

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:

- Conductor:** Bare, soft drawn, annealed, flexible, rope-lay stranded copper per ASTM B3/B172
- Separator Tape:** Non-conducting tape applied between the conductor and insulation to facilitate stripping
- Insulation:** Ethylene Propylene Diene Monomer (EPDM). Color coded black, white, red, green
- Fillers:** Paper fillers applied as needed to round the cable core
- Reinforcement Binder:** Reinforcing binder with twine applied over the core
- 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 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:

SOUTHWIRE® ROYAL® {5 CROWN LOGO} XX AWG (XX.XXmm²) 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 | Diameter Over Insulation | Approx. OD | Approx. Weight |
|--------------|---------------|--------------|---------------|-------------------------|------------------|--------------------------|------------|----------------|
| | AWG/ Kcmil | No. | No. | inch | mil | inch | inch | lb/1000ft |
| 558152 | 8 | 4 | 71 | 0.147 | 60 | 0.303 | 1.03 | 575 |
| 597803 | 8 | 4 | 133 | 0.162 | 60 | 0.288 | 0.971 | 524 |
| 558154 | 6 | 4 | 65 | 0.184 | 60 | 0.34 | 1.12 | 810 |
| 558156 | 4 | 4 | 112 | 0.235 | 60 | 0.391 | 1.25 | 1,130 |
| TBA | 4 | 4 | 427 | 0.240 | 60 | 0.401 | 0.595 | 265 |
| 558157 | 2 | 4 | 168 | 0.315 | 60 | 0.471 | 1.47 | 1,720 |
| 570102 | 1 | 4 | 224 | 0.362 | 80 | 0.535 | 1.654 | 1986 |
| 558158 | 1/0 | 4 | 259 | 0.385 | 80 | 0.581 | 1.73 | 2,230 |
| 558159 | 2/0 | 4 | 324 | 0.42 | 80 | 0.616 | 1.88 | 2,790 |
| 560068 | 3/0 | 4 | 418 | 0.47 | 80 | 0.666 | 1.91 | 3,200 |
| 560069 | 4/0 | 4 | 532 | 0.535 | 80 | 0.731 | 2.18 | 3,990 |
| TBA | 250 | 4 | 608 | 0.605 | 95 | 0.831 | 2.56 | 5,410 |
| 570250 | 350 | 4 | 855 | 0.67 | 95 | 0.896 | 2.65 | 6,380 |
| TBA | 500 | 4 | 1221 | 0.858 | 95 | 1.084 | 3.26 | 9,080 |

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 |
| 558152 | 8 | 4 | 0.666 | 0.848 | 0.041 | 7 | 48 | 57 | 65 |
| 597803 | 8 | 4 | 0.666 | 0.848 | 0.041 | 7 | 48 | 57 | 65 |
| 558154 | 6 | 4 | 0.415 | 0.529 | 0.038 | 7 | 63 | 77 | 87 |
| 558156 | 4 | 4 | 0.263 | 0.335 | 0.036 | 8 | 84 | 101 | 114 |
| TBA | 4 | 4 | 0.263 | 0.335 | 0.036 | 8 | 84 | 101 | 114 |
| 558157 | 2 | 4 | 0.172 | 0.215 | 0.034 | 9 | 112 | 133 | 152 |
| 570102 | 1 | 4 | 0.131 | 0.166 | 0.034 | 9.9 | 131 | 156 | 177 |
| 558158 | 1/0 | 4 | 0.109 | 0.139 | 0.034 | 11 | 151 | 181 | 205 |
| 558159 | 2/0 | 4 | 0.0834 | 0.106 | 0.033 | 11 | 174 | 208 | 237 |
| 560068 | 3/0 | 4 | 0.0662 | 0.084 | 0.032 | 12 | 201 | 241 | 274 |
| 560069 | 4/0 | 4 | 0.0525 | 0.066 | 0.032 | 13 | 232 | 277 | 316 |
| TBA | 250 | 4 | 0.0448 | 0.058 | 0.032 | 15 | 259 | 310 | 352 |
| 570250 | 350 | 4 | 0.032 | 0.041 | 0.031 | 16 | 318 | 381 | 433 |
| TBA | 500 | 4 | 0.0224 | 0.029 | 0.03 | 20 | 392 | 470 | 536 |

* 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 conductors are current-carrying, derate by 0.80 per NEC Table 400.5(A)(3)

