

## 3/C CU 2000V EPDM/CPE Type G-GC 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
4. **Ground Check:** One insulated, bare, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B3/B172
5. **Ground Conductors:** Two insulated, bare, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B3/B172
6. **Fillers:** Paper fillers applied as needed to round the cable core
7. **Reinforcement Binder:** Reinforcing binder with twine applied over the core
8. **Jacket:** Black, flame resistant, thermosetting Chlorinated Polyethylene (CPE)

### APPLICATIONS AND FEATURES:

Southwire Type G-GC cable is a heavy-duty industrial cable for use in flexible, portable, and extra-hard usage applications where equipment grounding is required per NEC Article 400. Suitable for continuous submersion in water – ideal for submersible pumps, marine application. 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 Listed.

### 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
- RoHS-2 (European Directive 2011/65/EU)

### SAMPLE PRINT LEGEND:

XXX AWG 3/C TYPE G-GC PORTABLE POWER CABLE 90°C - WET OR DRY 2000V OIL RESISTANT 60°C SUN RES. {UL}  
P-136-35-MSHA - AIW{TM} E172226 --- c{UL} FT1/FT5 (-40°C)



**Table 1 – Weights and Measurements**

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Conductor | Insul. Thickness | Ground    | Ground Check Size | Jacket Thickness | Approx. OD | Approx. Weight |
|--------------|------------|--------------|---------------|-------------------------|------------------|-----------|-------------------|------------------|------------|----------------|
|              | AWG/Kcmil  | No.          | No.           | inch                    | mil              | No. x AWG | AWG               | mil              | inch       | lb/1000ft      |
| 558170       | 2          | 3            | 168           | 0.290                   | 60               | 2 x 7     | 1x8               | 165              | 1.289      | 1405           |

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 | 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            | inch               | Amp                            | Amp                            | Amp                            |
| 2          | 0.172                | 0.207                | 0.045               | 6.4                | 112                            | 133                            | 152                            |

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

