



5/C CU 2000V EPDM/CPE Type W Industrial Grade Cable 90°C. MSHA Approved

Flexible Copper conductors, Ethylene Propylene Diene Monomer (EPDM) insulation, Single Layer Chlorinated Polyethylene (CPE) Jacket



Image not to scale. See Table 1 for dimensions.

CONSTRUCTION:

1. **Conductor:** Bare, soft drawn, annealed, flexible, rope-lay stranded copper per ASTM B3/B172
2. **Separator Tape:** Non-conducting tape applied between the conductor and insulation to facilitate stripping
3. **Insulation:** Ethylene Propylene Diene Monomer (EPDM). Color coded black, white, red, green, orange
4. **Fillers:** Jute fillers applied as needed to round the cable core
5. **Reinforcement Binder:** Reinforcing binder with twine applied over the core
6. **Jacket:** Black, flame resistant, thermosetting Chlorinated Polyethylene (CPE)

APPLICATIONS AND FEATURES:

Southwire Type W cable is a heavy-duty industrial cable for use in flexible, portable, and extra-hard usage applications per NEC Article 400. Suitable for continuous submersion in water – ideal for submersible pumps. Also suitable for use in light to medium-duty mining applications. Sunlight and oil resistant. Highly flexible and easy to work with in cold conditions. Not for use as permanent building wiring. Meets FT-5 Flame Test. cUL listing on select items only.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- UL 1650 Standard for Portable Power Cable
- MSHA Approved
- RoHS-2 (European Directive 2011/65/EU)

SAMPLE PRINT LEGEND:

AWG 5/C TYPE W PORTABLE POWER CABLE 90°C - WET OR DRY 2000V OIL AND SUN. RES. {UL} P-136-35-MSHA --- AIW™ E172226--- c{UL} FT1/FT5 (-40°C)





Table 1 – Weights and Measurements

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Conductor | Insul. Thickness | Jacket Thickness | Approx. OD | Approx. Weight | Jacket Color |
|--------------|---------------|--------------|---------------|-------------------------|------------------|------------------|------------|----------------|--------------|
| | AWG/ Kcmil | No. | No. | inch | mil | mil | inch | lb/1000ft | |
| 571259 | 8 | 5 | 71 | 0.145 | 60 | 155 | 1.056 | 665 | BK |
| 570257 | 6 | 5 | 65 | 0.186 | 60 | 140 | 1.210 | 881 | BK |
| 570255 | 4 | 5 | 112 | 0.235 | 60 | 155 | 1.399 | 1347 | BK |
| 571483 | 2 | 5 | 168 | 0.290 | 60 | 170 | 1.605 | 1990 | BK |
| TBA | 1 | 5 | 224 | 0.300 | 80 | 205 | 1.676 | 1907 | BK |
| 570097 | 1/0 | 5 | 259 | 0.379 | 80 | 260 | 2.041 | 3075 | BK |
| 571470 | 2/0 | 5 | 324 | 0.400 | 80 | 205 | 2.072 | 3336 | BK |
| 571472 | 3/0 | 5 | 418 | 0.480 | 80 | 205 | 2.153 | 3893 | BK |
| 570253 | 4/0 | 5 | 532 | 0.530 | 80 | 220 | 2.394 | 5313 | BK |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

Table 2 – Electrical and Engineering Data

| Cond. Size | DC Resistance @ 25°C | AC Resistance @ 90°C | Inductive Reactance | Max Pull Tension | Min Bending Radius | Allowable Ampacity In Air 60°C | Allowable Ampacity In Air 75°C | Allowable Ampacity In Air 90°C |
|---------------|----------------------|----------------------|---------------------|------------------|--------------------|--------------------------------|--------------------------------|--------------------------------|
| AWG/ Kcmil | Ω/1000ft | Ω/1000ft | Ω/1000ft | lb | inch | Amp | Amp | Amp |
| 8 | 0.679 | 0.818 | 0.052 | | 5.2 | 38 | 46 | 52 |
| 6 | 0.435 | 0.524 | 0.051 | | 6.0 | 50 | 62 | 70 |
| 4 | 0.274 | 0.330 | 0.048 | | 6.9 | 67 | 81 | 91 |
| 2 | 0.172 | 0.207 | 0.045 | | 8.0 | 90 | 106 | 122 |
| 1 | 0.137 | 0.164 | 0.046 | | 8.3 | 105 | 125 | 142 |
| 1/0 | 0.109 | 0.131 | 0.044 | | 12.2 | 121 | 145 | 164 |
| 2/0 | 0.087 | 0.104 | 0.043 | | 12.4 | 139 | 166 | 190 |
| 3/0 | 0.069 | 0.083 | 0.042 | | 12.9 | 161 | 193 | 219 |
| 4/0 | 0.055 | 0.067 | 0.041 | | 14.3 | 186 | 222 | 253 |

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

