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
3. **Insulation:** Ethylene Propylene Rubber (EPR), color coded black, white, red
4. **Ground Conductors:** Two mylar taped, tin coated, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B33/B172
5. **Filler:** Filler as needed
6. **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
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™ BRAND CABLE # AWG 3/C TYPE G-GC PORTABLE POWER CABLE 90°C WET OR DRY 2000V FT5 -50°C P-07-KA140024 MSHA

Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Ground Check Size	Ground Check Strands	Ground Check Insulation Thickness	Approx. OD	Approx. Weight
	AWG/ Kcmil	No.	No.	inch	mil	inch	AWG	No.	mil	inch	lb/1000ft
591266	8	3	168	0.155	60	0.311	10	104	30	0.97	630
585557	6	3	133	0.21	60	0.366	10	104	30	1.05	780
585028	4	3	259	0.256	60	0.412	10	104	30	1.19	1080
585725	2	3	308	0.32	60	0.476	8	168	45	1.34	1480
589268	1	3	385	0.355	80	0.551	8	168	45	1.51	1870
585726	2/0	3	324	0.42	80	0.616	8	168	45	1.75	2730
587197	4/0	3	532	0.577	80	0.773	8	168	45	2.04	3940
590199	250	3	608	0.61	95	0.836	8	168	45	2.39	5060
587531	350	3	855	0.72	95	0.946	8	168	45	2.68	6660

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	Capacitive Reactance	Inductive Reactance	Working Tension	Min Bending Radius	Allowable Ampacity In Air 90°C
AWG/ Kcmil	Ω/1000ft	Ω/1000ft	MΩ*1000ft	MΩ/1000ft	lb	inch	Amp
8	0.676	0.845	0.038	0.038	113.000	5.8	59
6	0.421	0.526	0.030	0.034	179.000	6.3	79
4	0.267	0.334	0.026	0.033	285.000	7.1	104
2	0.168	0.210	0.021	0.031	454.000	8	138
1	0.133	0.166	0.024	0.032	572.000	9.1	161
2/0	0.085	0.106	0.021	0.031	910.000	10.5	215
4/0	0.053	0.066	0.016	0.028	1446.000	12.2	287
250	0.045	0.056	0.017	0.029	1709.000	14.3	320
350	0.032	0.040	0.015	0.028	2393.000	16.1	394

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