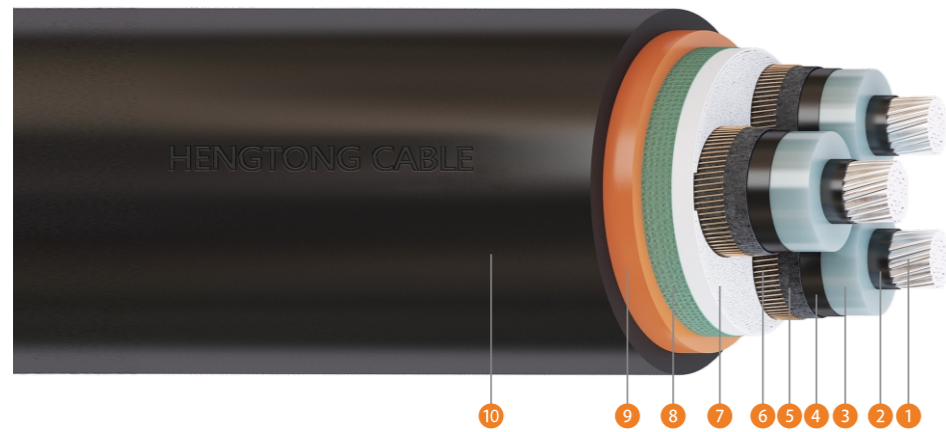


6.35/11kV Three Core Al/XLPE/CWS/PVC/HDPE



- 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	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.

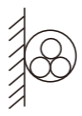
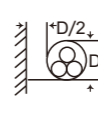



Structural Parameters:

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	162	19/0.6	17.8	1.1	1.2	44.7	1616	3.0	1110	670
35	7.0	3.4	16.7	228	27/0.6	18.8	1.2	1.2	46.9	1860	4.2	1170	700
50	8.1	3.4	17.8	32.1	38/0.6	19.9	1.2	1.3	49.3	2161	6.0	1230	730
70	9.8	3.4	19.5	44.4	26/0.85	22.1	1.3	1.3	54.0	2646	8.4	1350	810
95	11.4	3.4	21.1	61.2	36/0.85	23.7	1.3	1.4	57.4	3186	11.4	1430	860
120	12.9	3.4	22.6	68.1	40/0.85	25.2	1.4	1.4	60.7	3617	14.4	1510	910
150	14.4	3.4	24.1	68.1	40/0.85	26.7	1.4	1.5	63.9	4000	18.0	1590	950
185	16.0	3.4	25.7	68.1	40/0.85	28.3	1.5	1.5	67.4	4484	22.2	1680	1010
240	18.4	3.4	28.1	68.1	40/0.85	30.7	1.6	1.6	72.9	5271	28.8	1820	1090
300	20.6	3.4	30.3	68.1	40/0.85	32.9	1.6	1.7	77.9	6047	36.0	1940	1160
400	23.4	3.4	33.1	68.1	40/0.85	35.7	1.8	1.8	84.5	7183	48.0	2110	1260
500	26.2	3.4	36.3	68.1	40/0.85	38.9	1.9	1.9	91.8	8591	60.0	2290	1370

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	11200	0.216	0.431	10.9	2.62	0.128	1.17	2.37	0.0911
35	0.868	1.11	3.3	3.4	10200	0.237	0.473	12.0	2.54	0.121	0.832	1.70	0.0817
50	0.641	0.822	4.7	4.7	9300	0.260	0.519	13.2	2.47	0.116	0.591	1.23	0.0754
70	0.443	0.568	6.6	6.6	8100	0.295	0.588	14.9	2.39	0.110	0.427	0.873	0.0691
95	0.320	0.411	9.0	9.2	7300	0.329	0.656	16.7	2.33	0.105	0.310	0.630	0.0628
120	0.253	0.325	11.3	10.2	6700	0.360	0.718	18.2	2.28	0.101	0.279	0.533	0.0597
150	0.206	0.265	14.2	10.2	6100	0.391	0.780	19.8	2.24	0.0980	0.279	0.486	0.0565
185	0.164	0.211	17.5	10.2	5700	0.424	0.846	21.5	2.21	0.0952	0.279	0.444	0.0534
240	0.125	0.162	22.7	10.2	5100	0.473	0.944	24.0	2.17	0.0914	0.279	0.405	0.0503
300	0.100	0.130	28.3	10.2	4600	0.519	1.04	26.3	2.14	0.0886	0.279	0.380	0.0471
400	0.0778	0.102	37.8	10.2	4100	0.576	1.15	29.2	2.11	0.0858	0.279	0.358	0.0440
500	0.0605	0.081	47.2	10.2	3700	0.642	1.28	32.5	2.09	0.0842	0.279	0.341	0.0440

Current Ratings:

Nominal conductor area mm ²	Continuous current-carrying capacity, A				
	In air		In ground		
					
25	95	100	68	105	79
35	126	135	93	134	106
50	151	161	112	158	126
70	187	201	138	193	154
95	228	245	171	231	188
120	263	283	195	263	214
150	298	321	220	295	240
185	341	368	250	333	272
240	403	436	292	387	316
300	462	501	344	437	366
400	538	585	397	500	420
500	622	679	454	567	477