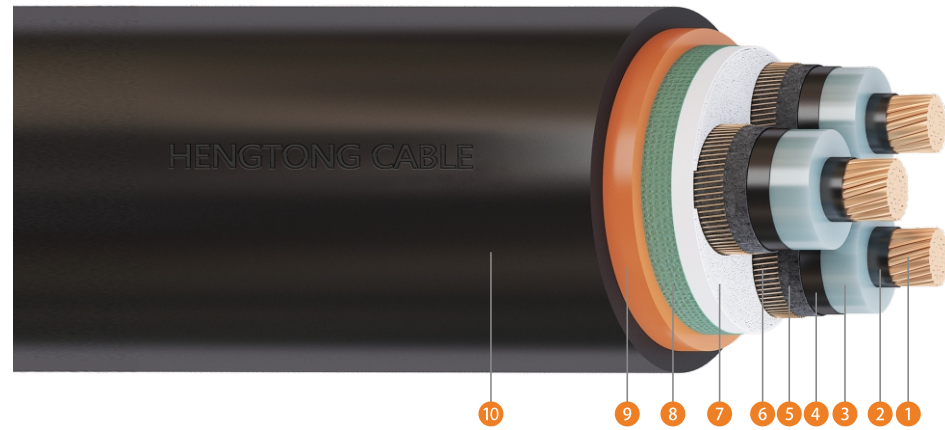


3.8/6.6kV Three Core Cu/XLPE/CWS/PVC/HDPE



- 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	3.8/6.6kV
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.

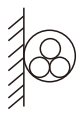
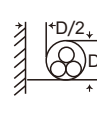



Structural Parameters:

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	2.5	12.7	15.3	18/0.6	14.8	1.0	1.0	38.2	1505	3.4	950	570
25	6.0	2.5	13.9	24.6	29/0.6	16.0	1.0	1.1	40.8	1942	5.3	1020	610
35	7.0	2.5	14.9	34.0	20/0.85	17.5	1.1	1.1	44.1	2404	7.4	1100	660
50	8.1	2.5	16.0	49.4	29/0.85	18.6	1.1	1.2	46.4	2979	10.5	1160	690
70	9.8	2.5	17.7	68.1	40/0.85	20.3	1.2	1.2	50.1	3872	14.7	1250	750
95	11.4	2.5	19.3	68.1	40/0.85	21.9	1.2	1.4	53.5	4730	20.0	1330	800
120	12.9	2.5	20.8	68.1	40/0.85	23.4	1.3	1.4	56.8	5535	25.2	1410	850
150	14.4	2.5	22.3	68.1	40/0.85	24.9	1.3	1.5	60.0	6427	31.5	1490	890
185	16.0	2.5	23.9	68.1	40/0.85	26.5	1.4	1.5	63.4	7574	38.9	1580	950
240	18.4	2.6	26.5	68.1	40/0.85	29.1	1.5	1.6	69.2	9418	50.4	1720	1030
300	20.6	2.8	29.1	68.1	40/0.85	31.7	1.6	1.7	75.2	11430	63.0	1870	1120
400	23.4	3.0	32.3	68.1	40/0.85	34.9	1.7	1.8	82.6	14173	84.0	2060	1230
500	26.2	3.2	35.9	68.1	40/0.85	38.5	1.8	1.9	90.7	17707	105.0	2260	1360

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
16	1.15	1.47	2.3	2.3	10100	0.238	0.284	4.32	2.06	0.130	1.24	2.39	0.0918
25	0.727	0.927	3.6	3.7	8800	0.272	0.325	4.94	1.98	0.121	0.771	1.50	0.0800
35	0.524	0.668	5.0	5.1	8000	0.301	0.359	5.46	1.93	0.117	0.557	1.08	0.0768
50	0.387	0.494	7.2	7.3	7200	0.332	0.396	6.02	1.89	0.111	0.384	0.771	0.0695
70	0.268	0.342	10.0	10.1	6300	0.380	0.453	6.89	1.84	0.105	0.279	0.547	0.0619
95	0.193	0.247	13.6	10.1	5600	0.425	0.507	7.71	1.80	0.100	0.279	0.472	0.0576
120	0.153	0.196	17.2	10.1	5100	0.467	0.557	8.47	1.77	0.0967	0.279	0.432	0.0543
150	0.124	0.159	21.5	10.1	4700	0.509	0.608	9.24	1.75	0.0937	0.279	0.403	0.0516
185	0.0991	0.128	26.5	10.1	4300	0.554	0.661	10.0	1.73	0.0910	0.279	0.378	0.0492
240	0.0754	0.0985	34.3	10.1	4000	0.599	0.716	10.9	1.65	0.0881	0.279	0.354	0.0467
300	0.0601	0.0796	42.9	10.1	3900	0.616	0.736	11.2	1.52	0.0863	0.279	0.339	0.0453
400	0.0470	0.0638	57.2	10.1	3700	0.645	0.770	11.7	1.41	0.0844	0.279	0.326	0.0436
500	0.0366	0.0515	71.5	10.1	3500	0.677	0.809	12.3	1.32	0.0834	0.279	0.315	0.0429

Current Ratings:

Nominal conductor area mm ²	Continuous current-carrying capacity, A				
	In air		In ground		
					
16	102	108	75	113	86
25	132	141	96	145	111
35	160	171	118	173	134
50	191	205	140	204	159
70	238	256	173	249	195
95	291	313	212	298	237
120	336	363	243	339	270
150	381	411	281	379	307
185	436	472	319	429	348
240	515	559	373	496	404
300	591	642	439	559	468
400	683	744	503	634	532
500	779	850	569	710	597