# 2/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 or B173
- 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
- 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-1 and FT-5 Flame Tests. 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) XX AWG (XXXmm2) 2/C TYPE W PORTABLE POWER CABLE E172226 (UL) 2000V 90C DRY 90C WET SUN RES OIL RES - P-136-35-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/ Kcmil	No.	No.	inch	mil	mil	inch	lb/1000ft	
559272	8	2	71	0.145	60	115	0.801	330	ВК
TBA	6	2	65	0.186	60	110	0.852	403	ВК
570254	4	2	112	0.235	60	110	1.020	611	ВК
TBA	1	2	224	0.300	80	155	1.250	925	ВК
672747	2	2	168	0.315	60	155	1.225	1075	BK
571598	1/0	2	259	0.385	80	155	1.511	1203	BK
559276	2/0	2	324	0.420	80	170	1.548	1804	ВК
TBA	3/0	2	418	0.480	80	155	1.610	1764	ВК

All dimensions are nominal and subject to normal manufacturing tolerances

**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		3.2	55	65	74
6	0.435	0.524	0.051		3.4	72	88	99
4	0.274	0.330	0.048		5.1	96	115	130
1	0.137	0.164	0.046		6.2	150	178	202
2	0.172	0.207	0.045		6.1	128	152	174
1/0	0.109	0.131	0.044		7.0	173	207	234
2/0	0.087	0.104	0.043		7.7	199	238	271
3/0	0.069	0.083	0.042		8.0	230	275	313

<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