# 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 perminant 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® 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



Copyright © 2024 Southwire Company, LLC. All Rights Reserved

## 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 |
| 558152 | 8 | 4 | 71 | 0.145 | 60 | 155 | 0.988 | 577 |
| 597803 | 8 | 4 | 133 | 0.145 | 60 | 155 | 1.011 | 573 |
| 558154 | 6 | 4 | 65 | 0.186 | 60 | 145 | 1.120 | 748 |
| TBA | 4 | 4 | 427 | 0.235 | 60 | 145 | 1.171 | 952 |
| 558156 | 4 | 4 | 112 | 0.235 | 60 | 125 | 1.223 | 1054 |
| 558157 | 2 | 4 | 168 | 0.290 | 60 | 145 | 1.465 | 1766 |
| 570102 | 1 | 4 | 224 | 0.300 | 80 | 145 | 1.654 | 1985 |
| 558158 | 1/0 | 4 | 259 | 0.379 | 80 | 165 | 1.729 | 2249 |
| 558159 | 2/0 | 4 | 324 | 0.400 | 80 | 225 | 1.874 | 2764 |
| 560068 | 3/0 | 3 | 418 | 0.480 | 80 | 155 | 1.890 | 3226 |
| 560069 | 4/0 | 4 | 532 | 0.530 | 80 | 235 | 2.199 | 3979 |
| TBA | 250 | 4 | 608 | 0.605 | 95 | 270 | 2.486 | 4705 |
| 570250 | 350 | 4 | 893 | 0.670 | 95 | 284 | 2.968 | 7114 |
| TBA | 500 | 4 | 1221 | 0.858 | 95 | 310 | 3.178 | 8464 |

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 | | 3.9 | 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.