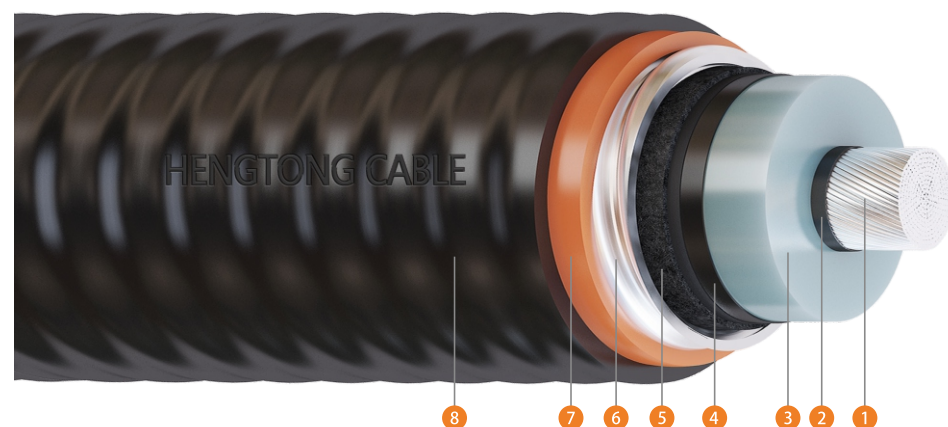


87/150kV Single Core Al/XLPE/CAS/PVC/HDPE



- 1 Compacted or Milliken Al 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.

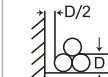
Structural Parameters:

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	6708	7.2	1816	1362
240	18.4	21	2.0	2.0	2.0	91.0	6831	9.4	1820	1365
300	20.6	21	2.0	2.0	2.0	93.2	7233	11.7	1864	1398
400	23.4	21	2.0	2.0	2.0	96.0	7809	15.6	1920	1440
500	26.6	21	2.0	2.2	2.3	101.2	8657	19.5	2024	1518
630	29.9	21	2.0	2.2	2.3	104.5	9375	24.6	2090	1567
800	33.6	20	2.4	2.2	2.3	107.0	10330	31.2	2140	1605
1000	39.2	20	2.4	2.5	2.5	115.9	12049	39.0	2318	1739
1200	43.4	20	2.4	2.5	2.5	120.1	13082	46.8	2402	1802
1600	49.6	20	2.4	2.5	2.5	127.3	14933	62.4	2546	1910
2000	55.0	20	2.4	2.5	2.5	133.7	16689	78.0	2674	2006
2500	61.5	20	2.4	2.5	2.5	140.2	18804	97.5	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	0.164	0.211	0.211	0.211	17.5	17.5	0.108	2.9	7.6	0.168	0.182	0.226	0.312	0.620
240	0.125	0.161	0.161	0.161	22.7	22.7	0.118	3.2	7.5	0.160	0.174	0.218	0.273	0.612
300	0.100	0.129	0.129	0.129	28.3	28.3	0.125	3.4	7.2	0.154	0.169	0.212	0.248	0.601
400	0.0778	0.1008	0.1008	0.1006	37.8	37.8	0.135	3.7	6.9	0.148	0.162	0.206	0.226	0.590
500	0.0605	0.0789	0.0789	0.0787	47.2	47.2	0.145	4.0	6.6	0.143	0.158	0.201	0.208	0.575
630	0.0469	0.0619	0.0619	0.0616	59.5	59.5	0.156	4.3	6.4	0.138	0.152	0.196	0.195	0.564
800	0.0367	0.0494	0.0494	0.0489	75.6	75.6	0.173	4.7	6.4	0.132	0.147	0.190	0.185	0.553
1000	0.0291	0.0375	0.0375	0.0375	94.5	80.0	0.196	5.4	6.1	0.127	0.142	0.185	0.177	0.534
1200	0.0247	0.0319	0.0319	0.0318	113.4	80.0	0.210	5.7	6.0	0.123	0.138	0.181	0.173	0.523
1600	0.0186	0.0241	0.0241	0.0241	151.2	80.0	0.231	6.3	5.8	0.118	0.133	0.177	0.167	0.507
2000	0.0149	0.0194	0.0194	0.0194	189.0	80.0	0.248	6.8	5.7	0.115	0.130	0.173	0.163	0.494
2500	0.0127	0.0167	0.0167	0.0166	236.3	80.0	0.269	7.4	5.6	0.111	0.126	0.169	0.161	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	395	425	391	340	352	336	335	334	327
240	462	500	458	392	408	388	386	387	377
300	525	572	521	439	461	436	433	437	425
400	606	665	603	499	528	497	492	500	485
500	697	770	696	564	605	566	559	573	552
630	799	893	801	634	690	640	628	654	625
800	904	1032	914	698	780	715	692	739	698
1000	1048	1213	1071	787	901	818	785	855	801
1200	1143	1346	1177	841	983	883	840	932	867
1600	1308	1588	1367	931	1133	998	933	1075	982
2000	1442	1802	1528	1000	1260	1091	1005	1197	1076
2500	1552	1993	1664	1048	1363	1160	1056	1296	1148