



# 4/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
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.

## 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) ROYAL(R) XXX AWG (XX.Xmm<sup>2</sup>) 4/C TYPE W PORTABLE POWER CABLE E172226 (UL) 2000V 90C DRY 90C WET SUN RES -- 156205 CSA TYPE W 2000V -40C FT1 FT5 P-07-KA100010-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	
558152	8	4	71	0.145	60	155	0.988	577	BK
597803	8	4	133	0.145	60	150	1.011	588	BK
558154	6	4	65	0.186	60	145	1.120	748	BK
TBA	4	4	427	0.235	60	145	1.171	952	BK
558156	4	4	112	0.235	60	125	1.223	1054	BK
558157	2	4	168	0.290	60	145	1.465	1766	BK
570102	1	4	224	0.300	80	145	1.654	1985	BK
558158	1/0	4	259	0.379	80	165	1.729	2249	BK
558159	2/0	4	324	0.400	80	225	1.874	2764	BK
560068	3/0	4	418	0.480	80	155	1.890	3226	BK
560069	4/0	4	532	0.530	80	235	2.199	3979	BK
456216	250	4	627	0.605	95	270	2.538	5045	BK
570250	350	4	893	0.670	95	284	2.968	7114	BK
TBA	500	4	1221	0.858	95	310	3.178	8464	BK

All dimensions are nominal and subject to normal manufacturing tolerances

◊ Cable marked with this symbol is a standard stock item

TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

**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		3.9	38	46	52
8	0.679	0.818	0.052		5.0	38	46	52
6	0.435	0.524	0.051		5.6	50	62	70
4	0.274	0.330	0.048		5.8	67	81	91
4	0.274	0.330	0.048		6.1	67	81	91
2	0.172	0.207	0.045		7.3	90	106	122
1	0.137	0.164	0.046		8.2	105	125	142
1/0	0.109	0.131	0.044		8.6	121	145	164
2/0	0.087	0.104	0.043		9.3	139	166	190
3/0	0.069	0.083	0.042		9.4	201	241	274
4/0	0.055	0.067	0.041		13.1	186	222	253
250	0.047	0.057	0.041		14.9	207	248	282
350	0.033	0.042	0.040		17.8	254	305	346
500	0.023	0.031	0.039		19.0	314	376	429

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

