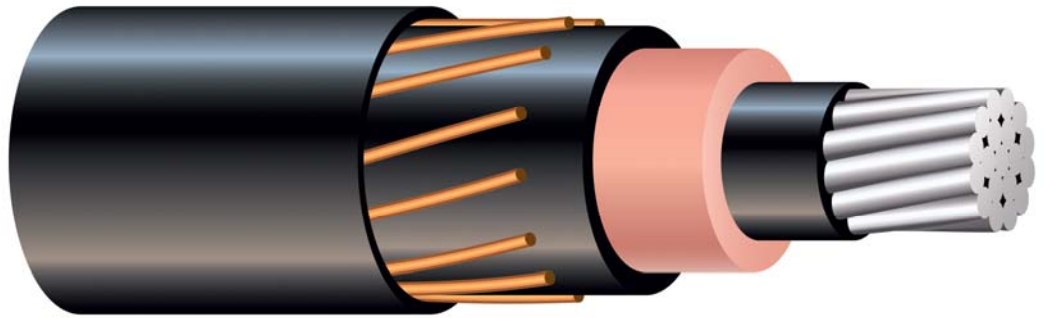


# 15kV Primary UD EPR Cable

Aluminum or Copper Conductor. EPR Insulation.  
Bare Copper Concentric Neutrals.  
Low Density Polyethylene Jacket.



## APPLICATIONS

Predominantly used for primary underground distribution in conduit systems; suitable for use in wet or dry locations, direct burial, underground duct, and where exposed to sunlight. To be used at 15,000 volts or less and at conductor temperatures not to exceed 105°C for normal operation.

## SPECIFICATIONS

Southwire 15kV Primary UD EPR Cable meets or exceeds the following ASTM specifications:

- B3 Soft Annealed Copper Wire
- B8 Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard or Soft
- B230 Aluminum, 1350-H19 Wire for Electrical Purposes
- B231 Aluminum 1350 Conductors, Concentric-Lay-Stranded
- B609 Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes

Southwire 15kV Primary UD EPR Cable is manufactured to the latest edition of the following specifications, and in the order as listed:

- ANSI/ICEA S-94-649
- AEIC CS-8
- UL 1072, When Specified
- RUS 1728F-U1

## CONSTRUCTION

The cable is composed of a solid or moisture blocked reverse lay, compressed stranded soft drawn copper, or a solid or moisture blocked reverse lay or unilay compressed stranded 1350-H16/26 aluminum phase conductor, covered by a semi-conducting cross-linked polyethylene strand shield, an ethylene propylene rubber primary insulation, and a semi-conducting cross-linked polyethylene insulation shield. Conductors are available with either 100% or 133% insulation levels. A concentric neutral of bare copper wires and a sunlight resistant, -40°C rated, insulating linear low density polyethylene jacket are applied over the insulation shield. The cable is identified by surface print on the jacket and with the lightning bolt symbol for supply cables indented in the jacket. Red extruded stripes available upon request. A semi-conducting polyethylene jacket is also available upon request.

# 15kV Primary UD EPR

Phase Conductor		Neutral		Thickness Per Cond. (mils)			Diameter (mils)				Weight 1000 feet (lbs.)	Allowable Ampacities+	
Size (AWG or kcmil)	Strand- ing	No. of Wires	Size (AWG)	Nominal Insul.	Insul. Shield min. Point	Approx. Jkt.	Bare Phase Cond.	Over Insul.	Over Insul. Shield	Comp. Cable	Comp. Cable	Direct Burial	In Ducts
<b>ALUMINUM CONDUCTOR - 100% INSULATION LEVEL</b>													
2	Solid	10	14	175	30	50	258	653	733	961	485	168*	119*
2	7	10	14	175	30	50	283	678	758	986	504	168*	119*
1	Solid	13	14	175	30	50	289	685	765	993	555	193*	137*
1	19	13	14	175	30	50	322	718	798	1026	577	193*	137*
1/0	Solid	16	14	175	30	50	325	720	800	1028	629	218*	155*
1/0	19	16	14	175	30	50	352	748	828	1056	648	218*	155*
2/0	19	20	14	175	30	50	395	790	870	1098	745	248*	177*
3/0	19	25	14	175	30	50	443	838	918	1146	862	284*	201*
4/0	19	20	12	175	30	50	498	893	973	1234	1042	324*	230*
250	37	16	10	175	30	50	558	963	1043	1346	1268	360*	257*
350	37	18	14	175	40	50	661	1068	1168	1396	1118	389**	319**
500	37	25	14	175	40	50	789	1193	1293	1521	1419	468**	384**
750	61	24	12	175	40	80	968	1383	1483	1798	2030	569**	468**
1000	61	20	10	175	40	80	1117	1530	1630	1988	2567	642**	542**
1250	91	25	10	220	55	80	1250	1765	1895	2253	3278	688**	604**
1500	91	30	10	220	55	80	1370	1885	2015	2373	3762	726**	637**
<b>COPPER CONDUCTOR - 100% INSULATION LEVEL</b>													
2	Solid	16	14	175	30	50	258	653	733	961	697	210*	150*
2	7	16	14	175	30	50	283	678	758	986	719	210*	150*
1	Solid	20	14	175	30	50	289	685	765	993	815	240*	171*
1	19	20	14	175	30	50	322	718	798	1026	841	240*	171*
1/0	Solid	25	14	175	30	50	325	720	800	1028	959	273*	194*
1/0	19	25	14	175	30	50	362	758	838	1066	991	273*	194*
2/0	19	20	12	175	30	50	405	800	880	1142	1204	313*	224*
3/0	19	25	12	175	30	50	456	853	933	1194	1437	358*	255*
4/0	19	20	10	175	30	50	512	908	988	1291	1768	410*	293*
250	37	24	10	175	30	50	558	963	1043	1346	2047	446*	322*
350	37	18	12	175	40	50	661	1068	1168	1429	2027	489**	400**
500	37	26	12	175	40	50	789	1193	1293	1554	2722	577**	472**
750	61	25	10	175	40	80	968	1383	1483	1840	3990	649**	532**
1000	61	26	9	175	40	80	1117	1530	1630	2013	5136	720**	630**
1250	91	26	8	220	55	80	1250	1765	1895	2306	6535	760**	667**

+ Ampacities shown assume use of 100% load factor, 60 Hz current, 36" burial depth, 20°C ambient temperature, 90°C conductor temperature, earth RHO 90, insulation and shield RHO 400

\* Full neutral construction (Ampacities assume - single phase circuit, one cable)

\*\* 1/3 neutral cable (Ampacities assume - three phase circuit, 3 cables triplexed, multi-point grounding per ICEA methods)

# 15kV Primary UD EPR

Phase Conductor		Neutral		Thickness Per Cond. (mils)			Nominal Diameter (mils)				Weight 1000 feet (lbs.)	Allowable Ampacities+	
Size (AWG or kcmil)	Stranding	No. of Wires	Size (AWG)	Nominal Insul.	Insul. Shield min. Point	Approx. Jkt.	Bare Phase Cond.	Over Insul.	Over Insul. Shield	Comp. Cable	Comp. Cable	Direct Burial	In Ducts
<b>ALUMINUM CONDUCTOR - 0.220" INSULATION - 133% INSULATION LEVEL</b>													
2	Solid	10	14	220	30	50	258	745	825	1053	556	168*	119*
2	7	10	14	220	30	50	283	770	850	1078	577	168*	119*
1	Solid	13	14	220	30	50	289	778	858	1086	628	193*	137*
1	19	13	14	220	30	50	322	810	890	1118	652	193*	137*
1/0	Solid	16	14	220	30	50	325	813	893	1121	705	218*	155*
1/0	19	16	14	220	30	50	352	840	920	1148	726	218*	155*
2/0	19	20	14	220	30	50	395	883	963	1191	826	248*	177*
3/0	19	25	14	220	30	50	443	930	1010	1238	947	284*	201*
4/0	19	20	12	220	30	50	498	985	1065	1327	1133	324*	230*
250	37	16	10	220	40	50	558	1055	1155	1459	1389	360*	257*
350	37	18	14	220	40	50	661	1158	1258	1486	1219	389**	319**
500	37	25	14	220	40	50	789	1285	1385	1613	1532	468**	384**
750	61	24	12	220	40	80	968	1475	1575	1891	2162	569**	468**
1000	61	20	10	220	55	80	1117	1623	1753	2110	2762	642**	542**
1250	91	25	10	220	55	80	1250	1765	1895	2253	3278	688**	604**
1500	91	30	10	220	55	80	1370	1885	2015	2373	3762	726**	637**
<b>COPPER CONDUCTOR - 0.220" INSULATION - 133% INSULATION LEVEL</b>													
2	Solid	16	14	220	30	50	258	745	825	1053	768	210*	150*
2	7	16	14	220	30	50	283	770	850	1078	792	210*	150*
1	Solid	20	14	220	30	50	289	778	858	1086	888	240*	171*
1	19	20	14	220	30	50	322	810	890	1118	916	240*	171*
1/0	Solid	25	14	220	30	50	325	813	893	1121	1035	273*	194*
1/0	19	25	14	220	30	50	362	850	930	1158	1070	273*	194*
2/0	19	20	12	220	30	50	405	893	973	1234	1288	313*	224*
3/0	19	25	12	220	30	50	456	943	1023	1284	1523	358*	255*
4/0	19	20	10	220	30	50	512	1000	1080	1384	1863	410*	293*
250	37	24	10	220	40	50	558	1055	1155	1459	2168	446*	322*
350	37	18	12	220	40	50	661	1158	1258	1519	2130	489**	400**
500	37	26	12	220	40	50	789	1285	1385	1647	2837	577**	472**
750	61	25	10	220	40	80	968	1475	1575	1933	4125	649**	532**
1000	61	26	9	220	55	80	1117	1623	1753	2135	5332	720**	630**
1250	91	26	8	220	55	80	1250	1765	1895	2306	6535	760**	667**
+ Ampacities shown assume use of 100% load factor, 60 Hz current, 36" burial depth, 20°C ambient temperature, 90°C conductor temperature, earth RHO 90, insulation and shield RHO 400 * Full neutral construction (Ampacities assume - single phase circuit, one cable) ** 1/3 neutral cable (Ampacities assume - three phase circuit, 3 cables triplexed, multi-point grounding per ICEA methods)													

