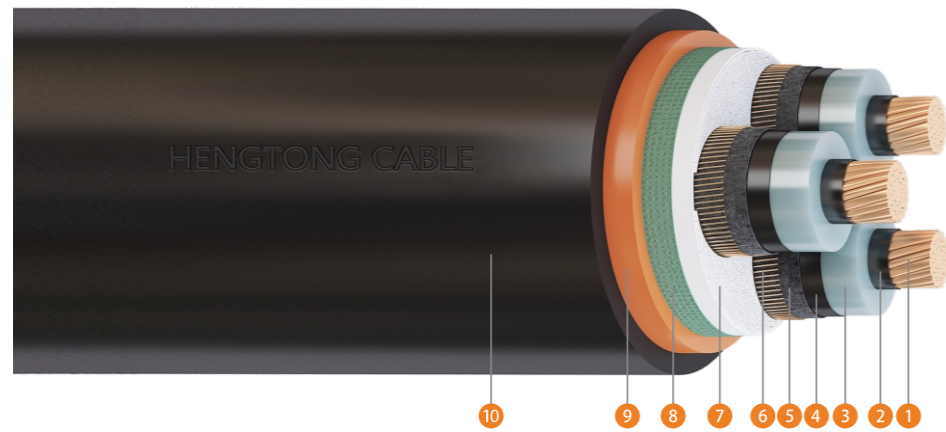


## 6.35/11kV Three Core Cu/XLPE/CWS/PVC/HDPE



- 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 filler
- 8 Non-hygroscopic tape
- 9 PVC inner sheath
- 10 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.

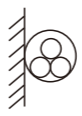
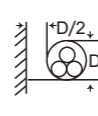



### Structural Parameters:

Nominal conductor area mm <sup>2</sup>	Approx. diameter of conductor mm	Nominal thickness of insulation mm	Nominal diameter over insulation mm	Nominal screen area mm <sup>2</sup>	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	18/0.6	16.6	1.0	1.2	42.1	1703	3.4	1050	630
25	6.0	3.4	15.7	24.6	29/0.6	17.8	1.1	1.2	44.7	2154	5.3	1110	670
35	7.0	3.4	16.7	34.0	20/0.85	19.3	1.1	1.3	47.9	2627	7.4	1190	710
50	8.1	3.4	17.8	49.4	29/0.85	20.4	1.2	1.3	50.3	3212	10.5	1250	750
70	9.8	3.4	19.5	68.1	40/0.85	22.1	1.2	1.4	54.0	4124	14.7	1340	800
95	11.4	3.4	21.1	68.1	40/0.85	23.7	1.3	1.4	57.4	4998	20.0	1430	860
120	12.9	3.4	22.6	68.1	40/0.85	25.2	1.4	1.4	60.6	5818	25.2	1510	900
150	14.4	3.4	24.1	68.1	40/0.85	26.7	1.4	1.5	63.9	6728	31.5	1590	950
185	16.0	3.4	25.7	68.1	40/0.85	28.3	1.5	1.5	67.4	7895	38.9	1680	1010
240	18.4	3.4	28.1	68.1	40/0.85	30.7	1.5	1.7	72.9	9748	50.4	1820	1090
300	20.6	3.4	30.3	68.1	40/0.85	32.9	1.6	1.7	77.9	11697	63.0	1940	1160
400	23.4	3.4	33.1	68.1	40/0.85	35.7	1.7	1.9	84.4	14367	84.0	2110	1260
500	26.2	3.4	36.3	68.1	40/0.85	38.9	1.8	2.0	91.6	17813	105.0	2290	1370

### Electrical Characteristics:

Nominal conductor area mm <sup>2</sup>	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
16	1.15	1.47	2.3	2.3	12700	0.190	0.379	9.63	2.75	0.137	1.24	2.39	0.0996
25	0.727	0.927	3.6	3.7	11200	0.216	0.430	10.9	2.62	0.128	0.771	1.50	0.0872
35	0.524	0.668	5.0	5.1	10200	0.237	0.472	12.0	2.54	0.123	0.557	1.08	0.0835
50	0.387	0.494	7.2	7.3	9300	0.260	0.518	13.2	2.47	0.117	0.384	0.771	0.0758
70	0.268	0.342	10.0	10.1	8100	0.295	0.589	15.0	2.39	0.110	0.279	0.547	0.0677
95	0.193	0.247	13.6	10.1	7300	0.329	0.656	16.7	2.33	0.105	0.279	0.472	0.0630
120	0.153	0.196	17.2	10.1	6700	0.360	0.718	18.2	2.28	0.101	0.279	0.432	0.0593
150	0.124	0.159	21.5	10.1	6100	0.391	0.780	19.8	2.24	0.0981	0.279	0.403	0.0563
185	0.0991	0.128	26.5	10.1	5700	0.424	0.846	21.5	2.21	0.0951	0.279	0.378	0.0536
240	0.0754	0.0983	34.3	10.1	5100	0.473	0.945	24.0	2.17	0.0914	0.279	0.354	0.0502
300	0.0601	0.0795	42.9	10.1	4600	0.519	1.04	26.3	2.14	0.0887	0.279	0.339	0.0477
400	0.0470	0.0637	57.2	10.1	4100	0.576	1.15	29.2	2.11	0.0858	0.279	0.326	0.0451
500	0.0366	0.0515	71.5	10.1	3700	0.641	1.28	32.5	2.09	0.0840	0.279	0.315	0.0436

### Current Ratings:

Nominal conductor area mm <sup>2</sup>	Continuous current-carrying capacity, A				
	In air		In ground		
					
16	104	110	78	113	89
25	134	143	100	145	114
35	162	173	120	173	136
50	194	208	145	204	162
70	241	259	178	249	199
95	295	317	220	299	242
120	340	367	252	340	276
150	385	415	284	380	310
185	440	476	322	429	350
240	519	563	389	497	416
300	594	645	442	560	470
400	685	746	505	635	534
500	779	850	569	710	597