**SPEC 44102** Stock #: 646468

# 3/C CU 2000V EPDM/CPE Type W Industrial Grade Cable 90°C 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, green.
- 4. Fillers: Paper fillers applied as needed to round the cable core
- 5. **Tape:** Reinforcing tape applied over the cabled core for improved mechanical integrity and ease of stripping
- 6. **Reinforcement Binder:** Reinforcing twine applied over the tapped core
- 7. **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 perminant building wiring. Meets FT-5 Flame Test. cUL listing on select items only.

#### SPECIFICATIONS:

- ASTM B3 Standard Specification for 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
- RoHS-2 (European Directive 2011/65/EU)

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

# AWG 3/C TYPE W PORTABLE POWER CABLE 90°C WET OR DRY 2000V OIL AND SUN RES (UL) P-136-35-MSHA AIWTM c (UL) FT1/FT5 (-40°C)













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

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Approx. OD	Approx. Weight
	AWG/ Kcmil	No.	No.	inch	mil	inch	inch	lb/1000ft
646468	3/0	3	418	0.470	80	0.66	1.76	2,480

All dimensions are nominal and subject to normal manufacturing tolerances

### Table 2 – Electrical and Engineering Data

Stock Number	Cond. Size	Cond. Number	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	No.	Ω/1000ft	Ω/1000ft	MΩ/1000ft	inch	Amp	Amp	Amp
646468	3/0	3	0.0662	0.0840	0.032	11	201	241	274

<sup>\*</sup> Inductive reactance based three current-carrying conductors.













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

<sup>†</sup> Ampacity based on NEC 400.5(A)(2) and is for a single isolated cable in air operated at an ambient temperature of 30°C connected to utilization equipment with three current-carrying conductors.