



# 3/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

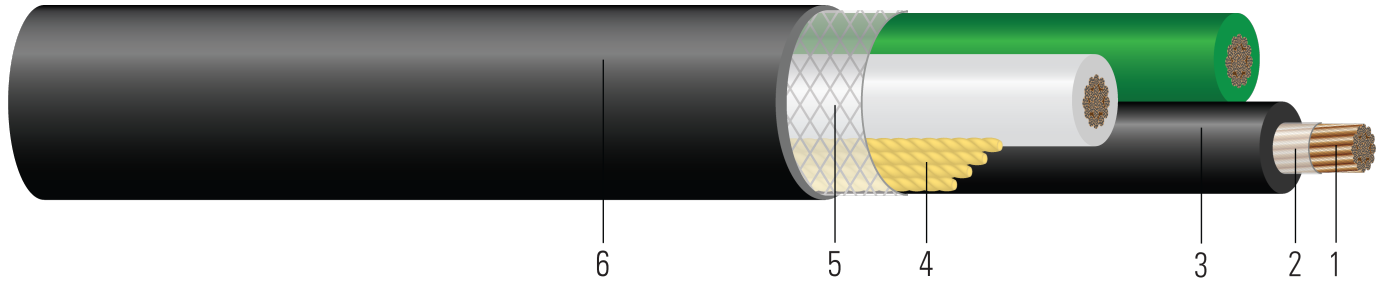


Image not to scale. See Table 1 for dimensions.

## 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, green.
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 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 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 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)





**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	
558151	8	3	71	0.145	60	145	0.963	477	Black
570256	6	3	65	0.186	60	145	1.030	609	Black
571409	4	3	112	0.235	60	125	1.170	881	Black
559279	2	3	168	0.290	60	145	1.292	1151	Black
TBA	1	3	224	0.300	80	145	1.304	1173	Black
TBA	1/0	3	259	0.379	80	160	1.505	1671	Black
559280	2/0	3	324	0.400	80	155	1.691	2098	Black
646468	3/0	3	418	0.480	80	160	1.713	2406	Black
570252	4/0	3	532	0.530	80	175	1.913	2904	Black
TBA	250	3	608	0.605	95	155	2.048	3382	Black
571292	350	3	893	0.670	95	245	2.685	5679	Black
599101	500	3	1221	0.858	95	245	2.800	6568	Black
571442	500	3	1221	0.858	95	270	2.861	6897	Black

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		3.8	48	57	65
6	0.435	0.524	0.051		5.1	63	77	87
4	0.274	0.330	0.048		5.8	84	101	114
2	0.172	0.207	0.045		6.4	112	133	152
1	0.137	0.164	0.046		6.5	131	156	177
1/0	0.109	0.131	0.044		7.5	151	181	205
2/0	0.087	0.104	0.043		8.4	174	208	237
3/0	0.069	0.083	0.042		8.5	201	241	274
4/0	0.055	0.067	0.041		9.5	232	277	316
250	0.047	0.057	0.041		12.2	259	310	352
350	0.033	0.042	0.040		16.1	318	381	433
500	0.023	0.031	0.039		16.8	392	470	536
500	0.023	0.031	0.039		17.1	392	470	536

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

