

## 5/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, red, green, orange
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 taped 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 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 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
- MSHA Approved
- RoHS-2 (European Directive 2011/65/EU)

### SAMPLE PRINT LEGEND:

# AWG 5/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
571259	8	5	71	0.148	60	0.3	1.09	660
570257	6	5	65	0.184	60	0.33	1.22	890
570255	4	5	112	0.235	60	0.39	1.38	1280
571483	2	5	168	0.315	60	0.47	1.63	1830
TBA	1	5	224	0.362	80	0.55	1.94	2540
570097	1/0	5	259	0.385	80	0.58	2	2870
571470	2/0	5	324	0.42	80	0.61	2.09	3410
571472	3/0	5	418	0.47	80	0.66	2.23	4120
570253	4/0	5	532	0.535	80	0.73	2.43	5040

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

## 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
571259	8	5	0.666	0.848	0.041	7	48	57	65
570257	6	5	0.415	0.529	0.038	7	63	77	87
570255	4	5	0.263	0.335	0.036	8	84	101	114
571483	2	5	0.172	0.215	0.034	10	112	133	152
TBA	1	5	0.131	0.166	0.034	12	131	156	177
570097	1/0	5	0.109	0.139	0.034	12	151	181	205
571470	2/0	5	0.0834	0.106	0.033	13	174	208	237
571472	3/0	5	0.0662	0.084	0.032	13	201	241	274
570253	4/0	5	0.0525	0.066	0.032	15	232	277	316

\* Inductive reactance based three current-carrying conductors.

† 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 so that only three conductors are current-carrying. If 4 or 5 conductors are current-carrying, derate by 0.80 per NEC Table 400.5(A)(3).



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