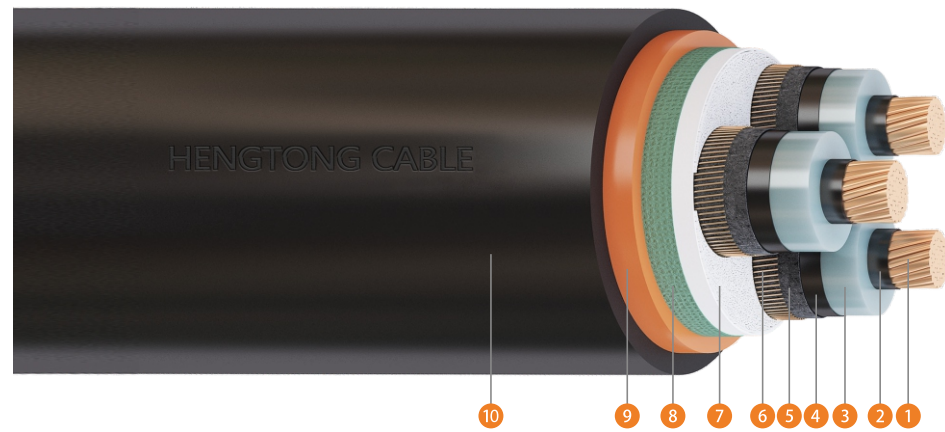


1.9/3.3kV Three Core Cu/XLPE/CWS/PVC/HDPE



- 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	1.9/3.3kV
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.

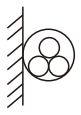
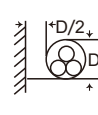



Structural Parameters:

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	2.0	11.7	15.3	18/0.6	13.8	1.0	1.0	36.1	1402	3.4	900	540
25	6.0	2.0	12.9	24.6	29/0.6	15.0	1.0	1.1	38.7	1833	5.3	960	580
35	7.0	2.0	13.9	34.0	20/0.85	16.5	1.0	1.2	41.9	2289	7.4	1040	620
50	8.1	2.0	15.0	49.4	29/0.85	17.6	1.1	1.2	44.3	2857	10.5	1100	660
70	9.8	2.0	16.7	68.1	40/0.85	19.3	1.1	1.3	47.9	3741	14.7	1190	710
95	11.4	2.0	18.3	68.1	40/0.85	20.9	1.2	1.3	51.4	4589	20.0	1280	770
120	12.9	2.0	19.8	68.1	40/0.85	22.4	1.2	1.4	54.6	5385	25.2	1360	810
150	14.4	2.0	21.3	68.1	40/0.85	23.9	1.3	1.4	57.8	6269	31.5	1440	860
185	16.0	2.0	22.9	68.1	40/0.85	25.5	1.4	1.4	61.3	7407	38.9	1530	910
240	18.4	2.0	25.3	68.1	40/0.85	27.9	1.4	1.6	66.6	9202	50.4	1660	990
300	20.6	2.0	27.5	68.1	40/0.85	30.1	1.5	1.6	71.5	11078	63.0	1780	1070
400	23.4	2.0	30.3	68.1	40/0.85	32.9	1.6	1.8	78.0	13694	84.0	1940	1160
500	26.2	2.2	33.9	68.1	40/0.85	36.5	1.7	1.9	86.1	17179	105.0	2150	1290

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	8500	0.283	0.169	1.28	1.23	0.126	1.24	2.39	0.0870
25	0.727	0.927	3.6	3.7	7400	0.326	0.194	1.48	1.19	0.117	0.771	1.50	0.0756
35	0.524	0.668	5.0	5.1	6600	0.361	0.215	1.64	1.16	0.113	0.557	1.08	0.0727
50	0.387	0.494	7.2	7.3	6000	0.400	0.239	1.81	1.14	0.108	0.384	0.771	0.0656
70	0.268	0.342	10.0	10.1	5200	0.459	0.274	2.08	1.11	0.102	0.279	0.547	0.0584
95	0.193	0.247	13.6	10.1	4600	0.515	0.308	2.34	1.09	0.0973	0.279	0.472	0.0544
120	0.153	0.196	17.2	10.1	4200	0.568	0.339	2.58	1.08	0.0939	0.279	0.432	0.0514
150	0.124	0.159	21.5	10.1	3800	0.620	0.370	2.81	1.07	0.0911	0.279	0.403	0.0488
185	0.0991	0.128	26.5	10.1	3500	0.676	0.404	3.07	1.05	0.0885	0.279	0.378	0.0466
240	0.0754	0.0986	34.3	10.1	3100	0.760	0.454	3.45	1.04	0.0854	0.279	0.354	0.0439
300	0.0601	0.0798	42.9	10.1	2800	0.837	0.499	3.80	1.03	0.0831	0.279	0.339	0.0418
400	0.0470	0.0641	57.2	10.1	2500	0.934	0.558	4.24	1.02	0.0807	0.279	0.326	0.0397
500	0.0366	0.0519	71.5	10.1	2500	0.955	0.570	4.33	0.93	0.0800	0.279	0.315	0.0394

Current Ratings:

Nominal conductor area mm ²	Continuous current-carrying capacity, A				
	In air		In ground		
					
16	80	88	63	98	74
25	115	125	84	130	100
35	145	155	105	160	120
50	175	185	125	190	145
70	225	240	160	235	180
95	275	300	195	285	220
120	320	345	225	325	255
150	360	390	260	360	285
185	415	455	300	410	330
240	500	540	355	475	385
300	570	625	420	540	450
400	665	725	485	615	510
500	740	810	520	700	580