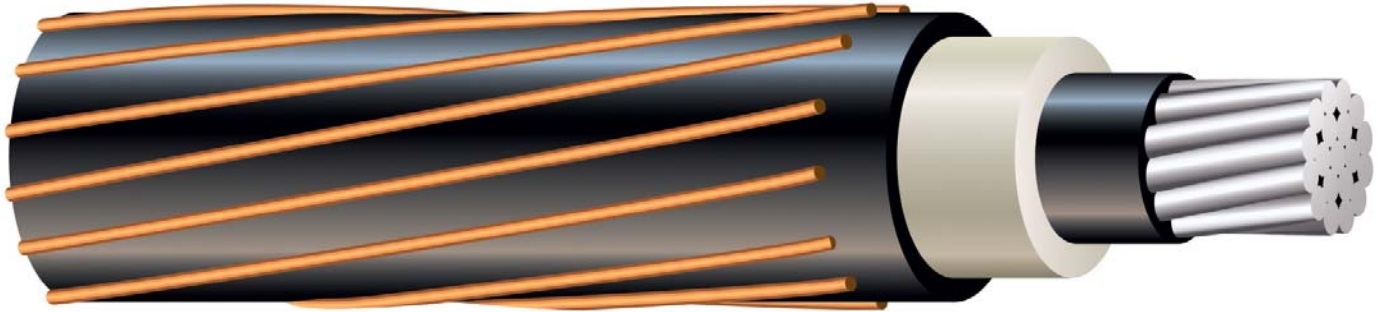


35kV Unjacketed Primary Cable UD

Aluminum or Copper Conductor. TRXLP Insulation.
Bare Copper Concentric Neutrals.



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.

SPECIFICATIONS

Southwire 35kV HI-DRI Unjacketed Primary UD TRXLP 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 35kV HI-DRI Unjacketed 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

CONSTRUCTION

The phase conductor is solid or moisture blocked reverse lay or 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, a tree-retardant cross-linked polyethylene primary insulation, and a semi-conducting polyethylene insulation shield. Conductors are available with either 100% or 133% insulation levels. A concentric neutral of bare copper wires is applied over the insulation shield.

35kV Unjacketed Primary UD TRXLP

| Phase Conductor | | Neutral | | Thickness Per Conductor (mils) | | Diameter (mils) | | | | Weight (lb/1000 ft) | Allowable Ampacities + | |
|---|-----------|--------------|------------|--------------------------------|--------------------------|------------------|-------------|--------------------|----------------|---------------------|------------------------|----------|
| Size (AWG or kcmil) | Stranding | No. of Wires | Size (AWG) | Nominal Insul. | Insul. Shield Min. Point | Bare Phase Cond. | Over Insul. | Over Insul. Shield | Complete Cable | Complete Cable | Direct Burial | In Ducts |
| ALUMINUM CONDUCTOR- 0.345" INSULATION- 100% INSULATION LEVEL | | | | | | | | | | | | |
| 1/0 | Solid | 16 | 14 | 345 | 40 | 325 | 1060 | 1160 | 1288 | 704 | 209* | 149* |
| 1/0 | 19 | 16 | 14 | 345 | 40 | 352 | 1085 | 1185 | 1313 | 722 | 209* | 149* |
| 2/0 | 19 | 20 | 14 | 345 | 40 | 395 | 1130 | 1230 | 1358 | 826 | 237* | 171* |
| 3/0 | 19 | 25 | 14 | 345 | 40 | 443 | 1175 | 1275 | 1403 | 949 | 270* | 187* |
| 4/0 | 19 | 20 | 12 | 345 | 40 | 498 | 1230 | 1330 | 1492 | 1113 | 308* | 220* |
| 250 | 37 | 16 | 10 | 345 | 40 | 558 | 1300 | 1400 | 1604 | 1314 | 341* | 242* |
| 350 | 37 | 18 | 14 | 345 | 40 | 661 | 1405 | 1505 | 1633 | 1176 | 384** | 323** |
| 500 | 37 | 25 | 14 | 345 | 40 | 789 | 1530 | 1630 | 1758 | 1486 | 463** | 389** |
| 750 | 61 | 24 | 12 | 345 | 55 | 968 | 1720 | 1850 | 2012 | 2060 | 565** | 483** |
| 1000 | 61 | 20 | 10 | 345 | 55 | 1117 | 1868 | 1998 | 2201 | 2556 | 645** | 550** |
| COPPER CONDUCTOR- 0.345" INSULATION- 100% INSULATION LEVEL | | | | | | | | | | | | |
| 1/0 | Solid | 25 | 14 | 345 | 40 | 325 | 1060 | 1160 | 1288 | 1046 | 262* | 186* |
| 1/0 | 19 | 25 | 14 | 345 | 40 | 362 | 1095 | 1195 | 1323 | 1077 | 262* | 186* |
| 2/0 | 19 | 20 | 12 | 345 | 40 | 405 | 1140 | 1240 | 1402 | 1277 | 300* | 215* |
| 3/0 | 19 | 25 | 12 | 345 | 40 | 456 | 1190 | 1290 | 1452 | 1518 | 340* | 238* |
| 4/0 | 19 | 20 | 10 | 345 | 40 | 512 | 1245 | 1345 | 1549 | 1830 | 389* | 238* |
| 250 | 37 | 24 | 10 | 345 | 40 | 558 | 1300 | 1400 | 1604 | 2120 | 430* | 305* |
| 350 | 37 | 18 | 12 | 345 | 40 | 661 | 1405 | 1505 | 1667 | 2069 | 485** | 406** |
| 500 | 37 | 26 | 12 | 345 | 40 | 789 | 1530 | 1630 | 1792 | 2778 | 573** | 480** |
| 750 | 61 | 25 | 10 | 345 | 55 | 968 | 1720 | 1850 | 2054 | 4004 | 675** | 574** |
| 1000 | 61 | 26 | 9 | 345 | 55 | 1117 | 1868 | 1998 | 2226 | 5135 | 729** | 642** |

+ 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)