0.822	0.822	0.822	4.7	4.7	9300	0.260	0.519	13.2	2.47	0.137	0.151	0.195	0.602	1.24	0.0785
70	0.443	0.568	0.568	0.568	6.6	6.6	8100	0.295	0.588	14.9	2.39	0.128	0.143	0.187	0.427	0.873	0.0691
95	0.320	0.411	0.411	0.410	9.0	9.1	7300	0.329	0.656	16.7	2.33	0.122	0.137	0.180	0.309	0.630	0.0628
120	0.253	0.325	0.325	0.325	11.3	10.2	6700	0.360	0.718	18.2	2.28	0.117	0.132	0.176	0.276	0.533	0.0597
150	0.206	0.265	0.265	0.264	14.2	10.2	6100	0.391	0.780	19.8	2.24	0.113	0.128	0.172	0.276	0.486	0.0565
185	0.164	0.211	0.211	0.211	17.5	10.2	5700	0.424	0.846	21.5	2.21	0.110	0.124	0.168	0.276	0.444	0.0534
240	0.125	0.161	0.161	0.161	22.7	10.2	5100	0.473	0.944	24.0	2.17	0.105	0.119	0.163	0.276	0.405	0.0503
300	0.100	0.130	0.129	0.129	28.3	10.2	4600	0.519	1.04	26.3	2.14	0.101	0.116	0.160	0.276	0.380	0.0471
400	0.0778	0.102	0.101	0.101	37.8	10.2	4100	0.576	1.15	29.2	2.11	0.0977	0.112	0.156	0.276	0.358	0.0440
500	0.0605	0.0800	0.0795	0.0788	47.2	10.2	3700	0.642	1.28	32.5	2.09	0.0952	0.110	0.153	0.276	0.341	0.0440
630	0.0469	0.0635	0.0627	0.0618	59.5	10.2	3300	0.716	1.43	36.3	2.06	0.0917	0.106	0.150	0.276	0.327	0.0408
800	0.0367	0.0514	0.0504	0.0492	75.6	10.2	3000	0.798	1.59	40.4	2.04	0.0886	0.103	0.147	0.276	0.317	0.0377
1000	0.0291	0.0403	0.0403	0.0398	94.6	10.2	2400	0.985	1.19	40.2	1.95	0.0872	0.103	0.129	0.276	0.292	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
25	115	135	105	115	80	115	115	115	100	105	100	91
35	140	164	129	135	96	139	139	134	120	121	119	109
50	169	199	155	165	116	164	164	159	144	144	140	130
70	210	244	194	205	144	199	199	194	174	171	170	159
95	254	294	235	250	170	234	234	230	204	200	201	189
120	290	334	270	289	200	264	260	261	226	224	229	219
150	329	375	305	325	225	294	289	293	254	249	255	244
185	374	425	350	374	255	329	320	330	284	274	288	275
240	439	493	414	440	295	375	364	380	324	309	330	319
300	498	554	471	504	346	419	400	426	359	339	369	365
400	574	630	549	585	399	470	444	485	403	375	419	416
500	660	717	639	683	455	529	493	550	449	414	474	474
630	750	803	734	785	519	588	538	620	494	450	530	534
800	849	896	840	900	610	645	584	693	544	489	590	619
1000	986	1008	997	1068	713	728	638	798	597	528	658	707