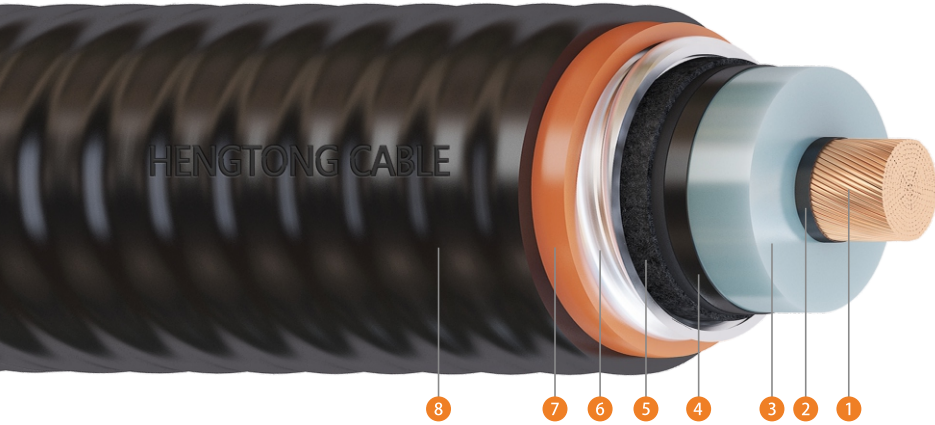


76/132kV Single Core Cu/XLPE/CAS/PVC/HDPE



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- Compacted or Milliken Cu conductor

Semi conductive screen tape and conductor screen

XLPE insulation

Insulation screen

Semi conductive water-blocking tape

Corrugated aluminium

PVC inner sheath

HDPE outer sheath with graphite coating

Properties:

Rated voltage	76/132kV
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.

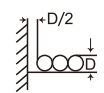
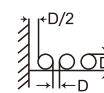
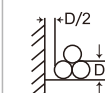
Structural Parameters:

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					
mm²	mm	mm	mm	mm	mm	mm	kg/km	kN	mm	mm
150	14.6	18	2.0	2.0	2.0	81.2	6235	10.2	1624	1218
185	16.2	18	2.0	2.0	2.0	82.8	6797	12.6	1656	1242
240	18.4	18	2.0	2.0	2.0	85.0	7507	16.3	1700	1275
300	20.6	18	2.0	2.0	2.0	87.2	8270	20.4	1744	1308
400	23.4	18	2.0	2.0	2.0	90.0	9369	27.2	1800	1350
500	26.6	18	2.0	2.0	2.0	93.2	10623	34.0	1864	1398
630	29.9	18	2.0	2.2	2.3	98.5	12360	42.8	1970	1477
800	33.6	18	2.0	2.2	2.3	102.2	14312	54.4	2044	1533
1000	39.2	18	2.3	2.2	2.3	111.7	17500	68	2234	1676
1200	43.4	18	2.3	2.5	2.5	115.9	19697	81.6	2318	1739
1600	49.6	18	2.3	2.5	2.5	122.1	23937	108.8	2442	1832
2000	55.0	18	2.3	2.5	2.5	128.5	28130	136.0	2570	1928
2500	61.5	18	2.3	2.5	2.5	135.0	33295	170.0	2700	2025

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		
mm²	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
150	0.124	0.159	0.159	0.159	21.5	21.5	0.115	2.7	7.7	0.167	0.182	0.225	0.272	0.640
185	0.0991	0.127	0.127	0.127	26.5	26.5	0.121	2.9	7.5	0.162	0.176	0.220	0.247	0.631
240	0.0754	0.0972	0.0972	0.0970	34.3	34.3	0.130	3.1	7.2	0.155	0.170	0.213	0.223	0.620
300	0.0601	0.0779	0.0779	0.0778	42.9	42.9	0.138	3.3	6.9	0.150	0.164	0.208	0.208	0.610
400	0.047	0.0617	0.0617	0.0614	57.2	57.2	0.149	3.6	6.7	0.144	0.158	0.202	0.195	0.598
500	0.0366	0.0489	0.0489	0.0485	71.5	71.5	0.161	3.8	6.4	0.138	0.153	0.196	0.185	0.585
630	0.0283	0.0390	0.0390	0.0384	90.1	75.0	0.173	4.1	6.2	0.134	0.149	0.192	0.176	0.571
800	0.0221	0.0318	0.0318	0.0311	114.5	75.0	0.187	4.5	6.1	0.129	0.144	0.187	0.170	0.559
1000	0.0176	0.0249	0.0249	0.0247	143.1	75.0	0.212	5.1	5.8	0.125	0.140	0.183	0.166	0.538
1200	0.0151	0.0220	0.0220	0.0218	171.7	75.0	0.228	5.4	5.7	0.121	0.135	0.179	0.163	0.527
1600	0.0113	0.0179	0.0179	0.0176	229.0	75.0	0.250	6.0	5.5	0.116	0.130	0.174	0.159	0.512
2000	0.009	0.0155	0.0155	0.0151	286.2	75.0	0.270	6.4	5.4	0.113	0.127	0.171	0.157	0.499
2500	0.0072	0.0137	0.0137	0.0132	357.8	75.0	0.293	7.0	5.3	0.109	0.123	0.167	0.155	0.486

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
mm²									
150	448	485	443	386	401	382	379	379	369
185	508	553	504	433	453	429	425	428	416
240	592	649	588	497	524	495	488	495	479
300	672	742	669	555	591	556	546	558	538
400	768	858	768	623	673	628	613	635	609
500	874	991	880	695	764	706	685	721	686
630	989	1137	1001	771	865	790	762	817	768
800	1103	1295	1125	840	968	871	832	914	849
1000	1243	1493	1289	891	1092	971	912	1034	949
1200	1327	1623	1387	958	1167	1026	955	1105	1004
1600	1465	1857	1553	1025	1300	1118	1024	1321	1097
2000	1565	2040	1679	1070	1402	1183	1073	1329	1164
2500	1661	2232	1802	1106	1499	1241	1113	1422	1225