



## 4/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
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 Article NEC 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.

### 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.Xmm<sup>2</sup>) 4/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**

| Stock Number | Cond. Size    | Cond. Number | Cond. Strands | Diameter Over Conductor | Insul. Thickness | Jacket Thickness | Approx. OD | Approx. Weight | Jacket Color |
|--------------|---------------|--------------|---------------|-------------------------|------------------|------------------|------------|----------------|--------------|
|              | AWG/<br>Kcmil | No.          | No.           | inch                    | mil              | mil              | inch       | lb/1000ft      |              |
| 570102       | 1             | 4            | 224           | 0.300                   | 80               | 145              | 1.654      | 1985           | 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.

**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/<br>Kcmil | Ω/1000ft             | Ω/1000ft             | Ω/1000ft            | inch               | Amp                            | Amp                            | Amp                            |
| 1             | 0.137                | 0.164                | 0.046               | 8.2                | 105                            | 125                            | 142                            |

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

