



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
- CSA C22.2 No. 96 Portable Power Cables
- MSHA Approved
- RoHS-2 (European Directive 2011/65/EU)

SAMPLE PRINT LEGEND:

SOUTHWIRE(R) ROYAL(R) XXX AWG (XX.Xmm²) X/C TYPE W PORTABLE POWER CABLE E172226 (UL) 2000V 90C DRY 90C WET SUN RES -- 156205 CSA TYPE W 2000V -40C FT1 FT5 P-07-KA100010-MSHA





Table 1 – Weights and Measurements

| 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 | |
| 1 | 5 | 224 | 0.300 | 80 | 205 | 1.676 | 1907 | BK |

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

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.

† Wax paper filler (instead of jute filler)

Table 2 – Electrical and Engineering Data

| Cond. Size | DC Resistance @ 25°C | AC Resistance @ 90°C | Inductive Reactance | 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 | inch | Amp | Amp | Amp |
| 1 | 0.137 | 0.164 | 0.046 | 8.3 | 105 | 125 | 142 |

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

