

5/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, orange
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-5 Flame Test. 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
- 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)



Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	No.	inch	mil	mil	inch	lb/1000ft
571259	8	5	71	0.145	60	155	1.056	665
570257	6	5	65	0.186	60	140	1.210	881
570255	4	5	112	0.235	60	155	1.399	1347
571483	2	5	168	0.290	60	170	1.605	1990
TBA	1	5	224	0.300	80	205	1.676	1907
570097	1/0	5	259	0.379	80	260	2.041	3075
571470	2/0	5	324	0.400	80	205	2.072	3336
571472	3/0	5	418	0.480	80	205	2.153	3893
570253	4/0	5	532	0.530	80	220	2.394	5313

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

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		5.2	38	46	52
6	0.435	0.524	0.051		6.0	50	62	70
4	0.274	0.330	0.048		6.9	67	81	91
2	0.172	0.207	0.045		8.0	90	106	122
1	0.137	0.164	0.046		8.3	105	125	142
1/0	0.109	0.131	0.044		12.2	121	145	164
2/0	0.087	0.104	0.043		12.4	139	166	190
3/0	0.069	0.083	0.042		12.9	161	193	219
4/0	0.055	0.067	0.041		14.3	186	222	253

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

