35kV XLPE Medium Voltage

APPLICATIONS
- Predominantly used for primary underground distribution
- Suitable for use in wet or dry locations, direct burial, underground duct, and where exposed to sunlight
- To be used at 35,000 volts or less and at conductor temperatures not to exceed 90°C for normal operation

CONSTRUCTION DETAILS
- The phase conductor is concentrically stranded, compressed soft copper or 1350-H16/26 aluminum alloy
- Cable is composed of the conductor with moisture block in the strands, covered by a semi-conducting cross-linked polyethylene strand shield, a tree-retardant cross-linked polyethylene primary insulation, and a semi-conducting cross-linked polyethylene insulation shield
- Conductors are available with either 100% or 133% insulation levels
- Concentric neutral of bare copper wires and an insulating polyethylene jacket is applied over the insulation shield
- Cable identified by surface print on the jacket and with the lightning bolt symbol for supply cables indented in the jacket

SPECIFICATIONS
Southwire 35kV HI-DRI Primary UD Cable meets or exceeds the following ASTM specifications:
- B 230: Aluminum 1350-H19 Wire for Electrical Purposes
- B 231: Aluminum 1350 Conductors, Concentric-Lay-Stranded
- B 609: Aluminum 1350 Round Wire, Annealed and Intermediate Tempers, for Electrical Purposes

Southwire 35kV HI-DRI Primary UD 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
- RUS U-1
# Phase Conductor

<table>
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<tr>
<th>Size (AWG or kcmil)</th>
<th>Strand- ing</th>
<th>Capacity</th>
<th>No. of Wires</th>
<th>Size (AWG)</th>
<th>Approx. Insul.</th>
<th>Insul. Shield Min. Point</th>
<th>Approx. Bare Phase Cond.</th>
<th>Over Insul.</th>
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<th>Comp. Cable</th>
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* 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)

## OPTIONS

- Stranded copper available
- XLPE jacket available upon request
- PVC jacket available upon request
- UL listed
- Cables manufactured to ICEA S-97-682
  - LCT Shield, Bare Copper Tape Shield
- Copper conductors manufactured to ASTM standards
  - B 3: Soft Annealed Copper Wire
  - B 8: Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard or Soft
- Other voltages available
- Cable can be triplexed or paralleled upon request