



## 3/C CU 2000V Type G-GC RHINOFLEX™ CPE Mining Cable 90°C. MSHA Approved

Flexible Copper conductors, Ethylene Propylene Rubber (EPR) insulation, Extra Heavy Duty Two Layer Chlorinated Polyethylene (CPE) Jacket with Optional Reflective Stripes



Image not to scale. See Table 1 for dimensions.

### CONSTRUCTION:

1. **Conductor:** Tin coated, soft drawn, annealed, flexible, rope-lay stranded copper per ASTM B33/B172
2. **Separator Tape:** Non-conducting tape applied between the conductor and insulation to facilitate stripping and Ethylene Propylene Rubber (EPR), color coded black, white, red.
3. **Ground Conductors:** Two mylar taped, tin coated, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B33/B172
4. **Ground Check Conductor:** Tin coated, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B33/B172 with yellow, high durometer, Ethylene Propylene Rubber (EPR) insulation.
5. **Filler:** Filler as needed
6. **Binder:** Binder Tape
7. **Inner Jacket:** Black, mold cured, extra heavy-duty integral fill flame resistant, thermosetting Chlorinated Polyethylene (CPE)
8. **Reinforcement:** Reinforcing twine applied between the two jacket layers
9. **Outer Jacket:** Black, mold cured, extra heavy-duty, modified integral fill, flame resistant, thermosetting Chlorinated Polyethylene (CPE). Alternate jacket colors available
10. **Reflective Stripe:** Highly visible reflective stripe embedded into the outer jacket to increase safety and help prevent cable runover (optional, contact your sales representative for part number)

### APPLICATIONS AND FEATURES:

RHINOFLEX™ Type G-G cable is a heavy-duty cable for use where flexibility and maximum protection is required. For use with all portable, temporary, and permanent power applications such as mobile or stationary mining equipment, shuttle cars, mobile drills, pumps, roof bolters, conveyors, and any portable power where equipment grounding is required, It is ideal for use anytime extra-durable, flexible cable is required. Also suitable for continuous submersion in water. Ground check conductor provides fail-safe ground monitoring. Embossed print legend for easy cable identification. Cold Bend and Impact Tested to -50°C.

### SPECIFICATIONS:





- ASTM B33 Standard Specification for Tin-Coated Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy

**SAMPLE PRINT LEGEND:**

SOUTHWIRE (R) RHINO<sup>TM</sup> BRAND CABLE # AWG 3/C TYPE G-GC PORTABLE POWER CABLE 90°C WET OR DRY 2000V FT5  
-50°C P-07-KA140024 MSHA



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**Table 1 – Weights and Measurements**

| Stock Number | Cond. Size | Cond. Number | Cond. Strands | Diameter Over Conductor | Insul. Thickness | Diameter Over Insulation | Ground    | Ground Check Size | Inner Jacket Thickness | Jacket Thickness | Approx. OD | Approx. Weight | Jacket Color |
|--------------|------------|--------------|---------------|-------------------------|------------------|--------------------------|-----------|-------------------|------------------------|------------------|------------|----------------|--------------|
|              | AWG/Kcmil  | No.          | No.           | inch                    | mil              | inch                     | No. x AWG | AWG               | mil                    | mil              | inch       | lb/1000ft      |              |
| 590199       | 250        | 3            | 608           | 0.682                   | 100              | 0.816                    | 1 x 2     | 8                 | 100                    | 120              | 2.390      | 4386           | BK           |

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 | Working Tension | Min Bending Radius | Allowable Ampacity In Air 90°C |
|------------|----------------------|----------------------|---------------------|-----------------|--------------------|--------------------------------|
| AWG/Kcmil  | Ω/1000ft             | Ω/1000ft             | Ω/1000ft            | lb              | inch               | Amp                            |
| 250        | 0.048                | 0.062                | 0.026               | 1710            | 19.1               | 320                            |

\* Ampacities based upon ICEA S-75-381 Table H-1.

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

