



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

Single Conductor Flexible Conductor with an EPR Insulation Non-Shielded Jumper Cable



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Flexible rope lay stranded annealed bare or tinned copper
2. **Conductor Shield:** Nylon semi-conducting tape, helically applied
3. **Insulation:** Heat, moisture, and ozone resistant Ethylene Propylene Rubber(EPR)

APPLICATIONS AND FEATURES:

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

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

SPECIFICATIONS:

- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors

SAMPLE PRINT LEGEND:

SOUTHWIRE® XXX SIZE NON-SHIELED FLEXIBLE JUMPER AND SWITCHGEAR CABLE NON-UL

Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Conductor Number | Color | Diameter Over Conductor | Conductor Stranding | Insulation Thickness | Approx. OD | Copper Weight | Overall Weight |
|--------------|---------------|------------------|-------|-------------------------|---------------------|----------------------|------------|---------------|----------------|
| | AWG/ Kcmil | | | inch | | mils | inch | lbs/1000ft | lbs/1000ft |
| 569424 | 2 | 0 | RD | 0.290 | 168 | 210 | 0.753 | 169 | 177 |
| 587529 | 2 | 0 | OE | 0.315 | 259 | 200 | 0.770 | 169 | 424 |
| 569423 | 1/0 | 1 | RD | 0.379 | 259 | 210 | 0.840 | 320 | 548 |
| 569425 | 2/0 | 1 | RD | 0.400 | 324 | 220 | 0.883 | 406 | 674 |
| 569487 | 4/0 | 1 | RD | 0.530 | 532 | 210 | 0.979 | 651 | 960 |
| 674322 | 4/0 | 1 | OE | 0.530 | 532 | 360 | 1.280 | 638 | 1244 |
| 569427 | 350 | 1 | RD | 0.670 | 893 | 230 | 1.160 | 1084 | 1475 |
| 569428 | 500 | 1 | RD | 0.858 | 1221 | 230 | 1.350 | 1514 | 1970 |





All dimensions are nominal and subject to normal manufacturing tolerances

◇ Cable marked with this symbol is a standard stock item

† Ampacities based upon 2023 NEC Table 310.16. Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

Table 2 – Electrical and Engineering Data

| Cond. Size | Conductor Number | Max Pull Tension | DC Resistance at 25°C | AC Resistance at 75°C | Inductive Reactance @ 60Hz | Allowable Ampacity Raceway 75°C | Allowable Ampacity Raceway 90°C |
|---------------|------------------|------------------|-----------------------|-----------------------|----------------------------|---------------------------------|---------------------------------|
| AWG/ Kcmil | | Lbs | Ω/1000ft | Ω/1000ft | Ω/1000ft | Amp | Amp |
| 2 | 0 | 530 | 0.172 | 0.207 | 0.045 | 115 | 130 |
| 2 | 0 | 530 | 0.172 | 0.207 | 0.045 | 115 | 130 |
| 1/0 | 1 | 844 | 0.109 | 0.131 | 0.044 | 150 | 170 |
| 2/0 | 1 | 1064 | 0.087 | 0.104 | 0.043 | 175 | 195 |
| 4/0 | 1 | 1692 | 0.055 | 0.067 | 0.041 | 230 | 260 |
| 4/0 | 1 | 1692 | 0.055 | 0.067 | 0.041 | 230 | 260 |
| 350 | 1 | 2800 | 0.033 | 0.042 | 0.040 | 310 | 350 |
| 500 | 1 | 4000 | 0.023 | 0.031 | 0.039 | 380 | 430 |

