Copper/Copper-Clad Steel Composite Cable

Product Description

Concentric-lay-stranded hard drawn copper wires in combination with copper-clad steel wires.

Other sizes available upon request.

Application

Used as catenary messenger in the electrification of railways. Can be used as a feeder circuit or return neutral while simultaneously supporting the contact wire.

Product Data

Type of Conductor	Diameter of Conductor (inch)	Conductor Composition Copper-clad Wires EHS-30% Conductivity No.-Diameter	Copper Wires Hard Drawn No.-Diameter	Breaking Load (lbs.)	Weight Lbs. Per 1,000 Ft.	Lbs. Per Mile	Cross-Section (sq. in.)
350 MCM Copper Equivalent-.03143 Ohms/M Ft. at 68° F.							
E	.788	7-.1576	12-.1576	32,420	1,403	7,409	.3704
EK	.735	4-.1470	15-.1470	23,850	1,238	6,536	.3224
300 MCM Copper Equivalent-.03667 Ohms/M Ft. at 68° F.							
E	.729	7-.1459	12-.1459	27,770	1,203	6,351	.3175
EK	.680	4-.1361	15-.1361	20,960	1,061	5,602	.2763
250 MCM Copper Equivalent-.0440 Oms/M Ft. at 68° F.							
E	.666	7-.1332	12-.1332	23,920	1,002	5,292	.2646
EK	.621	4-.1242	15-.1242	17,840	884.2	4,669	.2303
4/0 Awg Copper Equivalent-211,600 Cir. Mils-.05199 Ohms/M Ft. at 68° F.							
E	.613	7-.1225	12-.1225	20,730	848.3	4,479	.2239
G	.583	2-.1944	5-.1944	15,640	789.4	4,168	.2077
EK	.571	4-.1143	15-.1143	15,370	748.4	3,951	.1949
F	.550	1-.1833	6-.1833	12,290	710.2	3,750	.1847
2/0 Awg Copper Equivalent-133,100 Cir. Mils-.08265 Ohms/M Ft. at 68° F.							
K	.534	4-.1780	3-.1780	17,600	645.9	3,411	.1742
J	.494	3-.1648	4-.1648	13,430	560.6	2,960	.1493
G	.463	2-.1542	5-.1542	10,510	496.6	2,622	.1307
F	.436	1-.1454	6-.154	8,094	446.8	2,359	.1162
1/0 Awg Copper Equivalent-105,500 Cir. Mils-.1043 Ohms/M Ft. at 68° F.							
K	.475	4-.1585	3-.1585	14,490	512.0	2,703	.1381
J	.440	3-.1467	4-.1467	10,970	444.3	2,346	.1184
G	.412	2-.1373	5-.1373	8,563	393.6	2,078	.1036
F	.388	1-.1294	6-.1294	6,536	354.1	1,870	.09207
No. 1 Awg Copper Equivalent-83,690 Cir. Mils-.1315 Ohms/M Ft. at 68° F.							
N	.464	5-.1546	2-.1546	15,410	481.3	2,541	.1315
K	.423	4-.1412	3-.1412	11,900	406.2	2,144	.1096
J	.392	3-.1307	4-.1307	9,000	352.5	1,861	.09390
G	.367	2-.1222	5-.1222	6,956	312.2	1,649	.08216
F	.346	1-.1153	6-.1153	5,266	280.9	1,483	.07303
No. 2 Awg Copper Equivalent-66,370 Cir. Mils.-1658 Ohms/M Ft. at 68° F.							
P	.462	6-.1540	1-.1540	16,870	471.1	2,487	.1303
N	.413	5-.1377	2-.1377	12,680	381.7	2,015	.1043
K	.377	4-.1257	3-.1257	9,730	322.1	1,701	.08688
J	.349	3-.1164	4-.1164	7,322	279.5	1,476	.07447
A	.366	1-.1699	2-.1699	5,876	256.8	1,356	.06799
G	.327	2-.1089	5-.1089	5,626	247.6	1,307	.06516
F	.308	1-.1026	6-.1026	4,233	222.8	1,176	.05792
No. 4 Awg Copper Equivalent-41,740 Cir. Mils-.2636 Ohms/M Ft. at 68° F.							
P	.366	6-.1221	1-.1221	11,420	296.3	1,564	.08196
N	.328	5-.1092	2-.1092	8,460	240.0	1,267	.06556
D	.348	2-.1615	1-.1615	7,340	225.5	1,191	.06147
A	.290	1-.1347	2-.1347	3,938	161.5	852.8	.04276
No. 6 Awg Copper Equivalent-26,250 Cir. Mils-.4150 Ohms/M Ft. at 68° F.							
D	.276	2-.1281	1-.1281	4,942	141.8	748.9	.03866
A	.230	1-.1068	2-.1068	2,585	101.6	536.3	.02689
C	.225	1-.1046*	2-.1046	2,143	97.34	514.0	.02577
No. 8 Awg Copper Equivalent-16,510 Cir. Mils-.6598 Ohms/M Ft. at 68° F.							
D	.219	2-.1016	1-.1016	3,256	89.21	471.0	.02431
A	.199	1-.1127	2-.07969	2,233	74.27	392.2	.01995
C	.179	1-.08081*	2-.08336	1,362	60.67	320.3	.01604

+High Strength Copperweld, 40% Conductivity.

Specification Data

ASTM B-1	Hard drawn bare copper
ASTM B-227	Hard drawn copper-clad steel wire
ASTM B-229	Concentric-lay-stranded copper and copper-clad steel composite conductors