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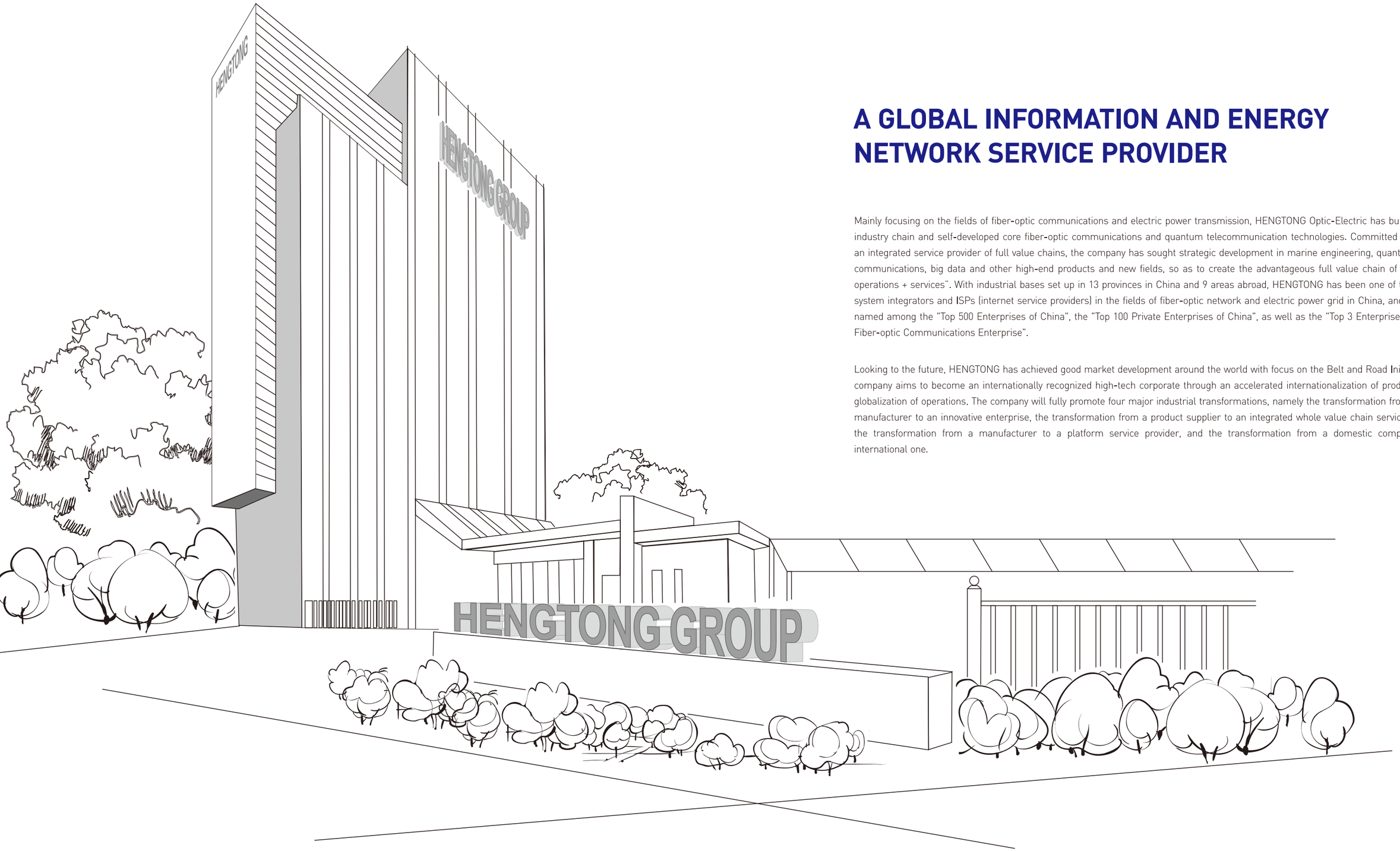
EHV CABLE SYSTEM

HENGTONG OPTIC-ELECTRIC
A Global Information and Energy Network Service Provider

Introduction



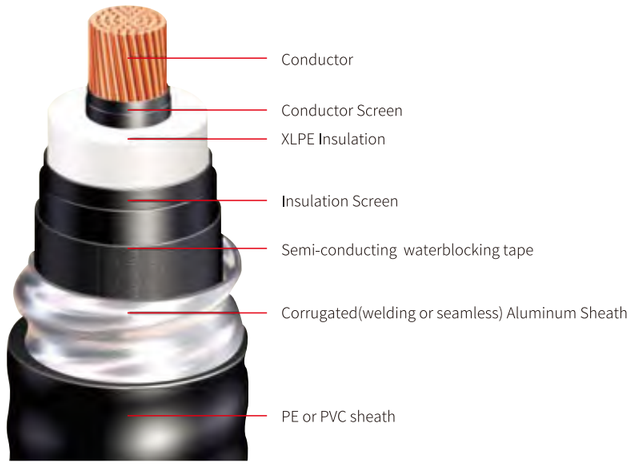
A GLOBAL INFORMATION AND ENERGY NETWORK SERVICE PROVIDER

Mainly focusing on the fields of fiber-optic communications and electric power transmission, HENGTONG Optic-Electric has built up a full industry chain and self-developed core fiber-optic communications and quantum telecommunication technologies. Committed to building an integrated service provider of full value chains, the company has sought strategic development in marine engineering, quantum secure communications, big data and other high-end products and new fields, so as to create the advantageous full value chain of "product + operations + services". With industrial bases set up in 13 provinces in China and 9 areas abroad, HENGTONG has been one of the leading system integrators and ISPs (internet service providers) in the fields of fiber-optic network and electric power grid in China, and has been named among the "Top 500 Enterprises of China", the "Top 100 Private Enterprises of China", as well as the "Top 3 Enterprises of Global Fiber-optic Communications Enterprise".

Looking to the future, HENGTONG has achieved good market development around the world with focus on the Belt and Road Initiative. The company aims to become an internationally recognized high-tech corporate through an accelerated internationalization of production and globalization of operations. The company will fully promote four major industrial transformations, namely the transformation from an R&D manufacturer to an innovative enterprise, the transformation from a product supplier to an integrated whole value chain service provider, the transformation from a manufacturer to a platform service provider, and the transformation from a domestic company to an international one.

Contents

36/66 (72.5) kV with Aluminum Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	576	503	621	703	0.0754	0.0970	0.168
300	646	579	689	797	0.0601	0.0778	0.180
400	733	660	799	919	0.047	0.0614	0.196
500	828	749	918	1053	0.0366	0.0486	0.213
630	933	848	1053	1207	0.0283	0.0385	0.231
800	1043	953	1195	1373	0.0221	0.0312	0.252
800 (Milliken)	1069	981	1246	1400	0.0221	0.0300	0.269
1000	1170	1076	1348	1572	0.0176	0.0247	0.291
1200	1250	1153	1503	1704	0.0151	0.0218	0.314
1400	1326	1225	1616	1832	0.0129	0.0193	0.331
1600	1389	1286	1716	1943	0.0113	0.0176	0.347

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	426	400	445	515	0.1250	0.1609	0.168
300	481	456	520	590	0.1000	0.1290	0.180
400	552	523	617	687	0.0778	0.1008	0.196
500	632	599	730	800	0.0605	0.0789	0.213
630	722	686	858	928	0.0469	0.0618	0.231
800	818	778	967	1067	0.0367	0.0491	0.252
800 (Milliken)	835	797	992	1092	0.0367	0.0472	0.269
1000	942	900	1157	1257	0.0291	0.0375	0.291
1200	1029	984	1243	1393	0.0247	0.0319	0.314
1400	1111	1064	1375	1525	0.0212	0.0274	0.331
1600	1186	1136	1497	1647	0.0186	0.0241	0.347

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	12.0	1.0	2.0	4.0	74.1	6046.6	4588.4
300		20.6	1.1	12.0	1.0	2.0	4.0	76.3	6754.9	4916.6
400		23.4	1.1	12.0	1.0	2.0	4.0	79.1	7805.6	5419.7
500		26.6	1.1	12.0	1.0	2.0	4.0	82.3	8996.7	5947.6
630		29.9	1.1	12.0	1.0	2.0	4.5	86.6	10582.1	6702.1
800		33.6	1.1	12.0	1.0	2.0	4.5	91.3	12496.6	7502.5
800	Segment Stranded (Milliken)	35.0	1.8	12.0	1.0	2.0	4.5	95.4	12913.5	7919.4
1000		39.2	1.8	12.0	1.0	2.3	4.5	100.2	15336.8	9105.4
1200		43.4	1.8	12.0	1.0	2.3	5.0	105.4	17626.3	10201.9
1400		46.6	1.8	12.0	1.0	2.3	5.0	108.6	19694.1	11032.3
1600		49.6	1.8	12.0	1.0	2.3	5.0	111.6	21748.1	11848.9

36/66 (72.5) kV with Lead Sheath

Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

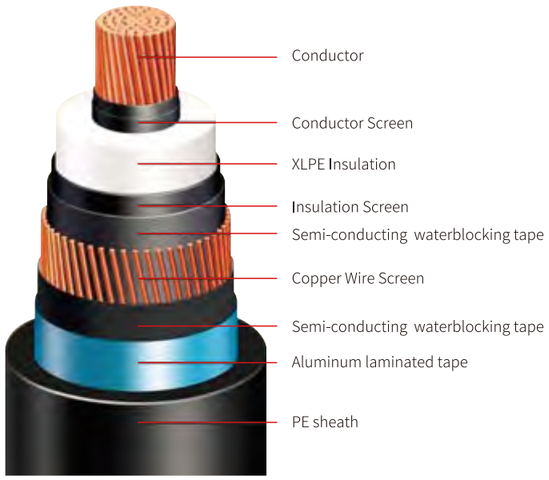
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	630	578	640	722	0.0754	0.0970	0.168
300	707	648	710	824	0.0601	0.0778	0.180
400	801	734	822	983	0.047	0.0614	0.196
500	907	832	951	1121	0.0366	0.0486	0.213
630	1025	941	1096	1252	0.0283	0.0385	0.231
800	1147	1055	1243	1437	0.0221	0.0312	0.252
800 (Milliken)	1168	1076	1278	1473	0.0221	0.0300	0.269
1000	1296	1196	1505	1752	0.0176	0.0247	0.291
1200	1386	1282	1648	1931	0.0151	0.0218	0.314
1400	1476	1367	1799	2096	0.0129	0.0193	0.331
1600	1551	1462	1906	2250	0.0113	0.0176	0.347

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	426	400	445	515	0.1250	0.1609	0.168
300	481	456	520	590	0.1000	0.1290	0.180
400	552	523	617	687	0.0778	0.1008	0.196
500	632	599	730	800	0.0605	0.0789	0.213
630	722	686	858	928	0.0469	0.0618	0.231
800	818	778	967	1067	0.0367	0.0491	0.252
800 (Milliken)	835	797	992	1092	0.0367	0.0472	0.269
1000	942	900	1157	1257	0.0291	0.0375	0.291
1200	1029	984	1243	1393	0.0247	0.0319	0.314
1400	1111	1064	1375	1525	0.0212	0.0274	0.331
1600	1186	1136	1497	1647	0.0186	0.0241	0.347

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	12.0	1.0	2.6	4.0	62.3	9224.3	7758.0
300		20.6	1.1	12.0	1.0	2.6	4.0	64.5	10101.6	8257.9
400		23.4	1.1	12.0	1.0	2.7	4.0	67.5	11560.7	9147.8
500		26.6	1.1	12.0	1.0	2.7	4.0	70.7	12992.9	9930.3
630		29.9	1.1	12.0	1.0	2.8	4.5	75.2	15043.4	11158.0
800		33.6	1.1	12.0	1.0	2.9	4.5	79.1	17465.4	12484.9
800	Segment Stranded (Milliken)	35.0	1.8	12.0	1.0	2.9	4.5	82.2	18121.3	13140.7
1000		39.2	1.8	12.0	1.0	3.0	4.5	86.6	20886.3	14668.3
1200		43.4	1.8	12.0	1.0	3.1	5.0	92.0	23779.2	16354.8
1400		46.6	1.8	12.0	1.0	3.2	5.0	95.4	26432.2	17770.4
1600		49.6	1.8	12.0	1.0	3.3	5.0	98.6	29072.1	19172.9

36/66 (72.5) kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	592	539	631	701	0.0754	0.0970	0.168
300	645	583	746	816	0.0601	0.0778	0.180
400	737	667	875	945	0.047	0.0614	0.196
500	840	763	996	1096	0.0366	0.0486	0.213
630	955	870	1164	1264	0.0283	0.0385	0.231
800	1075	982	1348	1448	0.0221	0.0312	0.252
800 (Milliken)	1103	1009	1390	1490	0.0221	0.0300	0.269
1000	1233	1130	1507	1695	0.0176	0.0247	0.291
1200	1329	1221	1664	1852	0.0151	0.0218	0.314
1400	1424	1311	1819	2007	0.0129	0.0193	0.331
1600	1531	1416	1944	2132	0.0113	0.0176	0.347

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	436	401	474	544	0.1250	0.1609	0.168
300	493	453	552	622	0.1000	0.1290	0.180
400	566	521	657	727	0.0778	0.1008	0.196
500	650	599	750	850	0.0605	0.0789	0.213
630	746	688	888	988	0.0469	0.0618	0.231
800	850	785	1045	1145	0.0367	0.0491	0.252
800 (Milliken)	870	805	1077	1177	0.0367	0.0472	0.269
1000	992	918	1177	1365	0.0291	0.0375	0.291
1200	1090	1011	1333	1521	0.0247	0.0319	0.314
1400	1188	1102	1488	1676	0.0212	0.0274	0.331
1600	1278	1187	1634	1822	0.0186	0.0241	0.347

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm^2		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	12.0	1.0	56/Φ1.5	0.25	4.0	63.0	5435.7	3969.4
300		20.6	1.1	12.0	1.0	56/Φ1.5	0.25	4.0	65.2	6114.0	4270.3
400		23.4	1.1	12.0	1.0	56/Φ1.5	0.25	4.0	68.0	7101.1	4688.2
500		26.6	1.1	12.0	1.0	56/Φ1.5	0.25	4.0	71.2	8230.1	5167.6
630		29.9	1.1	12.0	1.0	56/Φ1.5	0.25	4.5	75.5	9729.6	5844.1
800		33.6	1.1	12.0	1.0	56/Φ1.5	0.25	4.5	79.2	11536.7	6556.1
800	Segment Stranded (Milliken)	35.0	1.8	12.0	1.0	56/Φ1.5	0.25	4.5	82.3	11871.6	6891.1
1000		39.2	1.8	12.0	1.0	56/Φ1.5	0.25	4.5	86.5	13929.9	7711.9
1200		43.4	1.8	12.0	1.0	56/Φ1.5	0.25	5.0	91.7	16084.9	8660.5
1400		46.6	1.8	12.0	1.0	56/Φ1.5	0.25	5.0	94.9	18081.1	9419.3
1600		49.6	1.8	12.0	1.0	56/Φ1.5	0.25	5.0	97.9	20064.2	10165.0

64/110 (123) kV with Aluminum Sheath

Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

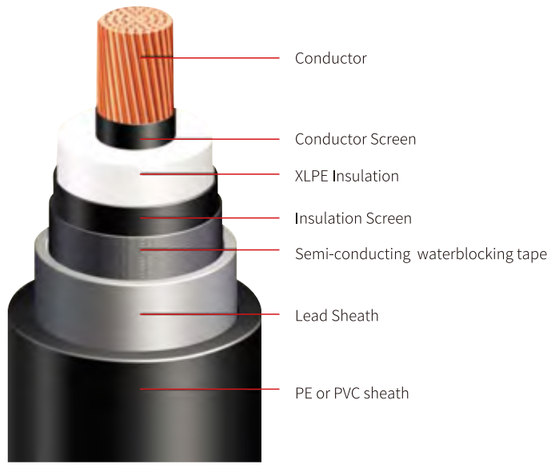
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	569	492	615	685	0.0754	0.0970	0.124
300	638	578	707	777	0.0601	0.0778	0.134
400	722	662	829	899	0.047	0.0614	0.150
500	812	732	959	1029	0.0366	0.0486	0.166
630	911	831	1106	1176	0.0283	0.0385	0.183
800	1009	929	1202	1302	0.0221	0.0312	0.202
800 (Milliken)	1045	925	1235	1335	0.0221	0.0300	0.215
1000	1149	1029	1393	1493	0.0176	0.0247	0.232
1200	1218	1098	1548	1698	0.0151	0.0218	0.249
1400	1321	1201	1617	1817	0.0129	0.0193	0.262
1600	1388	1268	1707	1907	0.0113	0.0176	0.275

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	421	391	432	502	0.1250	0.1609	0.124
300	475	455	505	575	0.1000	0.1290	0.134
400	544	525	602	672	0.0778	0.1008	0.150
500	620	585	712	782	0.0605	0.0789	0.166
630	705	672	834	904	0.0469	0.0618	0.183
800	791	758	912	1012	0.0367	0.0491	0.202
800 (Milliken)	816	752	941	1041	0.0367	0.0472	0.215
1000	925	861	1044	1194	0.0291	0.0375	0.232
1200	1003	937	1238	1388	0.0247	0.0319	0.249
1400	1107	1043	1363	1513	0.0212	0.0274	0.262
1600	1185	1120	1466	1616	0.0186	0.0241	0.275

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	19.0	1.0	2.0	4.0	88.1	7653.4	6195.2
300		20.6	1.1	18.5	1.0	2.0	4.0	89.3	8296.1	6457.8
400		23.4	1.1	17.5	1.0	2.0	4.0	90.1	9145.5	6759.6
500		26.6	1.1	17.0	1.0	2.0	4.0	92.3	10243.4	7194.3
630		29.9	1.1	16.5	1.0	2.0	4.5	95.6	11743.6	7863.6
800		33.6	1.1	16.0	1.0	2.0	4.5	99.3	13583.0	8588.9
800	Segment Stranded (Milliken)	35.0	1.8	16.0	1.0	2.0	4.5	103.4	14036.3	9042.3
1000		39.2	1.8	16.0	1.0	2.3	4.5	108.2	16531.0	10299.6
1200		43.4	1.8	16.0	1.0	2.3	5.0	113.4	18882.6	11458.2
1400		46.6	1.8	16.0	1.0	2.3	5.0	116.6	20987.7	12325.9
1600		49.6	1.8	16.0	1.0	2.3	5.0	119.6	23076.8	13177.6

64/110 (123) kV with Lead Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

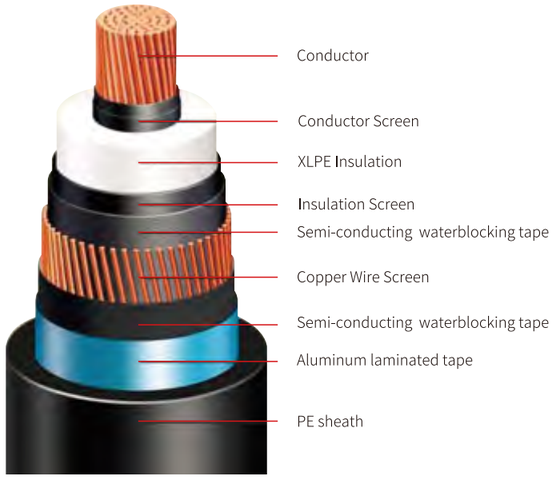
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	602	547	620	708	0.0754	0.0970	0.124
300	679	617	718	804	0.0601	0.0778	0.134
400	773	703	840	958	0.047	0.0614	0.150
500	878	804	970	1096	0.0366	0.0486	0.166
630	996	913	1125	1208	0.0283	0.0385	0.183
800	1118	1027	1229	1393	0.0221	0.0312	0.202
800 (Milliken)	1139	1048	1245	1413	0.0221	0.0300	0.215
1000	1263	1182	1486	1692	0.0176	0.0247	0.232
1200	1353	1268	1612	1871	0.0151	0.0218	0.249
1400	1443	1353	1765	2036	0.0129	0.0193	0.262
1600	1518	1448	1870	2182	0.0113	0.0176	0.275

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	400	373	423	493	0.1250	0.1609	0.124
300	451	419	491	561	0.1000	0.1290	0.134
400	519	482	591	661	0.0778	0.1008	0.150
500	595	553	705	775	0.0605	0.0789	0.166
630	678	634	836	906	0.0469	0.0618	0.183
800	770	721	950	1050	0.0367	0.0491	0.202
800 (Milliken)	788	736	989	1089	0.0367	0.0472	0.215
1000	894	836	1098	1248	0.0291	0.0375	0.232
1200	972	918	1244	1394	0.0247	0.0319	0.249
1400	1055	996	1386	1536	0.0212	0.0274	0.262
1600	1138	1068	1507	1657	0.0186	0.0241	0.275

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	19.0	1.0	2.6	4.0	76.3	11858.3	10392.0
300		20.6	1.1	18.5	1.0	2.6	4.0	77.5	12579.8	10736.0
400		23.4	1.1	17.5	1.0	2.7	4.0	78.5	13725.8	11312.9
500		26.6	1.1	17.0	1.0	2.7	4.0	80.7	15000.6	11938.0
630		29.9	1.1	16.5	1.0	2.8	4.5	84.2	16933.1	13047.7
800		33.6	1.1	16.0	1.0	2.9	4.5	87.1	19211.1	14230.6
800	Segment Stranded (Milliken)	35.0	1.8	16.0	1.0	2.9	4.5	90.2	19903.4	14922.9
1000		39.2	1.8	16.0	1.0	3.0	4.5	94.6	22746.0	16528.1
1200		43.4	1.8	16.0	1.0	3.1	5.0	100.0	25728.9	18304.5
1400		46.6	1.8	16.0	1.0	3.2	5.0	103.4	28447.9	19786.1
1600		49.6	1.8	16.0	1.0	3.3	5.0	106.6	31151.4	21252.2

64/110 (123) kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	575	533	613	683	0.0754	0.0970	0.124
300	627	575	696	786	0.0601	0.0778	0.134
400	719	659	825	915	0.047	0.0614	0.150
500	822	755	976	1066	0.0366	0.0486	0.166
630	937	862	1144	1234	0.0283	0.0385	0.183
800	1057	974	1313	1403	0.0221	0.0312	0.202
800 (Milliken)	1085	1001	1279	1445	0.0221	0.0300	0.215
1000	1215	1122	1484	1650	0.0176	0.0247	0.232
1200	1311	1213	1641	1807	0.0151	0.0218	0.249
1400	1406	1303	1796	1962	0.0129	0.0193	0.262
1600	1510	1406	1906	2072	0.0113	0.0176	0.275

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	424	415	455	525	0.1250	0.1609	0.124
300	479	447	509	599	0.1000	0.1290	0.134
400	552	515	614	704	0.0778	0.1008	0.150
500	636	593	737	827	0.0605	0.0789	0.166
630	732	682	875	965	0.0469	0.0618	0.183
800	836	779	1019	1109	0.0367	0.0491	0.202
800 (Milliken)	856	799	975	1141	0.0367	0.0472	0.215
1000	978	912	1163	1329	0.0291	0.0375	0.232
1200	1075	1004	1318	1484	0.0247	0.0319	0.249
1400	1173	1095	1472	1638	0.0212	0.0274	0.262
1600	1278	1187	1604	1770	0.0186	0.0241	0.275

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm^2		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	19.0	1.0	56/Φ1.5	0.25	4.0	77.0	6787.6	5321.3
300		20.6	1.1	18.5	1.0	56/Φ1.5	0.25	4.0	78.2	7400.8	5557.0
400		23.4	1.1	17.5	1.0	56/Φ1.5	0.25	4.0	79.0	8219.4	5806.5
500		26.6	1.1	17.0	1.0	56/Φ1.5	0.25	4.0	81.2	9287.8	6225.3
630		29.9	1.1	16.5	1.0	56/Φ1.5	0.25	4.5	84.5	10731.4	6846.0
800		33.6	1.1	16.0	1.0	56/Φ1.5	0.25	4.5	87.2	12463.7	7483.2
800	Segment Stranded (Milliken)	35.0	1.8	16.0	1.0	56/Φ1.5	0.25	4.5	90.3	12835.2	7854.6
1000		39.2	1.8	16.0	1.0	56/Φ1.5	0.25	4.5	94.5	14942.5	8724.5
1200		43.4	1.8	16.0	1.0	56/Φ1.5	0.25	5.0	99.7	17158.9	9734.5
1400		46.6	1.8	16.0	1.0	56/Φ1.5	0.25	5.0	102.9	19192.6	10530.8
1600		49.6	1.8	16.0	1.0	56/Φ1.5	0.25	5.0	105.9	21210.7	11311.5

76/132 (145) kV with Aluminum Sheath

Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

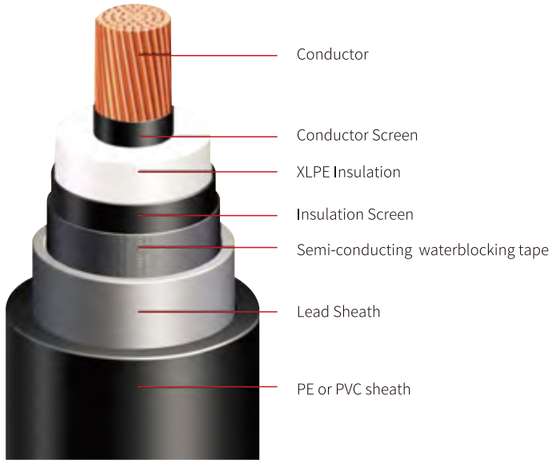
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	571	503	618	688	0.0754	0.0970	0.128
300	641	586	714	784	0.0601	0.0778	0.137
400	740	675	855	925	0.047	0.0614	0.147
500	839	744	1019	1089	0.0366	0.0486	0.159
630	952	854	1173	1243	0.0283	0.0385	0.172
800	1032	950	1231	1331	0.0221	0.0312	0.185
800 (Milliken)	1051	985	1272	1372	0.0221	0.0300	0.197
1000	1112	1032	1503	1603	0.0176	0.0247	0.212
1200	1195	1114	1576	1726	0.0151	0.0218	0.228
1400	1241	1198	1661	1861	0.0129	0.0193	0.239
1600	1377	1251	1742	1942	0.0113	0.0176	0.250
2000	1521	1354	2032	2232	0.009	0.0154	0.270

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	422	400	432	502	0.1250	0.1609	0.128
300	477	462	510	580	0.1000	0.1290	0.137
400	557	535	621	691	0.0778	0.1008	0.147
500	640	595	757	827	0.0605	0.0789	0.159
630	737	691	886	956	0.0469	0.0618	0.172
800	809	776	934	1034	0.0367	0.0491	0.185
800 (Milliken)	821	800	970	1070	0.0367	0.0472	0.197
1000	895	863	1182	1282	0.0291	0.0375	0.212
1200	984	951	1261	1411	0.0247	0.0319	0.228
1400	1040	1041	1399	1549	0.0212	0.0274	0.239
1600	1176	1105	1521	1646	0.0186	0.0241	0.250
2000	1299	1196	1742	1892	0.0149	0.0194	0.270

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	18.0	1.0	2.0	4.0	86.1	7410.5	5952.3
300		20.6	1.1	18.0	1.0	2.0	4.0	88.3	8187.1	6348.8
400		23.4	1.1	18.0	1.0	2.0	4.0	91.1	9257.2	6871.3
500		26.6	1.1	18.0	1.0	2.0	4.0	94.3	10504.3	7455.3
630		29.9	1.1	18.0	1.0	2.0	4.5	98.6	12184.8	8287.0
800		33.6	1.1	18.0	1.0	2.0	4.5	103.3	14146.4	9152.3
800	Segment Stranded (Milliken)	35.0	1.8	18.0	1.0	2.0	4.5	107.4	14647.7	9653.6
1000		39.2	1.8	18.0	1.0	2.3	4.5	112.2	17180.3	10948.9
1200		43.4	1.8	18.0	1.0	2.3	5.0	117.4	19528.7	12104.3
1400		46.6	1.8	18.0	1.0	2.3	5.0	120.6	21652.5	12990.7
1600		49.6	1.8	18.0	1.0	2.3	5.0	123.6	23759.1	13859.9
2000		55.0	1.8	18.0	1.0	2.3	5.2	129.3	27987.4	15613.4

76/132 (145) kV with Lead Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

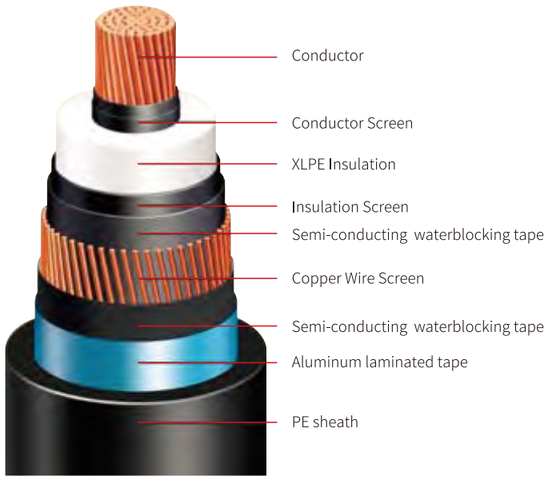
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	593	542	619	700	0.0754	0.0970	0.128
300	670	612	716	796	0.0601	0.0778	0.137
400	762	698	820	937	0.047	0.0614	0.147
500	867	795	934	1082	0.0366	0.0486	0.159
630	985	904	1077	1194	0.0283	0.0385	0.172
800	1107	1018	1222	1375	0.0221	0.0312	0.185
800 (Milliken)	1121	1039	1248	1395	0.0221	0.0300	0.197
1000	1245	1173	1469	1674	0.0176	0.0247	0.212
1200	1335	1259	1599	1853	0.0151	0.0218	0.228
1400	1425	1349	1741	2018	0.0129	0.0193	0.239
1600	1500	1444	1853	2164	0.0113	0.0176	0.250
2000	1650	1598	2064	2455	0.009	0.0154	0.270

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	403	375	425	495	0.1250	0.1609	0.128
300	453	421	490	560	0.1000	0.1290	0.137
400	521	481	591	661	0.0778	0.1008	0.147
500	591	552	698	768	0.0605	0.0789	0.159
630	674	633	828	898	0.0469	0.0618	0.172
800	766	717	942	1042	0.0367	0.0491	0.185
800 (Milliken)	781	729	981	1081	0.0367	0.0472	0.197
1000	886	828	1140	1240	0.0291	0.0375	0.212
1200	965	910	1235	1385	0.0247	0.0319	0.228
1400	1040	989	1365	1515	0.0212	0.0274	0.239
1600	1132	1062	1484	1634	0.0186	0.0241	0.250
2000	1275	1161	1660	1810	0.0149	0.0194	0.270

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	18.0	1.0	2.6	4.0	74.3	11464.5	9998.2
300		20.6	1.1	18.0	1.0	2.6	4.0	76.5	12380.4	10536.6
400		23.4	1.1	18.0	1.0	2.7	4.0	79.5	13931.4	11518.5
500		26.6	1.1	18.0	1.0	2.7	4.0	82.7	15419.7	12357.1
630		29.9	1.1	18.0	1.0	2.8	4.5	87.2	17607.1	13709.3
800		33.6	1.1	18.0	1.0	2.9	4.5	91.1	20119.1	15138.5
800	Segment Stranded (Milliken)	35.0	1.8	18.0	1.0	2.9	4.5	94.2	20829.6	15849.0
1000		39.2	1.8	18.0	1.0	3.0	4.5	98.6	23711.0	17493.1
1200		43.4	1.8	18.0	1.0	3.1	5.0	104.0	26738.9	19314.5
1400		46.6	1.8	18.0	1.0	3.2	5.0	107.4	29490.8	20829.0
1600		49.6	1.8	18.0	1.0	3.3	5.0	110.6	32226.1	22326.9
2000		55.0	1.8	18.0	1.0	3.3	5.2	116.4	36942.3	24568.3

76/132 (145) kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

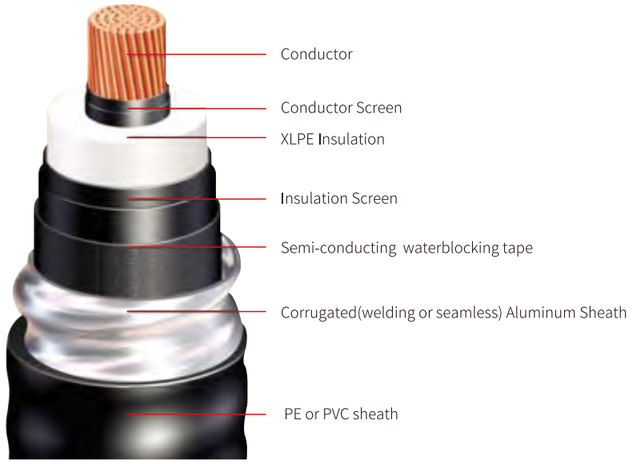
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	576	533	615	685	0.0754	0.0970	0.128
300	619	572	714	784	0.0601	0.0778	0.137
400	711	656	836	906	0.047	0.0614	0.147
500	814	752	986	1056	0.0366	0.0486	0.159
630	929	859	1124	1224	0.0283	0.0385	0.172
800	1049	966	1293	1393	0.0221	0.0312	0.185
800 (Milliken)	1077	993	1325	1425	0.0221	0.0300	0.197
1000	1207	1114	1530	1630	0.0176	0.0247	0.212
1200	1303	1205	1631	1787	0.0151	0.0218	0.228
1400	1398	1295	1781	1937	0.0129	0.0193	0.239
1600	1500	1401	1890	2046	0.0113	0.0176	0.250
2000	1635	1529	2120	2276	0.009	0.0154	0.270

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
240	425	415	458	528	0.1250	0.1609	0.128
300	473	444	528	598	0.1000	0.1290	0.137
400	546	512	627	697	0.0778	0.1008	0.147
500	630	590	749	819	0.0605	0.0789	0.159
630	726	679	857	957	0.0469	0.0618	0.172
800	829	772	1002	1102	0.0367	0.0491	0.185
800 (Milliken)	849	792	1026	1126	0.0367	0.0472	0.197
1000	971	905	1213	1313	0.0291	0.0375	0.212
1200	1069	998	1312	1468	0.0247	0.0319	0.228
1400	1166	1089	1462	1618	0.0212	0.0274	0.239
1600	1252	1199	1593	1749	0.0186	0.0241	0.250
2000	1365	1309	1789	1945	0.0149	0.0194	0.270

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm^2		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
240	Compact Round Stranded	18.4	1.1	18.0	1.0	56/Φ1.5	0.25	4.0	75.0	6575.0	5108.7
300		20.6	1.1	18.0	1.0	56/Φ1.5	0.25	4.0	77.2	7292.2	5448.5
400		23.4	1.1	18.0	1.0	56/Φ1.5	0.25	4.0	80.0	8330.6	5917.7
500		26.6	1.1	18.0	1.0	56/Φ1.5	0.25	4.0	83.2	9516.0	6453.5
630		29.9	1.1	18.0	1.0	56/Φ1.5	0.25	4.5	87.5	11110.0	7212.2
800		33.6	1.1	18.0	1.0	56/Φ1.5	0.25	4.5	91.2	12962.8	7982.3
800	Segment Stranded (Milliken)	35.0	1.8	18.0	1.0	56/Φ1.5	0.25	4.5	94.3	13355.1	8374.5
1000		39.2	1.8	18.0	1.0	56/Φ1.5	0.25	4.5	98.5	15486.4	9268.5
1200		43.4	1.8	18.0	1.0	56/Φ1.5	0.25	5.0	103.7	17733.0	10308.6
1400		46.6	1.8	18.0	1.0	56/Φ1.5	0.25	5.0	106.9	19785.7	11123.9
1600		49.6	1.8	18.0	1.0	56/Φ1.5	0.25	5.0	109.9	21821.3	11922.1
2000		55.0	1.8	18.0	1.0	62/Φ1.5	0.25	5.2	115.7	26008.5	13634.5

85/150(170) kV with Aluminum Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

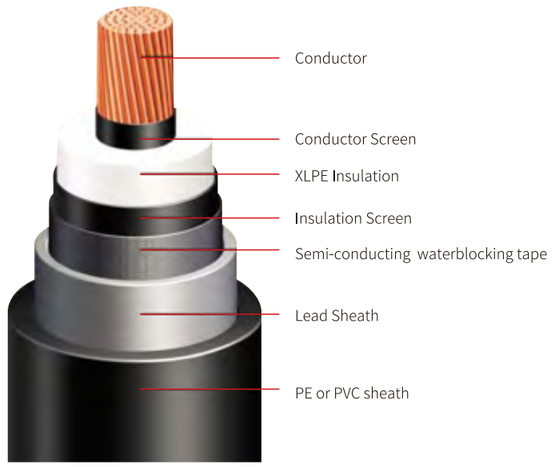
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	724	649	818	888	0.047	0.0614	0.142
500	839	744	979	1049	0.0366	0.0486	0.154
630	952	854	1133	1203	0.0283	0.0385	0.165
800	1027	947	1224	1324	0.0221	0.0312	0.178
800 (Milliken)	1052	974	1235	1335	0.0221	0.0300	0.184
1000	1150	1021	1453	1553	0.0176	0.0247	0.204
1200	1288	1114	1526	1676	0.0151	0.0218	0.218
1400	1399	1198	1611	1811	0.0129	0.0193	0.229
1600	1455	1277	1742	1942	0.0113	0.0176	0.240
2000	1502	1341	1928	2128	0.009	0.0154	0.258
2500	1682	1524	2154	2354	0.0072	0.0131	0.281

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	545	514	616	664	0.0778	0.1008	0.142
500	640	595	727	797	0.0605	0.0789	0.154
630	737	691	855	925	0.0469	0.0618	0.165
800	805	773	959	1029	0.0367	0.0491	0.178
800 (Milliken)	822	791	941	1041	0.0367	0.0472	0.184
1000	926	854	1142	1242	0.0291	0.0375	0.204
1200	1060	951	1270	1370	0.0247	0.0319	0.218
1400	1172	1041	1408	1508	0.0212	0.0274	0.229
1600	1242	1128	1496	1646	0.0186	0.0241	0.240
2000	1282	1185	1654	1804	0.0149	0.0194	0.258
2500	1436	1346	1845	1995	0.0127	0.0167	0.281

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.1	19.0	1.0	2.4	5.0	95.9	10196.4	7810.5
500		26.6	1.1	19.0	1.0	2.4	5.0	99.1	11475.1	8426.0
630		29.9	1.1	19.0	1.0	2.4	5.0	102.4	13029.1	9131.3
800		33.6	1.1	19.0	1.0	2.4	5.0	107.1	15026.9	10032.9
800		35.0	1.8	19.0	1.0	2.4	5.0	108.8	15255.9	10261.9
1000		39.2	1.8	19.0	1.0	2.6	5.0	115.8	17996.4	11764.9
1200	Segment Stranded (Milliken)	43.4	1.8	19.0	1.0	2.6	5.0	120.0	20222.3	12797.9
1400		46.6	1.8	19.0	1.0	2.6	5.0	124.2	22382.7	13720.9
1600		49.6	1.8	19.0	1.0	2.6	5.0	127.2	24507.0	14607.8
2000		55.0	1.8	19.0	1.0	2.8	5.0	134.0	29002.1	16628.1
2500		61.5	1.8	19.0	1.0	2.8	5.0	140.5	34371.9	18904.4

85/150 (170) kV with Lead Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

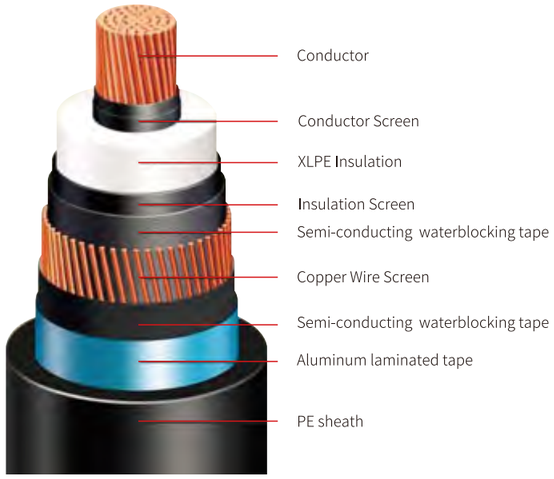
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	734	670	819	928	0.047	0.0614	0.142
500	839	767	928	1054	0.0366	0.0486	0.154
630	957	876	1073	1176	0.0283	0.0385	0.165
800	1079	997	1218	1361	0.0221	0.0312	0.178
800 (Milliken)	1094	1018	1233	1381	0.0221	0.0300	0.184
1000	1218	1152	1464	1660	0.0176	0.0247	0.204
1200	1308	1231	1589	1832	0.0151	0.0218	0.218
1400	1401	1321	1723	1997	0.0129	0.0193	0.229
1600	1476	1416	1845	2143	0.0113	0.0176	0.240
2000	1626	1570	2060	2434	0.009	0.0154	0.258
2500	1784	1687	2169	2692	0.0072	0.0131	0.281

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	518	487	587	657	0.0778	0.1008	0.142
500	588	559	691	761	0.0605	0.0789	0.154
630	671	640	822	892	0.0469	0.0618	0.165
800	763	724	961	1031	0.0367	0.0491	0.178
800 (Milliken)	773	736	1002	1072	0.0367	0.0472	0.184
1000	878	836	1081	1231	0.0291	0.0375	0.204
1200	956	918	1226	1376	0.0247	0.0319	0.218
1400	1014	996	1355	1505	0.0212	0.0274	0.229
1600	1107	1070	1474	1624	0.0186	0.0241	0.240
2000	1210	1144	1618	1768	0.0149	0.0194	0.258
2500	1321	1251	1921	2071	0.0127	0.0167	0.281

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.1	19.0	1.0	2.7	5.0	83.5	14601.1	12188.2
500		26.6	1.1	19.0	1.0	2.7	5.0	86.7	16108.6	13046.1
630		29.9	1.1	19.0	1.0	2.8	5.0	90.2	18190.1	14292.2
800		33.6	1.1	19.0	1.0	2.8	5.0	93.9	20422.7	15442.2
800		35.0	1.8	19.0	1.0	2.8	5.0	97.0	21136.1	16155.5
1000		39.2	1.8	19.0	1.0	2.8	5.0	101.2	23698.6	17480.7
1200	Segment Stranded (Milliken)	43.4	1.8	19.0	1.0	2.9	5.0	105.6	26561.8	19137.4
1400		46.6	1.8	19.0	1.0	3.0	5.0	109.0	29306.0	20644.2
1600		49.6	1.8	19.0	1.0	3.1	5.0	112.2	32034.3	22135.1
2000		55.0	1.8	19.0	1.0	3.2	5.0	117.8	37044.1	24670.1
2500		61.5	1.8	19.0	1.0	3.4	5.0	124.7	43624.3	28156.8

85/150 (170) kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	725	668	823	893	0.047	0.0614	0.142
500	819	755	976	1046	0.0366	0.0486	0.154
630	924	862	1144	1214	0.0283	0.0385	0.165
800	1044	963	1313	1383	0.0221	0.0312	0.178
800 (Milliken)	1072	990	1345	1415	0.0221	0.0300	0.184
1000	1202	1111	1470	1620	0.0176	0.0247	0.204
1200	1298	1202	1627	1777	0.0151	0.0218	0.218
1400	1393	1292	1734	1922	0.0129	0.0193	0.229
1600	1495	1398	1843	2031	0.0113	0.0176	0.240
2000	1629	1524	2073	2261	0.009	0.0154	0.258
2500	1763	1653	2318	2506	0.0072	0.0131	0.281

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	557	522	617	687	0.0778	0.1008	0.142
500	634	593	741	811	0.0605	0.0789	0.154
630	722	682	879	949	0.0469	0.0618	0.165
800	825	770	1024	1094	0.0367	0.0491	0.178
800 (Milliken)	846	790	1048	1118	0.0367	0.0472	0.184
1000	967	903	1155	1305	0.0291	0.0375	0.204
1200	1065	995	1309	1459	0.0247	0.0319	0.218
1400	1162	1086	1417	1605	0.0212	0.0274	0.229
1600	1248	1196	1548	1736	0.0186	0.0241	0.240
2000	1360	1304	1744	1932	0.0149	0.0194	0.258
2500	1507	1380	1954	2142	0.0127	0.0167	0.281

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm^2		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.1	19.0	1.0	84/Φ1.5	0.25	5.0	84.0	9269.0	6856.1
500		26.6	1.1	18.5	1.0	84/Φ1.5	0.25	5.0	87.2	10473.6	7411.1
630		29.9	1.1	17.5	1.0	84/Φ1.5	0.25	5.0	90.5	11953.4	8055.6
800		33.6	1.1	17.0	1.0	84/Φ1.5	0.25	5.0	94.2	13822.7	8842.2
800		35.0	1.8	16.5	1.0	84/Φ1.5	0.25	5.0	97.3	14228.9	9248.3
1000		39.2	1.8	16.0	1.0	84/Φ1.5	0.25	5.0	101.5	16378.9	10161.0
1200	Segment Stranded (Milliken)	43.4	1.8	16.0	1.0	84/Φ1.5	0.25	5.0	105.7	18485.3	11060.9
1400		46.6	1.8	16.0	1.0	84/Φ1.5	0.25	5.0	108.9	20547.3	11885.5
1600		49.6	1.8	16.0	1.0	84/Φ1.5	0.25	5.0	111.9	22591.7	12692.5
2000		55.0	1.8	16.0	1.0	84/Φ1.5	0.25	5.0	117.3	26625.4	14251.4
2500		61.5	1.8	16.0	1.0	84/Φ1.5	0.25	5.0	124.6	32133.4	16665.9

127/220 (245) kV with Aluminum Sheath

Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

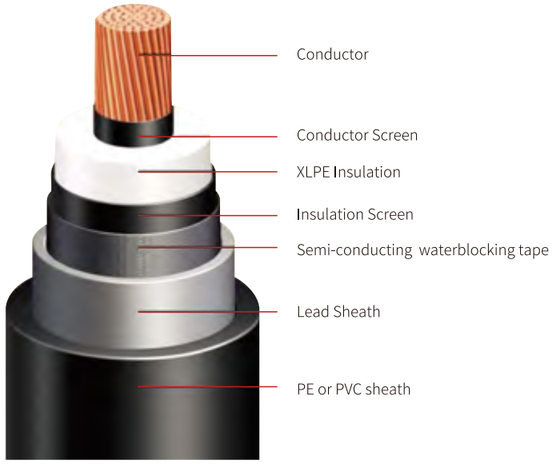
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	719	650	796	866	0.047	0.0614	0.118
500	824	755	959	1029	0.0366	0.0486	0.126
630	937	887	1113	1183	0.0283	0.0385	0.138
800	1067	944	1212	1312	0.0221	0.0312	0.151
800 (Milliken)	1048	968	1255	1355	0.0221	0.0300	0.156
1000	1134	1045	1473	1573	0.0176	0.0247	0.172
1200	1314	1138	1756	1906	0.0151	0.0218	0.184
1400	1402	1222	1632	1832	0.0129	0.0193	0.193
1600	1478	1301	1718	1918	0.0113	0.0176	0.201
2000	1556	1374	1862	2062	0.009	0.0154	0.216
2500	1659	1577	2105	2305	0.0072	0.0131	0.234

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	541	515	577	647	0.0778	0.1008	0.118
500	629	604	712	782	0.0605	0.0789	0.126
630	725	718	840	910	0.0469	0.0618	0.138
800	837	771	950	1020	0.0367	0.0491	0.151
800 (Milliken)	819	786	957	1057	0.0367	0.0472	0.156
1000	913	874	1158	1258	0.0291	0.0375	0.172
1200	1082	971	1458	1558	0.0247	0.0319	0.184
1400	1175	1061	1425	1525	0.0212	0.0274	0.193
1600	1262	1149	1476	1626	0.0186	0.0241	0.201
2000	1329	1214	1598	1748	0.0149	0.0194	0.216
2500	1417	1393	1804	1954	0.0127	0.0167	0.234

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	27.0	1.0	2.4	5.0	113.3	12889.5	10503.6
500		26.6	1.8	27.0	1.0	2.4	5.0	116.5	14251.6	11202.6
630		29.9	1.8	26.0	1.0	2.4	5.0	117.8	15551.9	11654.1
800		33.6	1.8	25.0	1.0	2.4	5.0	120.5	17255.0	12261.0
800		35.0	1.8	25.0	1.0	2.4	5.0	122.2	17518.8	12524.7
1000		39.2	1.8	24.0	1.0	2.6	5.0	125.8	19742.7	13511.2
1200	Segment Stranded (Milliken)	43.4	1.8	24.0	1.0	2.6	5.0	130.0	22030.0	14605.6
1400		46.6	1.8	24.0	1.0	2.6	5.0	134.2	24275.7	15613.9
1600		49.6	1.8	24.0	1.0	2.6	5.0	137.2	26443.8	16544.6
2000		55.0	1.8	24.0	1.0	2.8	5.0	144.0	30997.0	18623.0
2500		61.5	1.8	24.0	1.0	2.8	5.0	150.5	36476.8	21009.3

127/220 (245) kV with Lead Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

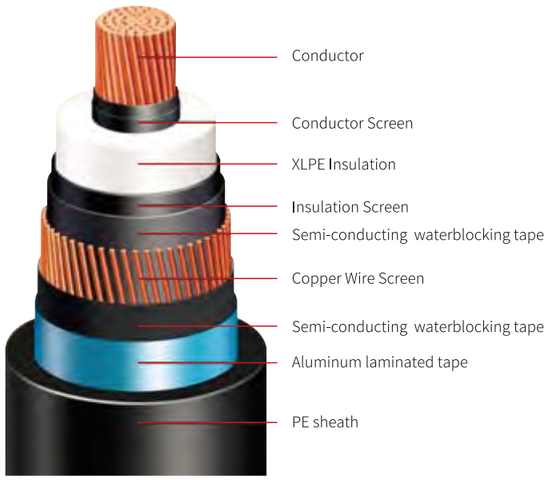
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	718	646	799	911	0.047	0.0614	0.118
500	823	743	914	1048	0.0366	0.0486	0.126
630	939	862	1054	1264	0.0283	0.0385	0.138
800	1061	983	1196	1389	0.0221	0.0312	0.151
800 (Milliken)	1076	1004	1221	1423	0.0221	0.0300	0.156
1000	1197	1141	1429	1679	0.0176	0.0247	0.172
1200	1287	1220	1552	1851	0.0151	0.0218	0.184
1400	1380	1310	1708	1953	0.0129	0.0193	0.193
1600	1452	1401	1797	2112	0.0113	0.0176	0.201
2000	1602	1555	2004	2380	0.009	0.0154	0.216
2500	1760	1672	2108	2598	0.0072	0.0131	0.234

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	515	489	566	636	0.0778	0.1008	0.118
500	589	565	677	747	0.0605	0.0789	0.126
630	674	649	812	882	0.0469	0.0618	0.138
800	758	725	931	1001	0.0367	0.0491	0.151
800 (Milliken)	784	750	974	1044	0.0367	0.0472	0.156
1000	888	860	1073	1223	0.0291	0.0375	0.172
1200	963	941	1216	1366	0.0247	0.0319	0.184
1400	1006	1022	1345	1495	0.0212	0.0274	0.193
1600	1062	1059	1383	1533	0.0186	0.0241	0.201
2000	1206	1167	1534	1684	0.0149	0.0194	0.216
2500	1317	1252	1783	1933	0.0127	0.0167	0.234

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	27.0	1.0	2.7	5.0	100.9	18533.6	16120.7
500		26.6	1.8	27.0	1.0	2.7	5.0	104.1	20124.5	17061.9
630		29.9	1.8	26.0	1.0	2.8	5.0	105.6	21855.3	17957.5
800		33.6	1.8	25.0	1.0	2.8	5.0	107.3	23669.9	18689.4
800		35.0	1.8	25.0	1.0	2.8	5.0	109.0	24065.4	19084.9
1000		39.2	1.8	24.0	1.0	2.8	5.0	111.2	26186.5	19968.6
1200	Segment Stranded (Milliken)	43.4	1.8	24.0	1.0	2.9	5.0	115.6	29146.7	21722.3
1400		46.6	1.8	24.0	1.0	3.0	5.0	119.0	31973.3	23311.5
1600		49.6	1.8	24.0	1.0	3.1	5.0	122.2	34781.2	24882.0
2000		55.0	1.8	24.0	1.0	3.2	5.0	127.8	39905.5	27531.5
2500		61.5	1.8	24.0	1.0	3.4	5.0	134.7	46652.1	31184.6

127/220 (245) kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

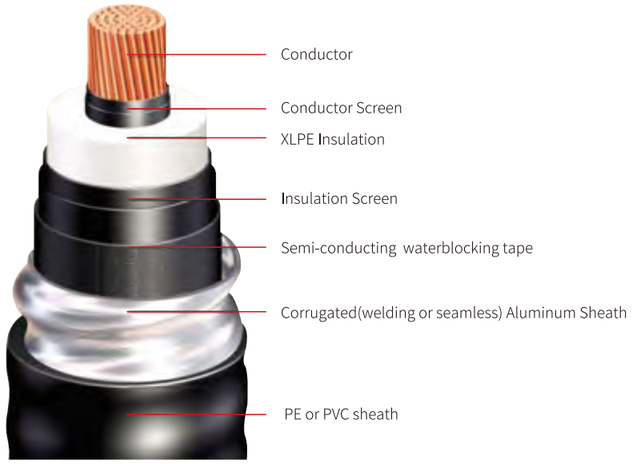
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	720	678	789	859	0.047	0.0614	0.118
500	814	742	946	1016	0.0366	0.0486	0.126
630	919	849	1114	1184	0.0283	0.0385	0.138
800	1034	950	1253	1353	0.0221	0.0312	0.151
800 (Milliken)	1062	977	1285	1385	0.0221	0.0300	0.156
1000	1192	1088	1470	1570	0.0176	0.0247	0.172
1200	1263	1179	1539	1727	0.0151	0.0218	0.184
1400	1358	1269	1684	1872	0.0129	0.0193	0.193
1600	1460	1375	1768	1956	0.0113	0.0176	0.201
2000	1594	1501	1998	2186	0.009	0.0154	0.216
2500	1733	1633	2240	2428	0.0072	0.0131	0.234

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	553	530	591	661	0.0778	0.1008	0.118
500	630	583	718	788	0.0605	0.0789	0.126
630	718	671	855	925	0.0469	0.0618	0.138
800	818	759	970	1070	0.0367	0.0491	0.151
800 (Milliken)	838	779	994	1094	0.0367	0.0472	0.156
1000	959	884	1164	1264	0.0291	0.0375	0.172
1200	1036	976	1230	1418	0.0247	0.0319	0.184
1400	1133	1067	1375	1563	0.0212	0.0274	0.193
1600	1219	1177	1484	1672	0.0186	0.0241	0.201
2000	1331	1285	1680	1868	0.0149	0.0194	0.216
2500	1481	1363	1887	2075	0.0127	0.0167	0.234

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm^2		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	27.0	1.0	84/Φ1.5	0.25	5.0	101.4	11545.3	9132.4
500		26.6	1.8	27.0	1.0	84/Φ1.5	0.25	5.0	104.6	12833.3	9770.8
630		29.9	1.8	26.0	1.0	84/Φ1.5	0.25	5.0	105.9	14097.9	10200.1
800		33.6	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	107.6	15746.7	10766.1
800		35.0	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	109.3	15973.2	10992.7
1000		39.2	1.8	24.0	1.0	84/Φ1.5	0.25	5.0	111.5	17879.3	11661.4
1200	Segment Stranded (Milliken)	43.4	1.8	24.0	1.0	84/Φ1.5	0.25	5.0	115.7	20047.0	12622.6
1400		46.6	1.8	24.0	1.0	84/Φ1.5	0.25	5.0	118.9	22155.8	13494.0
1600		49.6	1.8	24.0	1.0	84/Φ1.5	0.25	5.0	121.9	24244.0	14344.8
2000		55.0	1.8	24.0	1.0	84/Φ1.5	0.25	5.0	127.3	28356.6	15982.6
2500		61.5	1.8	24.0	1.0	84/Φ1.5	0.25	5.0	134.6	33981.4	18513.9

160/275 kV with Aluminum Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

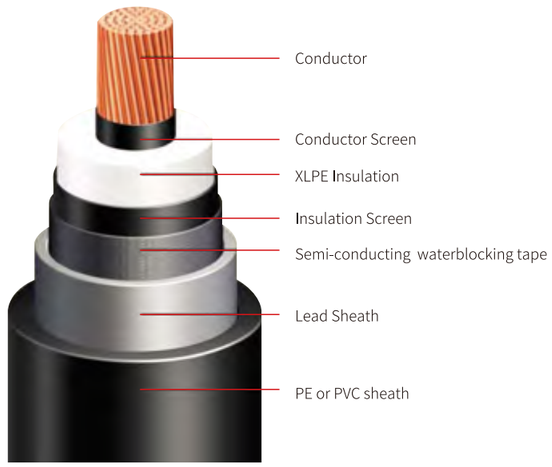
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	721	660	794	864	0.047	0.0614	0.123
500	824	764	953	1023	0.0366	0.0486	0.132
630	937	896	1107	1177	0.0283	0.0385	0.141
800	1019	953	1187	1287	0.0221	0.0312	0.151
800 (Milliken)	1048	977	1223	1323	0.0221	0.0300	0.156
1000	1140	1060	1382	1482	0.0176	0.0247	0.167
1200	1274	1127	1462	1612	0.0151	0.0218	0.178
1400	1301	1211	1547	1747	0.0129	0.0193	0.187
1600	1388	1290	1678	1878	0.0113	0.0176	0.195
2000	1457	1365	1808	2008	0.009	0.0154	0.209
2500	1619	1566	2065	2265	0.0072	0.0131	0.226

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	542	512	576	646	0.0778	0.1008	0.118
500	629	622	707	777	0.0605	0.0789	0.126
630	725	732	835	905	0.0469	0.0618	0.138
800	799	817	930	1000	0.0367	0.0491	0.151
800 (Milliken)	819	838	932	1032	0.0367	0.0472	0.156
1000	918	991	1085	1185	0.0291	0.0375	0.172
1200	1049	1125	1218	1318	0.0247	0.0319	0.184
1400	1090	1263	1354	1454	0.0212	0.0274	0.193
1600	1185	1406	1442	1592	0.0186	0.0241	0.201
2000	1244	1504	1552	1702	0.0149	0.0194	0.216
2500	1382	1696	1770	1920	0.0127	0.0167	0.234

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	25.0	1.0	2.4	5.0	109.3	12218.3	9805.4
500		26.6	1.8	25.0	1.0	2.4	5.0	112.5	13561.7	10499.2
630		29.9	1.8	25.0	1.0	2.4	5.0	115.8	15182.4	11284.6
800		33.6	1.8	25.0	1.0	2.4	5.0	120.5	17255.0	12274.5
800		35.0	1.8	25.0	1.0	2.4	5.0	122.2	17518.8	12538.2
1000		39.2	1.8	25.0	1.0	2.6	5.0	127.8	20140.4	13922.5
1200	Segment Stranded (Milliken)	43.4	1.8	25.0	1.0	2.6	5.0	132.0	22401.3	14976.9
1400		46.6	1.8	25.0	1.0	2.6	5.0	136.2	24656.4	15994.6
1600		49.6	1.8	25.0	1.0	2.6	5.0	139.2	26833.3	16934.1
2000		55.0	1.8	25.0	1.0	2.8	5.0	146.0	31405.2	19031.2
2500		61.5	1.8	25.0	1.0	2.8	5.0	152.5	36906.9	21439.4

160/275 kV with Lead Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

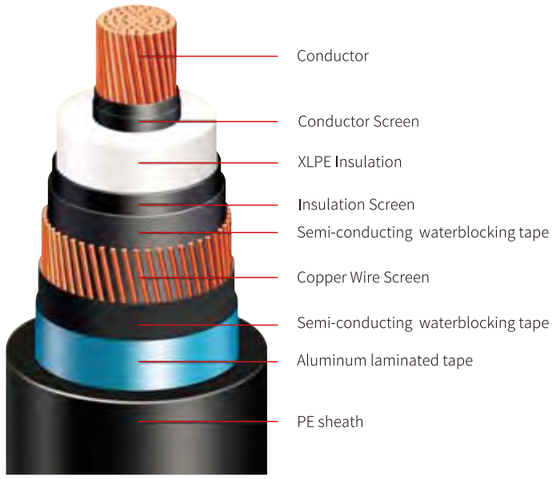
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	697	627	776	888	0.047	0.0614	0.123
500	802	724	897	1025	0.0366	0.0486	0.132
630	925	848	1037	1239	0.0283	0.0385	0.141
800	1047	964	1177	1366	0.0221	0.0312	0.151
800 (Milliken)	1062	985	1202	1400	0.0221	0.0300	0.156
1000	1183	1126	1407	1653	0.0176	0.0247	0.167
1200	1269	1205	1530	1825	0.0151	0.0218	0.178
1400	1362	1295	1686	1927	0.0129	0.0193	0.187
1600	1434	1386	1764	2086	0.0113	0.0176	0.195
2000	1584	1536	1971	2354	0.009	0.0154	0.209
2500	1742	1657	2075	2574	0.0072	0.0131	0.226

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	512	485	569	639	0.0778	0.1008	0.118
500	586	564	679	749	0.0605	0.0789	0.126
630	671	643	813	883	0.0469	0.0618	0.138
800	760	720	927	997	0.0367	0.0491	0.151
800 (Milliken)	786	744	890	1040	0.0367	0.0472	0.156
1000	880	848	1056	1206	0.0291	0.0375	0.172
1200	955	928	1199	1349	0.0247	0.0319	0.184
1400	980	1009	1277	1477	0.0212	0.0274	0.193
1600	1037	1046	1307	1507	0.0186	0.0241	0.201
2000	1180	1149	1459	1659	0.0149	0.0194	0.216
2500	1293	1228	1711	1911	0.0127	0.0167	0.234

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	25.0	1.0	2.7	5.0	96.9	17594.4	15181.4
500		26.6	1.8	25.0	1.0	2.7	5.0	100.1	19166.5	16104.0
630		29.9	1.8	25.0	1.0	2.8	5.0	103.6	21362.5	17464.6
800		33.6	1.8	25.0	1.0	2.8	5.0	107.3	23669.9	18689.4
800		35.0	1.8	25.0	1.0	2.8	5.0	109.0	24065.4	19084.9
1000		39.2	1.8	25.0	1.0	2.8	5.0	113.2	26701.6	20483.7
1200	Segment Stranded (Milliken)	43.4	1.8	25.0	1.0	2.9	5.0	117.6	29681.2	22256.8
1400		46.6	1.8	25.0	1.0	3.0	5.0	121.0	32524.3	23862.5
1600		49.6	1.8	25.0	1.0	3.1	5.0	124.2	35348.1	25448.9
2000		55.0	1.8	25.0	1.0	3.2	5.0	129.8	40495.3	28121.3
2500		61.5	1.8	25.0	1.0	3.4	5.0	136.7	47275.2	31807.7

160/275 kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	722	676	794	864	0.047	0.0614	0.123
500	809	737	950	1020	0.0366	0.0486	0.132
630	914	844	1111	1181	0.0283	0.0385	0.141
800	1029	945	1280	1350	0.0221	0.0312	0.151
800 (Milliken)	1057	972	1253	1375	0.0221	0.0300	0.156
1000	1187	1077	1438	1560	0.0176	0.0247	0.167
1200	1254	1168	1595	1717	0.0151	0.0218	0.178
1400	1349	1258	1735	1857	0.0129	0.0193	0.187
1600	1451	1364	1753	1941	0.0113	0.0176	0.195
2000	1585	1490	1983	2171	0.009	0.0154	0.209
2500	1724	1622	2222	2410	0.0072	0.0131	0.226

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	554	528	595	665	0.0778	0.1008	0.118
500	626	579	721	791	0.0605	0.0789	0.126
630	714	667	853	923	0.0469	0.0618	0.138
800	814	755	998	1068	0.0367	0.0491	0.151
800 (Milliken)	834	775	964	1086	0.0367	0.0472	0.156
1000	955	875	1134	1256	0.0291	0.0375	0.172
1200	1028	967	1288	1410	0.0247	0.0319	0.184
1400	1125	1057	1429	1551	0.0212	0.0274	0.193
1600	1211	1167	1471	1659	0.0186	0.0241	0.201
2000	1323	1275	1667	1855	0.0149	0.0194	0.216
2500	1473	1354	1872	2060	0.0127	0.0167	0.234

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm^2		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	97.4	10986.8	8573.9
500		26.6	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	100.6	12256.1	9193.5
630		29.9	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	103.9	13802.6	9904.8
800		33.6	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	107.6	15746.7	10766.1
800		35.0	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	109.3	15973.2	10992.7
1000		39.2	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	113.5	18196.9	11979.0
1200	Segment Stranded (Milliken)	43.4	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	117.7	20376.9	12952.5
1400		46.6	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	120.9	22495.0	13833.2
1600		49.6	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	123.9	24592.0	14692.8
2000		55.0	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	129.3	28720.4	16346.4
2500		61.5	1.8	25.0	1.0	84/Φ1.5	0.25	5.0	136.6	34368.7	18901.2

190/330 (362) kV with Aluminum Sheath

Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

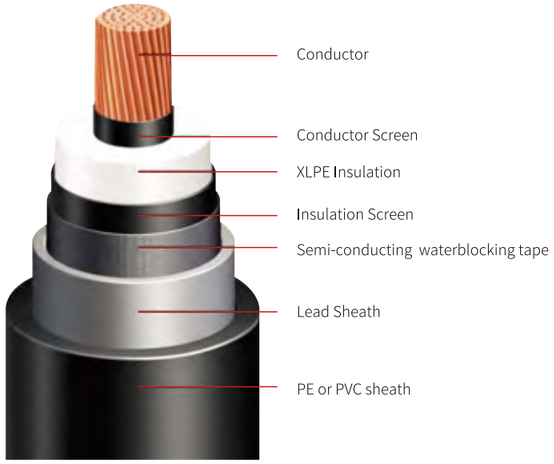
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	711	642	790	860	0.047	0.0614	0.118
500	815	749	948	1018	0.0366	0.0486	0.126
630	930	882	1102	1172	0.0283	0.0385	0.134
800	1008	935	1175	1275	0.0221	0.0312	0.144
800 (Milliken)	1048	966	1212	1312	0.0221	0.0300	0.148
1000	1126	1021	1371	1471	0.0176	0.0247	0.159
1200	1264	1074	1451	1601	0.0151	0.0218	0.169
1400	1291	1132	1536	1736	0.0129	0.0193	0.177
1600	1359	1189	1639	1839	0.0113	0.0176	0.184
2000	1445	1285	1762	1962	0.009	0.0154	0.198
2500	1558	1466	2028	2228	0.0072	0.0131	0.213

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	483	509	573	643	0.0778	0.1008	0.118
500	572	599	703	773	0.0605	0.0789	0.126
630	683	714	831	901	0.0469	0.0618	0.134
800	733	763	921	991	0.0367	0.0491	0.144
800 (Milliken)	755	785	923	1023	0.0367	0.0472	0.148
1000	822	854	1076	1176	0.0291	0.0375	0.159
1200	884	917	1209	1309	0.0247	0.0319	0.169
1400	948	983	1345	1445	0.0212	0.0274	0.177
1600	1015	1050	1409	1559	0.0186	0.0241	0.184
2000	1097	1135	1513	1663	0.0149	0.0194	0.198
2500	1252	1295	1739	1889	0.0127	0.0167	0.213

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	27.0	1.0	2.9	6.0	116.3	13778.8	11365.8
500		26.6	1.8	27.0	1.0	2.9	6.0	119.5	15166.1	12103.5
630		29.9	1.8	27.0	1.0	2.9	6.0	122.8	16831.6	12933.8
800		33.6	1.8	27.0	1.0	2.9	6.0	127.5	18963.3	13982.8
800		35.0	1.8	27.0	1.0	2.9	6.0	129.2	19250.1	14269.6
1000		39.2	1.8	27.0	1.0	3.0	6.0	134.6	21786.7	15568.7
1200	Segment Stranded (Milliken)	43.4	1.8	27.0	1.0	3.0	6.0	138.8	24142.2	16717.8
1400		46.6	1.8	27.0	1.0	3.0	6.0	143.0	26447.4	17785.6
1600		49.6	1.8	27.0	1.0	3.1	6.0	146.2	28795.6	18896.4
2000		55.0	1.8	27.0	1.0	3.2	6.0	152.8	33321.6	20947.6
2500		61.5	1.8	27.0	1.0	3.3	6.0	159.5	39056.1	23588.6

190/330 (362) kV with Lead Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

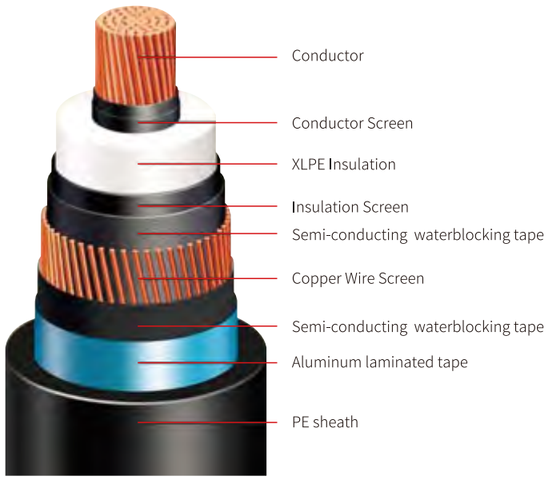
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	686	610	761	884	0.047	0.0614	0.118
500	791	707	882	1008	0.0366	0.0486	0.126
630	907	831	1032	1198	0.0283	0.0385	0.134
800	1029	945	1173	1322	0.0221	0.0312	0.144
800 (Milliken)	1044	966	1196	1356	0.0221	0.0300	0.148
1000	1165	1107	1399	1609	0.0176	0.0247	0.159
1200	1247	1186	1520	1770	0.0151	0.0218	0.169
1400	1340	1270	1649	1872	0.0129	0.0193	0.177
1600	1410	1361	1764	2031	0.0113	0.0176	0.184
2000	1562	1511	1961	2299	0.009	0.0154	0.198
2500	1720	1632	2061	2517	0.0072	0.0131	0.213

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	483	509	573	643	0.0778	0.1008	0.118
500	572	599	703	773	0.0605	0.0789	0.126
630	683	714	831	901	0.0469	0.0618	0.134
800	733	763	921	991	0.0367	0.0491	0.144
800 (Milliken)	755	785	923	1023	0.0367	0.0472	0.148
1000	822	854	1076	1176	0.0291	0.0375	0.159
1200	884	917	1209	1309	0.0247	0.0319	0.169
1400	948	983	1345	1445	0.0212	0.0274	0.177
1600	1015	1050	1409	1559	0.0186	0.0241	0.184
2000	1097	1135	1513	1663	0.0149	0.0194	0.198
2500	1252	1295	1739	1889	0.0127	0.0167	0.213

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	27.0	1.0	3.3	6.0	104.1	20831.2	18418.2
500		26.6	1.8	27.0	1.0	3.3	6.0	107.3	22500.4	19437.8
630		29.9	1.8	27.0	1.0	3.3	6.0	110.6	24459.3	20561.5
800		33.6	1.8	27.0	1.0	3.3	6.0	114.3	26865.8	21885.3
800		35.0	1.8	27.0	1.0	3.3	6.0	116.0	27307.3	22326.8
1000		39.2	1.8	27.0	1.0	3.4	6.0	120.4	30446.6	24228.6
1200	Segment Stranded (Milliken)	43.4	1.8	27.0	1.0	3.5	6.0	124.8	33572.8	26148.4
1400		46.6	1.8	27.0	1.0	3.5	6.0	128.0	36113.7	27451.9
1600		49.6	1.8	27.0	1.0	3.6	6.0	131.2	39036.2	29137.0
2000		55.0	1.8	27.0	1.0	3.7	6.0	136.8	44346.4	31972.4
2500		61.5	1.8	27.0	1.0	3.8	6.0	143.5	50863.4	35395.9

190/330 (362) kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

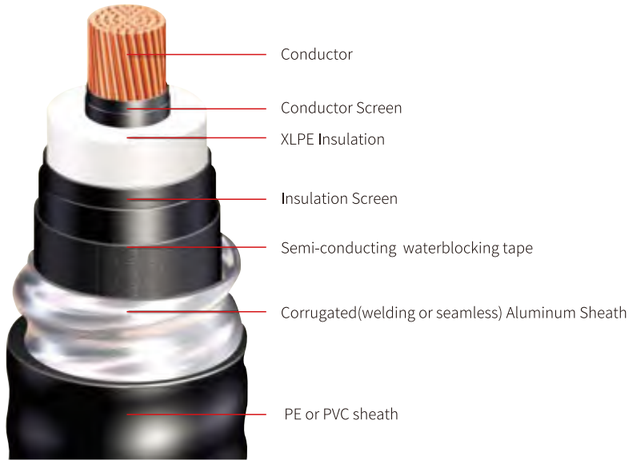
Copper Conductor							
Cross-Sectional Area (mm²)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	712	670	782	852	0.047	0.0614	0.118
500	794	730	935	1005	0.0366	0.0486	0.126
630	899	837	1066	1166	0.0283	0.0385	0.134
800	1014	938	1235	1335	0.0221	0.0312	0.144
800 (Milliken)	1042	955	1260	1360	0.0221	0.0300	0.148
1000	1162	1060	1435	1535	0.0176	0.0247	0.159
1200	1229	1151	1504	1692	0.0151	0.0218	0.169
1400	1324	1241	1644	1832	0.0129	0.0193	0.177
1600	1426	1347	1718	1906	0.0113	0.0176	0.184
2000	1560	1473	1948	2136	0.009	0.0154	0.198
2500	1696	1601	2179	2367	0.0072	0.0131	0.213

Aluminum Conductor							
Cross-Sectional Area (mm²)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
400	547	523	585	655	0.0778	0.1008	0.118
500	614	573	709	779	0.0605	0.0789	0.126
630	702	662	811	911	0.0469	0.0618	0.134
800	802	750	956	1056	0.0367	0.0491	0.144
800 (Milliken)	822	762	974	1074	0.0367	0.0472	0.148
1000	935	861	1136	1236	0.0291	0.0375	0.159
1200	1008	953	1202	1390	0.0247	0.0319	0.169
1400	1105	1043	1342	1530	0.0212	0.0274	0.177
1600	1190	1153	1441	1629	0.0186	0.0241	0.184
2000	1302	1261	1637	1825	0.0149	0.0194	0.198
2500	1449	1336	1835	2023	0.0127	0.0167	0.213

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm²		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
400	Compact Round Stranded	23.4	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	97.4	12345.0	9932.1
500		26.6	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	100.6	13642.9	10580.3
630		29.9	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	103.9	15218.8	11321.0
800		33.6	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	107.6	17195.9	12215.4
800		35.0	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	109.3	17437.8	12457.3
1000		39.2	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	113.5	19699.0	13481.1
1200	Segment Stranded (Milliken)	43.4	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	117.7	21916.5	14492.1
1400		46.6	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	120.9	24063.1	15401.3
1600		49.6	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	123.9	26186.9	16287.7
2000		55.0	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	129.3	30363.5	17989.5
2500		61.5	1.8	27.0	1.0	83/Φ1.75	0.25	6.0	136.6	35608.4	20140.9

220/380 (420) kV with Aluminum Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

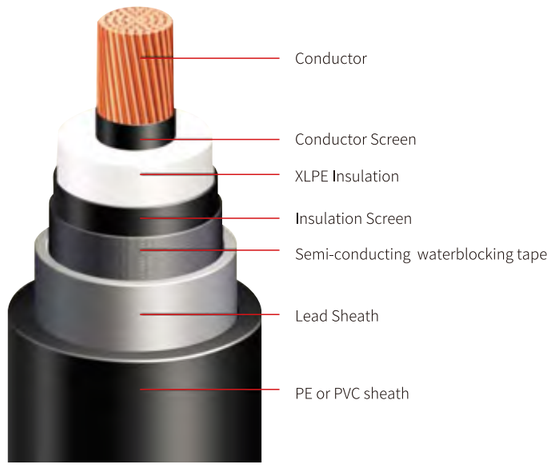
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	995	915	1109	1209	0.0221	0.0312	0.138
800 (Milliken)	1006	941	1162	1262	0.0221	0.0300	0.142
1000	1084	996	1271	1421	0.0176	0.0247	0.152
1200	1222	1049	1351	1551	0.0151	0.0218	0.162
1400	1249	1107	1456	1656	0.0129	0.0193	0.169
1600	1317	1164	1559	1759	0.0113	0.0176	0.176
2000	1403	1260	1682	1882	0.009	0.0154	0.188
2500	1507	1411	1899	2099	0.0072	0.0131	0.203

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	780	747	870	940	0.0367	0.0491	0.138
800 (Milliken)	786	765	884	984	0.0367	0.0472	0.142
1000	873	833	1036	1136	0.0291	0.0375	0.152
1200	1006	895	1168	1268	0.0247	0.0319	0.162
1400	1046	962	1278	1378	0.0212	0.0274	0.169
1600	1125	1028	1341	1491	0.0186	0.0241	0.176
2000	1198	1113	1445	1595	0.0149	0.0194	0.188
2500	1307	1246	1629	1779	0.0127	0.0167	0.203

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
800	Compact Round Stranded	33.6	2.0	29.0	1.5	2.9	6.0	137.9	20311.1	21459.6
800	Segment Stranded (Milliken)	35.0	2.0	29.0	1.5	2.9	6.0	139.6	20612.4	21775.8
1000		39.2	2.0	29.0	1.5	3.0	6.0	145.0	23194.8	24405.2
1200		43.4	2.0	29.0	1.5	3.0	6.0	149.2	25585.7	26832.7
1400		46.6	2.0	29.0	1.5	3.0	6.0	153.4	27873.3	29156.9
1600		49.6	2.0	29.0	1.5	3.1	6.0	156.6	30255.7	31567.2
2000		55.0	2.0	29.0	1.5	3.2	6.0	163.2	34836.1	36205.1
2500		61.5	2.0	29.0	1.5	3.3	6.0	169.9	40642.4	42069.7

220/380 (420) kV with Lead Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

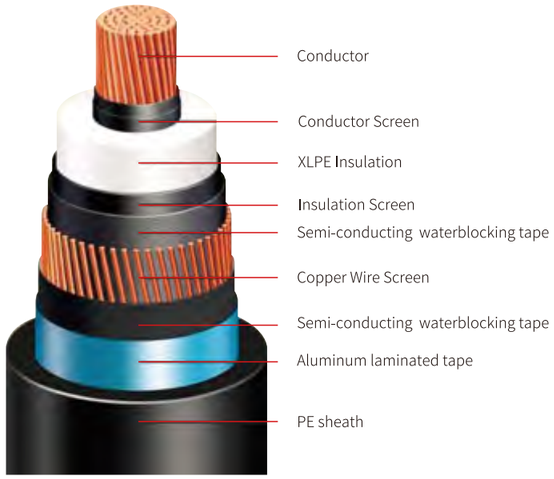
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	1005	927	1161	1304	0.0221	0.0312	0.138
800 (Milliken)	1020	948	1196	1338	0.0221	0.0300	0.142
1000	1137	1083	1385	1584	0.0176	0.0247	0.152
1200	1219	1162	1501	1745	0.0151	0.0218	0.162
1400	1312	1246	1611	1839	0.0129	0.0193	0.169
1600	1377	1344	1734	1998	0.0113	0.0176	0.176
2000	1529	1494	1926	2266	0.009	0.0154	0.188
2500	1687	1615	2022	2470	0.0072	0.0131	0.203

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	751	708	851	921	0.0367	0.0491	0.138
800 (Milliken)	758	729	892	962	0.0367	0.0472	0.142
1000	836	787	1038	1108	0.0291	0.0375	0.152
1200	968	847	1089	1239	0.0247	0.0319	0.162
1400	1007	910	1199	1349	0.0212	0.0274	0.169
1600	1082	975	1309	1459	0.0186	0.0241	0.176
2000	1137	1040	1415	1565	0.0149	0.0194	0.188
2500	1246	1188	1574	1724	0.0127	0.0167	0.203

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
800	Compact Round Stranded	33.6	2.0	29.0	1.5	3.3	6.0	119.7	28425.4	29368.2
800	Segment Stranded (Milliken)	35.0	2.0	29.0	1.5	3.3	6.0	121.4	28881.4	29838.5
1000		39.2	2.0	29.0	1.5	3.4	6.0	125.8	32075.3	33068.9
1200		43.4	2.0	29.0	1.5	3.5	6.0	130.2	35256.2	36286.3
1400		46.6	2.0	29.0	1.5	3.5	6.0	133.4	37824.1	38880.7
1600		49.6	2.0	29.0	1.5	3.6	6.0	136.6	40791.2	41874.3
2000		55.0	2.0	29.0	1.5	3.7	6.0	142.2	46166.2	47295.8
2500		61.5	2.0	29.0	1.5	3.8	6.0	148.9	52757.2	53942.4

220/380 (420) kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	1029	951	1189	1289	0.0221	0.0312	0.138
800 (Milliken)	1027	960	1220	1320	0.0221	0.0300	0.142
1000	1147	1055	1395	1495	0.0176	0.0247	0.152
1200	1214	1146	1552	1652	0.0151	0.0218	0.162
1400	1309	1226	1624	1812	0.0129	0.0193	0.169
1600	1406	1332	1698	1886	0.0113	0.0176	0.176
2000	1540	1458	1928	2116	0.009	0.0154	0.188
2500	1675	1583	2143	2331	0.0072	0.0131	0.203

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	814	760	919	1019	0.0367	0.0491	0.138
800 (Milliken)	810	766	943	1043	0.0367	0.0472	0.142
1000	923	857	1104	1204	0.0291	0.0375	0.152
1200	996	949	1257	1357	0.0247	0.0319	0.162
1400	1092	1031	1325	1513	0.0212	0.0274	0.169
1600	1174	1140	1424	1612	0.0186	0.0241	0.176
2000	1286	1248	1620	1808	0.0149	0.0194	0.188
2500	1431	1321	1804	1992	0.0127	0.0167	0.203

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm^2		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
800	Compact Round Stranded	33.6	2.0	29.0	1.5	83/Φ1.75	0.25	6.0	119.5	18125.9	13145.3
800	Segment Stranded (Milliken)	35.0	2.0	29.0	1.5	83/Φ1.75	0.25	6.0	121.2	18382.3	13401.8
1000		39.2	2.0	29.0	1.5	83/Φ1.75	0.25	6.0	125.4	20678.9	14460.9
1200		43.4	2.0	29.0	1.5	83/Φ1.75	0.25	6.0	129.6	22931.7	15507.3
1400		46.6	2.0	29.0	1.5	83/Φ1.75	0.25	6.0	132.8	25105.4	16443.6
1600		49.6	2.0	29.0	1.5	83/Φ1.75	0.25	6.0	135.8	27254.4	17355.2
2000		55.0	2.0	29.0	1.5	83/Φ1.75	0.25	6.0	141.2	31476.5	19102.5
2500		61.5	2.0	29.0	1.5	83/Φ1.75	0.25	6.0	148.5	36787.0	21319.5

290/500 (550) kV with Aluminum Sheath

Construction

- Copper /Aluminum Conductor XLPE Insulation
- Aluminum Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

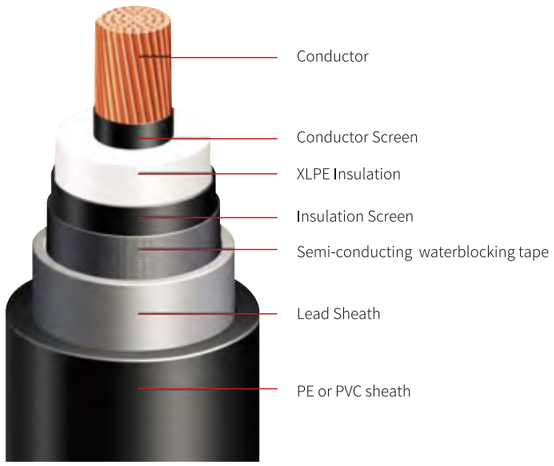
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	954	882	1087	1187	0.0221	0.0312	0.125
800 (Milliken)	966	881	1132	1232	0.0221	0.0300	0.128
1000	1044	936	1241	1391	0.0176	0.0247	0.139
1200	1182	989	1321	1521	0.0151	0.0218	0.148
1400	1209	1047	1426	1626	0.0129	0.0193	0.158
1600	1297	1104	1529	1729	0.0113	0.0176	0.164
2000	1383	1220	1652	1852	0.009	0.0154	0.180
2500	1485	1399	1866	2066	0.0072	0.0131	0.194

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	748	720	852	922	0.0367	0.0491	0.125
800 (Milliken)	755	716	861	961	0.0367	0.0472	0.128
1000	841	783	1012	1112	0.0291	0.0375	0.139
1200	973	844	1143	1243	0.0247	0.0319	0.148
1400	1013	909	1254	1354	0.0212	0.0274	0.158
1600	1107	975	1316	1466	0.0186	0.0241	0.164
2000	1181	1078	1420	1570	0.0149	0.0194	0.180
2500	1309	1236	1601	1751	0.0127	0.0167	0.194

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
800	Compact Round Stranded	33.6	2.0	34.0	1.5	2.9	6.0	147.9	22346.2	23581.8
800	Segment Stranded (Milliken)	35.0	2.0	34.0	1.5	2.9	6.0	149.6	22672.6	23923.2
1000		39.2	2.0	33.0	1.5	3.0	6.0	153.0	24896.4	26176.6
1200		43.4	2.0	33.0	1.5	3.0	6.0	157.2	27336.4	28653.2
1400		46.6	2.0	32.0	1.5	3.0	6.0	159.4	29216.8	30552.7
1600		49.6	2.0	32.0	1.5	3.1	6.0	162.6	31631.4	32995.1
2000		55.0	2.0	31.0	1.5	3.2	6.0	167.2	35798.8	37202.6
2500		61.5	2.0	31.0	1.5	3.3	6.0	173.9	41653.5	43115.7

290/500 (550) kV with Lead Sheath



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Lead Sheath PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

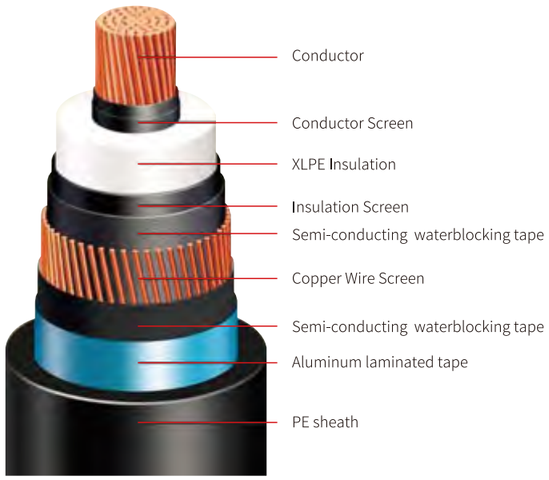
Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	988	912	1151	1288	0.0221	0.0312	0.125
800 (Milliken)	1003	933	1375	1314	0.0221	0.0300	0.128
1000	1126	1062	1394	1551	0.0176	0.0247	0.139
1200	1208	1141	1475	1712	0.0151	0.0218	0.148
1400	1290	1225	1584	1800	0.0129	0.0193	0.158
1600	1355	1322	1710	1959	0.0113	0.0176	0.164
2000	1507	1472	1900	2227	0.009	0.0154	0.180
2500	1665	1593	1995	2419	0.0072	0.0131	0.194

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	717	681	832	902	0.0367	0.0491	0.125
800 (Milliken)	740	693	855	955	0.0367	0.0472	0.128
1000	820	753	1006	1106	0.0291	0.0375	0.139
1200	950	810	1135	1235	0.0247	0.0319	0.148
1400	990	875	1245	1345	0.0212	0.0274	0.158
1600	1047	908	1261	1411	0.0186	0.0241	0.164
2000	1139	1024	1365	1515	0.0149	0.0194	0.180
2500	1227	1178	1573	1723	0.0127	0.0167	0.194

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Aluminum sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter								
mm^2		mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
800	Compact Round Stranded	33.6	2.0	34.0	1.5	3.3	6.0	129.7	31352.2	32378.0
800	Segment Stranded (Milliken)	35.0	2.0	34.0	1.5	3.3	6.0	131.4	31833.4	32873.5
1000		39.2	2.0	33.0	1.5	3.4	6.0	133.8	34502.9	35562.8
1200		43.4	2.0	33.0	1.5	3.5	6.0	138.2	37761.4	38857.8
1400		46.6	2.0	32.0	1.5	3.5	6.0	139.4	39722.2	40828.6
1600		49.6	2.0	32.0	1.5	3.6	6.0	142.6	42737.0	43870.0
2000		55.0	2.0	31.0	1.5	3.7	6.0	146.2	47503.4	48666.2
2500		61.5	2.0	31.0	1.5	3.8	6.0	152.9	54146.7	55365.1

290/500 (550) kV with Copper Wire Screen



Construction

- Copper /Aluminum Conductor XLPE Insulation
- Copper Wire Screen PE Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Copper Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	971	914	1136	1236	0.0221	0.0312	0.125
800 (Milliken)	982	920	1180	1280	0.0221	0.0300	0.128
1000	1082	995	1345	1445	0.0176	0.0247	0.139
1200	1149	1086	1414	1602	0.0151	0.0218	0.148
1400	1224	1130	1554	1742	0.0129	0.0193	0.158
1600	1321	1236	1628	1816	0.0113	0.0176	0.164
2000	1455	1362	1848	2036	0.009	0.0154	0.180
2500	1552	1455	2058	2246	0.0072	0.0131	0.194

Aluminum Conductor							
Cross-Sectional Area (mm^2)	Direct Buried	Pipe Duct	In Air		Max. DC Resistance at 20°C	Max. AC Resistance at 90°C	Capacitance
			Trefoil	Flat			
A	A	A	A	A	Ω/km	Ω/km	μF/ km
800	768	723	877	977	0.0367	0.0491	0.125
800 (Milliken)	775	735	911	1011	0.0367	0.0472	0.128
1000	871	794	1064	1164	0.0291	0.0375	0.139
1200	942	882	1128	1316	0.0247	0.0319	0.148
1400	1021	936	1267	1455	0.0212	0.0274	0.158
1600	1103	1039	1364	1552	0.0186	0.0241	0.164
2000	1215	1166	1552	1740	0.0149	0.0194	0.180
2500	1296	1245	1731	1919	0.0127	0.0167	0.194

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	No./ diameter of copper wire	Thickness of aluminum-polymer laminate	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable (copper conductor)	Weight of Cable (aluminium conductor)
Cross-Sectional Area	Shape	Diameter									
mm^2		mm	mm	mm	mm	mm	mm	mm	mm	kg / km	kg / km
800	Compact Round Stranded	33.6	2.0	34.0	1.5	83/Φ1.75	0.25	6.0	129.5	19886.8	14906.3
800	Segment Stranded (Milliken)	35.0	2.0	34.0	1.5	83/Φ1.75	0.25	6.0	131.2	20168.3	15187.8
1000		39.2	2.0	33.0	1.5	83/Φ1.75	0.25	6.0	133.4	22145.1	15927.2
1200		43.4	2.0	33.0	1.5	83/Φ1.75	0.25	6.0	137.6	24447.1	17022.7
1400		46.6	2.0	32.0	1.5	83/Φ1.75	0.25	6.0	138.8	26261.2	17599.4
1600		49.6	2.0	32.0	1.5	83/Φ1.75	0.25	6.0	141.8	28436.5	18537.3
2000		55.0	2.0	31.0	1.5	83/Φ1.75	0.25	6.0	145.2	32290.3	19916.3
2500		61.5	2.0	31.0	1.5	83/Φ1.75	0.25	6.0	152.5	37648.5	22181.0

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Ecuador

Mexico

Peru

Asia Pacific Region

Australia

Bengladesh

Cambodia

India

Indonesia

Malaysia

Myanmar

Nepel

Pakistan

Philippines

Singapore

Sri Lanka

Taiwan, China

Thailand

Vietnam

Brazil Hengtong

Brazil

Middle East and North Africa Region

Algeria

Dubai (Bay sea area)

Egypt

Jordan

Lebanon

Morocco (West Africa&North Africa Region)

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