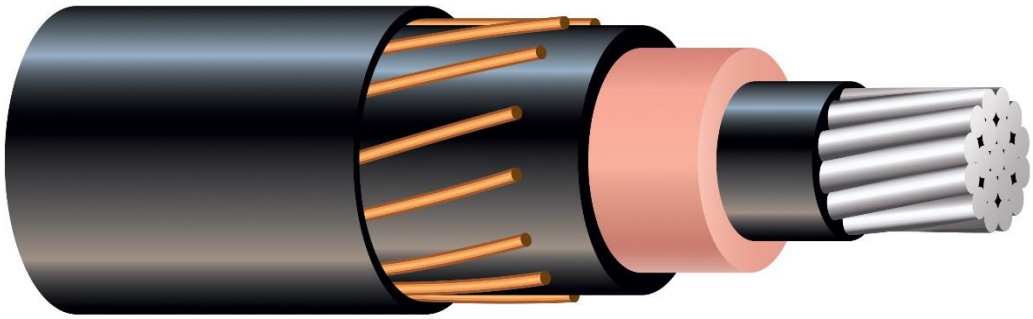
46kV Primary UD EPR Cable

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 46,000 volts or less and at conductor temperatures not to exceed 105°C for normal operation.

SPECIFICATIONS

Southwire 46kV 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 46kV Primary UD EPR Cable is manufactured to the latest edition of the following specifications, and in case of specification conflicts, in the order listed:

- ANSI/ICEA S-94-649
- AEIC CS-8

CONSTRUCTION

The cable is composed of a moisture blocked reverse lay, compressed stranded soft drawn copper, or a 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.

46kV Primary UD EPR

Phase Conductor		Neutral		Thickness Per Cond. (mils)			Nominal Diameter (mils)				Weight 1000 feet (lbs.)	Allowable Ampacities+	
Size (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
ALUMINUM CONDUCTOR - 0.445" INSULATION - 100% INSULATION LEVEL													
350	37	18	14	445	55	80	661	1600	1730	2012	1921	384**	327**
500	37	25	14	445	55	80	789	1725	1855	2137	2284	462**	393**
750	61	24	12	445	55	80	968	1915	2045	2361	2941	563**	486**
1000	61	20	10	445	55	80	1117	2063	2193	2550	3560	637**	548**
1250	91	25	10	445	55	80	1250	2208	2338	2695	4132	693**	612**
1500	91	30	10	445	55	80	1370	2328	2458	2815	4659	736**	648**
COPPER CONDUCTOR - 0.445" INSULATION - 100% INSULATION LEVEL													
350	37	18	12	445	55	80	661	1600	1730	2046	2843	484**	412**
500	37	26	12	445	55	80	789	1725	1855	2171	3600	571**	485**
750	61	25	10	445	55	80	968	1915	2045	2403	4917	670**	576**
1000	61	26	9	445	55	80	1117	2063	2193	2575	6138	733**	647**
1250	91	26	8	445	55	80	1250	2208	2338	2748	7405	775**	683**

+ 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)

One Southwire Drive
Carrollton, GA 30119 USA
770/832-4242
www.southwire.com