1/C CU EPR CPE Medium Voltage Non-Shielded Jumper & Switchgear Cable

Single Conductor Tinned Copper EPDM Insulation with a CPE Jacket Non-Shielded Jumper Cable

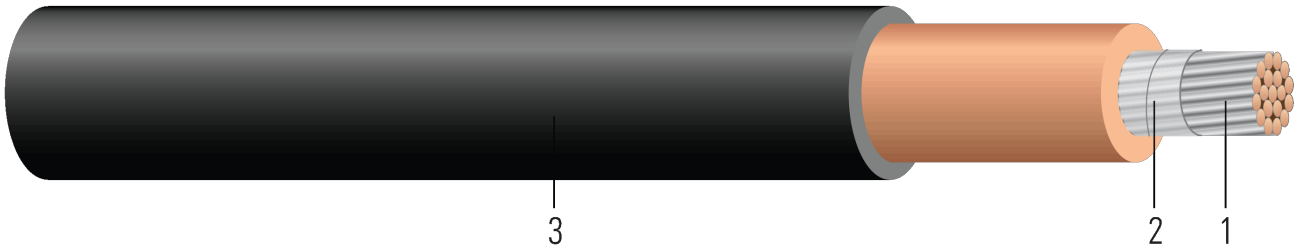

Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Tinned copper class B or C
2. **Tape:** Binder tape for ease of insulation removal
3. **Insulation:** Heat, moisture, and ozone resistant Ethylene Propylene Diene Monomer (EPDM)
4. **Jacket:** Thermoplastic Chlorinated Polyethylene CPE jacket

APPLICATIONS AND FEATURES:

Southwire's medium voltage non-shielded cable is intended for use in substations installed on insulators and inside switchgear isolated from ground and where a non-shielded cable is desired. These cables are capable of operating continuously at a conductor temperature not in excess of 90°C. See Table 2 for installation guidelines.

This cable is rated up to 40KV and is not UL listed. See Table 2 for Installation Guidelines

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire

SAMPLE PRINT LEGEND:

SOUTHWIRE® XXX SIZE STRANDED NON-SHIELDED 90°C DRY EPDM/CPE SEQUENTIAL MARKS NON-UL

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Strand Count	Diameter Over Conductor	Insul. Thickness	Jacket Thickness	Approx. OD	Copper Weight	Approx. Weight
	AWG/ Kcmil		No. of Strands	inch	mil	mil	inch	lb/1000ft	lb/1000ft
585796	350	1	37	0.661	175	80	1.193	1080	1512

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item

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Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	Min Bending Radius	Max Pull Tension	DC Resistance @ 25°C	AC Resistance @ 75°C	Inductive Reactance @ 60Hz	Allowable Ampacity At 60°C	Allowable Ampacity At 75°C	Allowable Ampacity At 90°C
	AWG/ Kcmil		inch	lb	Ω/1000ft	Ω/1000ft	Ω/1000ft	Amp	Amp	Amp
585796	350	1	5.9	2800	0.031	0.039	0.040	260	310	350

† Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

† Ampacities have been adjusted for more than Three Current-Carrying Conductors.

* Inductive impedance is based on non-ferrous conduit with one diameter spacing.