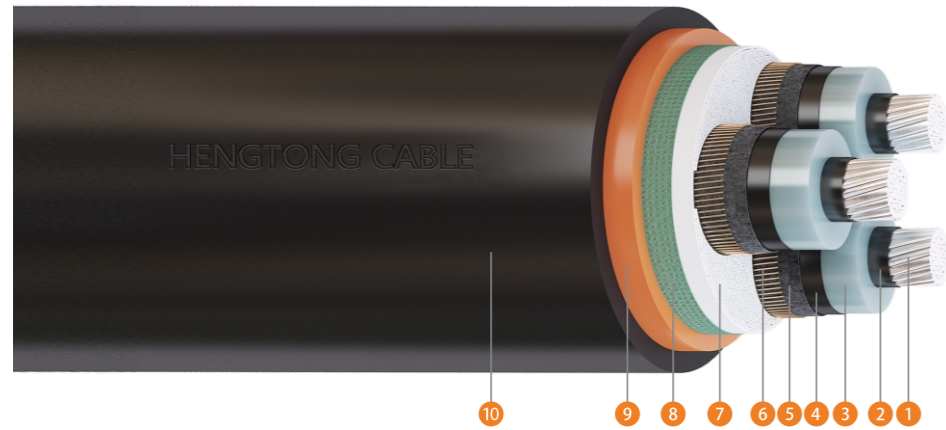


1.9/3.3kV Three Core Al/XLPE/CWS/PVC/HDPE



- 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 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.


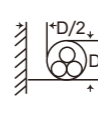



Structural Parameters:

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
25	6.0	2.0	12.9	16.2	19/0.6	15.0	1.0	1.0	38.7	1293	3.0	960	580
35	7.0	2.0	13.9	22.8	27/0.6	16.0	1.0	1.1	40.9	1521	4.2	1020	610
50	8.1	2.0	15.0	32.1	38/0.6	17.1	1.1	1.2	43.2	1800	6.0	1080	640
70	9.8	2.0	16.7	44.4	26/0.85	19.3	1.2	1.2	48.0	2260	8.4	1200	720
95	11.4	2.0	18.3	61.2	36/0.85	20.9	1.2	1.3	51.4	2774	11.4	1280	770
120	12.9	2.0	19.8	68.1	40/0.85	22.4	1.3	1.3	54.6	3176	14.4	1360	810
150	14.4	2.0	21.3	68.1	40/0.85	23.9	1.3	1.4	57.9	3540	18.0	1440	860
185	16.0	2.0	22.9	68.1	40/0.85	25.5	1.4	1.4	61.3	3992	22.2	1530	910
240	18.4	2.0	25.3	68.1	40/0.85	27.9	1.5	1.5	66.5	4693	28.8	1660	990
300	20.6	2.0	27.5	68.1	40/0.85	30.1	1.5	1.6	71.4	5420	36.0	1780	1070
400	23.4	2.0	30.3	68.1	40/0.85	32.9	1.7	1.7	78.1	6506	48.0	1950	1170
500	26.2	2.2	33.9	68.1	40/0.85	36.5	1.8	1.8	86.2	7940	60.0	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
25	1.20	1.54	2.4	2.4	7400	0.326	0.195	1.48	1.19	0.117	1.17	2.37	0.0785
35	0.868	1.11	3.3	3.4	6600	0.361	0.215	1.64	1.16	0.111	0.832	1.70	0.0723
50	0.641	0.822	4.7	4.7	6000	0.400	0.239	1.81	1.14	0.106	0.591	1.23	0.0628
70	0.443	0.568	6.6	6.6	5200	0.459	0.274	2.08	1.11	0.102	0.427	0.873	0.0597
95	0.320	0.411	9.0	9.2	4600	0.515	0.307	2.34	1.09	0.0974	0.310	0.630	0.0534
120	0.253	0.325	11.3	10.2	4200	0.568	0.339	2.58	1.08	0.0939	0.279	0.533	0.0503
150	0.206	0.265	14.2	10.2	3800	0.620	0.370	2.81	1.07	0.0911	0.279	0.486	0.0503
185	0.164	0.211	17.5	10.2	3500	0.676	0.404	3.07	1.05	0.0886	0.279	0.444	0.0471
240	0.125	0.162	22.7	10.2	3100	0.760	0.454	3.45	1.04	0.0855	0.279	0.405	0.0440
300	0.100	0.130	28.3	10.2	2800	0.837	0.500	3.80	1.03	0.0829	0.279	0.380	0.0408
400	0.0778	0.102	37.8	10.2	2500	0.934	0.558	4.24	1.02	0.0807	0.279	0.358	0.0408
500	0.0605	0.081	47.2	10.2	2500	0.957	0.571	4.34	0.93	0.0801	0.279	0.341	0.0408

Current Ratings:

Nominal conductor area mm ²	Continuous current-carrying capacity, A				
	In air		In ground		
					
25	90	95	60	95	72
35	110	120	75	120	90
50	135	145	95	145	110
70	170	185	120	180	135
95	210	230	150	215	170
120	245	265	175	250	195
150	275	300	200	275	220
185	320	345	225	315	250
240	380	415	270	365	295
300	440	480	320	415	345
400	515	565	375	480	400
500	590	635	410	530	460