

87/161 (170) kV HV POWER CABLE

Aluminum Sheath



Construction

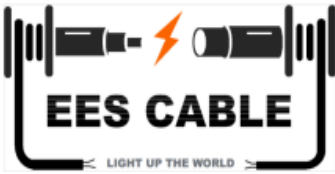
- Copper Conductor
- XLPE Insulation
- Aluminum Sheath
- PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Cross-Sectional Area (mm ²)	Direct Buried	Pipe Duct	In Air	
			Trefoil	Flat (S=2D)
300	584	558	669	740
400	664	634	768	855
500	754	718	879	988
630	853	811	1009	1146
800	953	938	1134	1307
1000	1100	1087	1328	1548
1200	1179	1163	1429	1684
1600	1331	1311	1627	1967
2000	1447	1485	1774	2199
2500	1523	1563	1868	2315

Constructional Data (Nominal Values)

Cross-Sectional Area	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	Max. DC Conductor Resistance at 20°C	Capacitance
	Shape	Diameter									
mm ²		mm	mm	mm	mm	mm	mm	mm	kg / m	Ω / km	μF / km
300	Compact Round Stranded	20.4	1.5	17	1.3	1.9	4.5	87	8.4	0.0601	0.16
400		23.2	1.5	17	1.3	1.9	4.5	91	9.4	0.0470	0.18
500		26.3	1.5	17	1.3	2.0	4.5	94	10.7	0.0366	0.19
630		30.2	1.5	17	1.3	2.1	4.5	98	12.3	0.0283	0.21
800		34.0	1.5	17	1.3	2.2	4.5	102	14.4	0.0221	0.22
1000	Segment Stranded (Miliken)	38.7	1.5	17	1.3	2.3	4.5	108	17.0	0.0176	0.24
1200		41.8	1.5	17	1.3	2.3	4.5	111	19.0	0.0151	0.26
1600		48.1	1.5	17	1.3	2.5	4.5	119	23.5	0.0113	0.28
2000		54.3	1.5	17	1.3	2.6	4.5	125	28.0	0.0090	0.31
2500		63.0	1.5	17	1.3	2.8	4.5	134	34.5	0.0072	0.34



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Lead Sheath



Construction

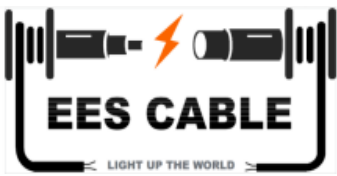
- Copper Conductor ■ XLPE Insulation
- Lead Sheath ■ PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Cross-Sectional Area (mm ²)	Direct Buried	Pipe Duct	In Air	
			Trefoil	Flat (S=2D)
300	598	557	698	775
400	682	648	805	898
500	777	736	928	1042
630	886	836	1073	1214
800	996	939	1218	1391
1000	1168	1131	1464	1670
1200	1259	1221	1589	1825
1600	1445	1398	1845	2152
2000	1597	1541	2060	2445
2500	1681	1622	2169	2574

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Thickness of Lead Sheath	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable	Max. DC Conductor Resistance at 20°C	Capacitance
Cross-Sectional Area	Shape	Diameter									
mm ²		mm	mm	mm	mm	mm	mm	mm	kg / m	Ω / km	µF / km
300	Compact Round Stranded	20.4	1.5	17	1.3	2.5	4.5	80	12.5	0.0601	0.16
400		23.2	1.5	17	1.3	2.6	4.5	83	14.0	0.0470	0.18
500		26.3	1.5	17	1.3	2.7	4.5	86	15.7	0.0366	0.19
630		30.2	1.5	17	1.3	2.8	4.5	90	18.0	0.0283	0.21
800		34.0	1.5	17	1.3	2.9	4.5	94	20.5	0.0221	0.22
1000	Segment Stranded (Miliken)	38.7	1.5	17	1.3	3.0	4.5	100	23.8	0.0176	0.24
1200		41.8	1.5	17	1.3	3.2	4.5	103	26.7	0.0151	0.26
1600		48.1	1.5	17	1.3	3.4	4.5	110	32.2	0.0113	0.28
2000		54.3	1.5	17	1.3	3.6	4.5	116	37.9	0.0090	0.31
2500		63.0	1.5	17	1.3	3.7	4.5	124	44.9	0.0072	0.34



87/161 (170) kV HV POWER CABLE

Copper Wire Shield



Construction

- Copper Conductor ■ XLPE Insulation
- Copper Wire Shield ■ PE (or PVC) Outer Sheath

Continuous Current Ratings for Single Circuit (A)

Cross-Sectional Area (mm ²)	Direct Buried	Pipe Duct	In Air	
			Trefoil	Flat (S=2D)
300	591	553	684	765
400	673	629	789	887
500	766	713	907	1027
630	871	829	1043	1193
800	977	928	1181	1367
1000	1143	1081	1415	1639
1200	1232	1208	1535	1790
1600	1404	1382	1765	2100
2000	1554	1523	1973	2384
2500	1636	1603	2077	2510

Constructional Data (Nominal Values)

Conductor			Thickness of Conductor Screen Approx.	Thickness of Insulation	Thickness of Insulation Screen Approx.	Diameter & Number of Copper Wires	Thickness of Outer Sheath	Outer Diameter of Cable	Weight of Cable	Max. DC Conductor Resistance at 20°C	Capacitance
Cross-Sectional Area	Shape	Diameter									
mm ²		mm	mm	mm	mm	mm x No.	mm	mm	kg / m	Ω / km	µF / km
300	Compact Round Stranded	20.4	1.5	17	1.3	1.5 x 80	4.5	72	6.3	0.0601	0.21
400		23.2	1.5	17	1.3	1.5 x 80	4.5	75	7.2	0.0470	0.23
500		26.3	1.5	17	1.3	1.5 x 80	4.5	79	8.6	0.0366	0.25
630		30.2	1.5	17	1.3	1.5 x 80	4.5	83	10.1	0.0283	0.28
800		34.0	1.5	17	1.3	1.5 x 80	4.5	87	12.0	0.0221	0.30
1000	Segment Stranded (Miliken)	38.7	1.5	17	1.3	1.5 x 80	4.5	92	14.4	0.0176	0.33
1200		41.8	1.5	17	1.3	1.5 x 80	4.5	98	16.7	0.0151	0.36
1600		48.1	1.5	17	1.3	1.5 x 80	4.5	105	20.9	0.0113	0.40
2000		54.3	1.5	17	1.3	1.5 x 80	4.5	112	25.4	0.0090	0.44
2500		63.0	1.5	17	1.3	1.5 x 80	4.5	118	31.1	0.0072	0.34