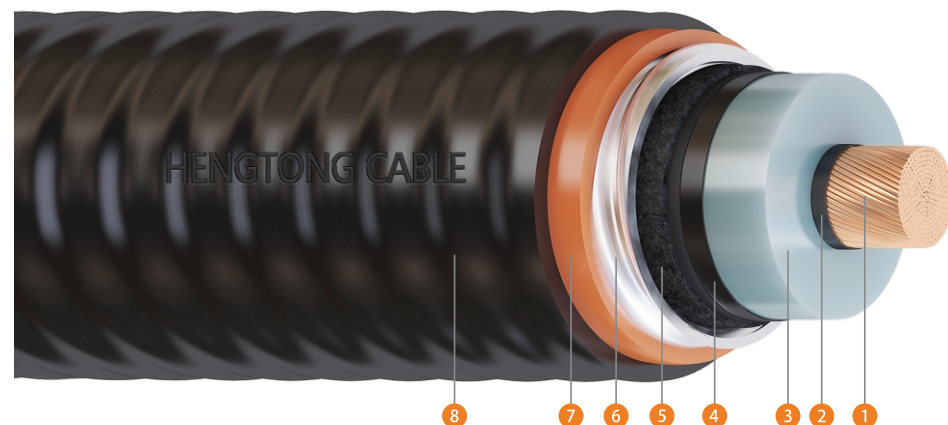


87/150kV Single Core Cu/XLPE/CAS/PVC/HDPE



- 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	87/150kV
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.

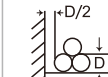
Structural Parameters:

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
185	16.2	22	2.0	2.0	2.0	90.8	7826	12.6	1816	1362
240	18.4	21	2.0	2.0	2.0	91.0	8289	16.3	1820	1365
300	20.6	21	2.0	2.0	2.0	93.2	9071	20.4	1864	1398
400	23.4	21	2.0	2.0	2.0	96.0	10195	27.2	1920	1440
500	26.6	21	2.0	2.2	2.3	101.2	11706	34.0	2024	1518
630	29.9	21	2.0	2.2	2.3	104.5	13255	42.8	2090	1567
800	33.6	20	2.4	2.2	2.3	107.0	15324	54.4	2140	1605
1000	39.2	20	2.4	2.5	2.5	115.9	18281	68	2318	1739
1200	43.4	20	2.4	2.5	2.5	120.1	20506	81.6	2402	1802
1600	49.6	20	2.4	2.5	2.5	127.3	24832	108.8	2546	1910
2000	55.0	20	2.4	2.5	2.5	133.7	29063	136.0	2674	2006
2500	61.5	20	2.4	2.5	2.5	140.2	34272	170.0	2804	2103

Electrical Characteristics:

Nominal conductor area	Max. DC resistance of conductor at 20°C	Max. AC 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
185	0.0991	0.127	0.127	0.127	26.5	26.5	0.108	2.9	7.6	0.168	0.182	0.226	0.247	0.620
240	0.0754	0.0971	0.0971	0.0970	34.3	34.3	0.118	3.2	7.5	0.160	0.174	0.218	0.223	0.612
300	0.0601	0.0779	0.0779	0.0778	42.9	42.9	0.125	3.4	7.2	0.154	0.169	0.212	0.208	0.601
400	0.047	0.0616	0.0616	0.0614	57.2	57.2	0.135	3.7	6.9	0.148	0.162	0.206	0.195	0.590
500	0.0366	0.0488	0.0488	0.0485	71.5	71.5	0.145	4.0	6.6	0.143	0.158	0.201	0.185	0.575
630	0.0283	0.0389	0.0389	0.0384	90.1	80.0	0.156	4.3	6.4	0.138	0.152	0.196	0.176	0.564
800	0.0221	0.0317	0.0317	0.0311	114.5	80.0	0.173	4.7	6.4	0.132	0.147	0.190	0.170	0.553
1000	0.0176	0.0249	0.0249	0.0247	143.1	80.0	0.196	5.4	6.1	0.127	0.142	0.185	0.166	0.534
1200	0.0151	0.0220	0.0220	0.0218	171.7	80.0	0.210	5.7	6.0	0.123	0.138	0.181	0.163	0.523
1600	0.0113	0.0179	0.0179	0.0176	229.0	80.0	0.231	6.3	5.8	0.118	0.133	0.177	0.159	0.507
2000	0.009	0.0155	0.0155	0.0151	286.2	80.0	0.248	6.8	5.7	0.115	0.130	0.173	0.157	0.494
2500	0.0072	0.0137	0.0137	0.0132	357.8	80.0	0.269	7.4	5.6	0.111	0.126	0.169	0.155	0.481

Current Ratings:

Nominal conductor area	Continuous current-carrying capacity, A								
	In air			In ground			In underground ducts		
									
mm ²	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
185	505	546	501	432	452	429	426	429	417
240	589	642	586	496	523	494	488	496	481
300	667	734	666	553	590	555	546	559	540
400	763	848	764	621	671	626	613	636	610
500	868	977	875	694	763	705	687	723	687
630	982	1124	996	767	863	789	761	818	770
800	1089	1284	1117	826	963	864	819	911	844
1000	1235	1519	1283	910	1102	967	906	1045	947
1200	1318	1610	1379	950	1164	1021	949	1104	1002
1600	1455	1837	1545	1018	1298	1114	1020	1231	1096
2000	1555	2019	1670	1063	1399	1180	1069	1328	1163
2500	1651	2210	1794	1100	1497	1238	1109	1422	1224