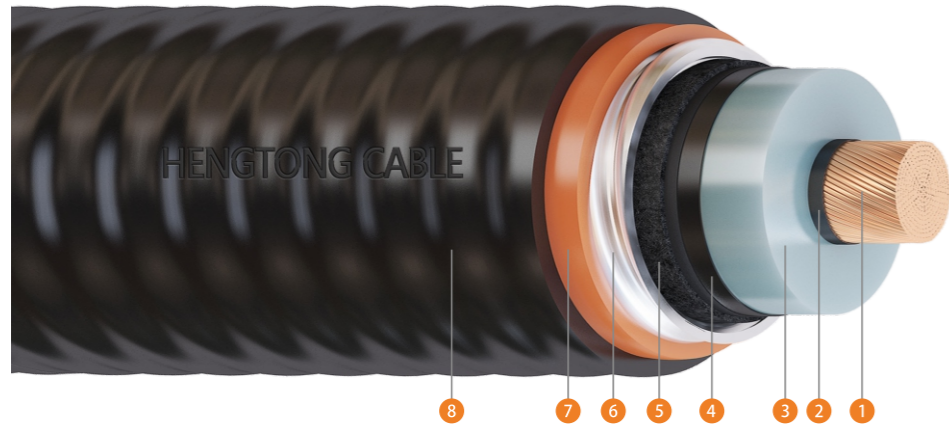


190/330kV Single Core Cu/XLPE/CAS/PVC/HDPE



- 1 Compacted or Milliken Cu conductor
- 2 Semi conductive screen tape and conductor screen
- 3 XLPE insulation
- 4 Insulation screen
- 5 Semi conductive water-blocking tape
- 6 Corrugated aluminium
- 7 PVC inner sheath
- 8 HDPE outer sheath with graphite coating

Properties:

Rated voltage	190/330kV
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 1429.2
Fault Level	as per 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	Approx. diameter of conductor	Nominal thickness of insulation	Nominal thickness of aluminium sheath	Nominal thickness of outer sheath		Approx. overall diameter of cable	Approx. weight of cable	Max. allowable pulling force of conductor	Min. bending radius during installation	Min. bending radius after installed
				Inner layer	Outer layer					
mm ²	mm	mm	mm	mm	mm	mm	kg/km	kN	mm	mm
500	26.6	29	2.4	2.5	2.5	124.0	15432	34.0	2480	1860
630	29.9	29	2.4	2.5	2.5	126.9	17077	42.8	2538	1904
800	33.6	28	2.4	2.5	2.5	129.4	18815	54.4	2588	1941
1000	39.2	27	2.6	2.5	2.5	132.5	21410	68	2650	1988
1200	43.4	27	2.6	2.5	2.5	139.0	23844	81.6	2780	2085
1600	49.6	26	2.6	2.5	2.5	143.5	27880	108.8	2870	2153
2000	55.0	26	2.8	2.5	2.5	150.5	32545	136.0	3010	2258
2500	61.5	26	2.8	3.0	3.0	163.5	38769	170.0	3270	2453

Electrical Characteristics:

Nominal conductor area	Max. DC resistance of conductor at 20°C	Max. A.C resistance of conductor at 90°C			Fault current carrying of conductor for 1 second	Fault current carrying of screen for 1 second	Conductor to screen capacitance	Charging current per phase	Maximum dielectric stress	Inductive reactance at 50Hz and 90°C			Zero sequence resistance at 20°C	Zero sequence reactance at 50Hz
		Trefoil touching	Flat touching	Flat spaced						Trefoil touching	Flat touching	Flat spaced		
mm ²	Ω/km	Ω/km	Ω/km	Ω/km	kA	kA	μF/km	A/km	kV/mm	Ω/km	Ω/km	Ω/km	Ω/km	Ω/km
500	0.0366	0.0487	0.0487	0.0485	71.5	71.5	0.120	7.2	11.7	0.156	0.170	0.214	0.185	0.433
630	0.0283	0.0387	0.0387	0.0384	90.1	90.1	0.128	7.7	11.2	0.150	0.165	0.208	0.176	0.423
800	0.0221	0.0315	0.0315	0.0311	114.5	106	0.140	8.4	11.1	0.144	0.158	0.202	0.170	0.413
1000	0.0176	0.0248	0.0248	0.0247	143.1	106	0.159	9.5	10.8	0.136	0.150	0.194	0.166	0.402
1200	0.0151	0.0220	0.0220	0.0218	171.7	106	0.169	10.1	10.5	0.132	0.147	0.190	0.163	0.388
1600	0.0113	0.0178	0.0178	0.0176	229.0	106	0.189	11.3	10.4	0.126	0.141	0.184	0.159	0.376
2000	0.009	0.0154	0.0154	0.0151	286.2	106	0.203	12.1	10.2	0.123	0.137	0.181	0.157	0.363
2500	0.0072	0.0136	0.0136	0.0132	357.8	106	0.220	13.1	9.9	0.121	0.135	0.179	0.155	0.346

Current Ratings:

Nominal conductor area	Continuous current-carrying capacity, A								
	In air			In ground			In underground ducts		
	Single point bonding or cross-bonding	Single point bonding or cross-bonding	Single point bonding or cross-bonding	Single point bonding or cross-bonding	Single point bonding or cross-bonding	Single point bonding or cross-bonding	Single point bonding or cross-bonding	Single point bonding or cross-bonding	Single point bonding or cross-bonding
500	844	944	852	674	750	690	674	714	678
630	954	1081	970	744	848	770	745	809	758
800	1065	1233	1090	810	947	848	811	902	835
1000	1205	1365	1252	883	1023	943	885	974	930
1200	1286	1555	1346	922	1141	996	927	1086	983
1600	1423	1783	1511	985	1270	1084	992	1207	1072
2000	1519	1964	1634	1023	1368	1144	1033	1301	1135
2500	1617	2144	1759	1068	1469	1207	1083	1398	1199