# 1/C CU 2000V EPDM/CPE Type W RHH/RHW-2 Industrial Grade Cable 90°C. MSHA Approved

Flexible Copper Conductors, Ethylene Propylene Diene Monomer (EPDM) Insulation, Single Layer Chlorinated Polyethylene (CPE) Jacket. Type RHH/RHW-2 90°C Wet and Dry



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)
- 4. Reinforcement Binder: Reinforcing twine.
- 5. 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. Approved for use per the NEC® as Type RHH/RHW-2 90°C wet or dry. Meets FT-1 and FT-5 Flame Tests.

#### **SPECIFICATIONS:**

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 1650 Standard for Portable Power Cable
- MSHA Approved
- RoHS-2 (European Directive 2011/65/EU)

#### **SAMPLE PRINT LEGEND:**

SOUTHWIRE{R} ROYAL{R} XXX AWG (XX{mm2}) TYPE W PORTABLE POWER CABLE E172226 MASTER-DESIGN {UL} RHH/RHW-2 2000V 90{D}C DRY 90{D}C WET SUN RES -- LL90458 {CSA} TYPE W 2000V -40{D}C FT1 FT5 P-07-KA100009-MSHA







### **Table 1 – Weights and Measurements**

| Stock<br>Number | Cond. Size    | Cond.<br>Number | Cond.<br>Strands | Diameter Over<br>Conductor | Insul.<br>Thickness | Jacket<br>Thickness | Approx.<br>OD | Approx.<br>Weight | Jacket<br>Color |
|-----------------|---------------|-----------------|------------------|----------------------------|---------------------|---------------------|---------------|-------------------|-----------------|
|                 | AWG/<br>Kcmil | No.             | No.              | inch                       | mil                 | mil                 | inch          | lb/1000ft         |                 |
| 641395          | 1/0           | 1               | 259              | 0.379                      | 80                  | 95                  | 0.759         | 514               | ВК              |

All dimensions are nominal and subject to normal manufacturing tolerances

## Table 2 – Electrical and Engineering Data

| Cond.<br>Size | DC Resistance @ 25°C | AC Resistance @ 90°C | Inductive<br>Reactance | Min Bending<br>Radius | Allowable Ampacity In<br>Air 60°C | Allowable Ampacity In<br>Air 75°C | Allowable Ampacity In<br>Air 90°C |
|---------------|----------------------|----------------------|------------------------|-----------------------|-----------------------------------|-----------------------------------|-----------------------------------|
| AWG/<br>Kcmil | Ω/1000ft             | Ω/1000ft             | Ω/1000ft               | inch                  | Amp                               | Amp                               | Amp                               |
| 1/0           | 0.109                | 0.131                | 0.044                  | 3.0                   | 195                               | 230                               | 260                               |

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





<sup>♦</sup> Cable marked with this symbol is a standard stock item

<sup>^</sup> class H stranding