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 Conductors:** Two insulated, bare, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B3/B172
5. **Ground Check:** One 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. Suitable for continuous submersion in water – ideal for submersible pumps, marine application. Also suitable for use in light to medium-duty mining applications. Sunlight 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 Soft or Annealed Copper Wire
- ASTM B172 Standard Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Copper Conductors
- CSA C22.2 No. 96 Portable Power Cables
- RoHS-2 (European Directive 2011/65/EU)

SAMPLE PRINT LEGEND:

{CSA} LL90458 XXX AWG 3/C TYPE G-GC PORTABLE POWER CABLE 90°C WET OR DRY 2000V SUN RES. FT1/FT5 (-40°C) --- 07-KA110009-MSHA

Table 1 – Weights and Measurements

Cond. Size	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Ground	Ground Check Size	Jacket Thickness	Approx. OD	Approx. Weight	Jacket Color
AWG/Kcmil	No.	No.	inch	mil	No. x AWG	AWG	mil	inch	lb/1000ft	
10	3	104	0.125	60	2 x 2 x 12	1 x 12	120	0.788	408	BK
8	3	71	0.145	60	2 x 2 x 10	1 x 10	145	0.980	655	BK
6	3	65	0.186	60	2 x 2 x 10	1 x 10	145	1.055	815	BK
4	3	112	0.235	60	2 x 2 x 8	1 x 10	130	1.172	1116	BK
2	3	168	0.290	60	2 x 2 x 7	1 x 10	165	1.289	1405	BK
1	3	224	0.300	80	2 x 2 x 6	1 x 8	145	1.455	1733	BK
1/0	3	259	0.379	80	2 x 2 x 5	1 x 8	185	1.660	2096	BK
2/0	3	324	0.400	80	2 x 2 x 4	1 x 8	165	1.690	2496	BK
3/0	3	418	0.480	80	2 x 2 x 3	1 x 8	205	1.830	3015	BK
4/0	3	532	0.530	80	2 x 2 x 2	1 x 8	175	1.970	3710	BK
250	3	608	0.605	95	2 x 2 x 1	1 x 8	260	2.284	4691	BK
350	3	855	0.670	95	2 x 2 x 1/0	1 x 8	330	2.681	6135	BK
500	3	1221	0.858	95	2 x 2 x 3/0	1 x 8	290	2.891	8028	BK

All dimensions are nominal and subject to normal manufacturing tolerances
◊ Cable marked with this symbol is a standard stock item
TBA stock codes are estimations only and actual product may vary. Please wait until a stock code is assigned to purchase connectors and/or fittings.

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
10	1.081	1.302	0.050		3.1	20	20	20
8	0.679	0.818	0.052	396	3.9	48	57	65
6	0.435	0.524	0.051	629	5.2	63	77	87
4	0.274	0.330	0.048	1001	5.8	84	101	114
2	0.172	0.207	0.045	1592	6.4	112	133	152
1	0.137	0.164	0.046	2008	7.2	131	156	177
1/0	0.109	0.131	0.044	2534	8.3	151	181	205
2/0	0.087	0.104	0.043	3194	8.4	174	208	237
3/0	0.069	0.083	0.042	4027	9.1	201	241	274
4/0	0.055	0.067	0.041	5078	9.8	232	277	316
250	0.047	0.057	0.041	6000	13.7	259	310	352
350	0.033	0.042	0.040	8400	16.0	318	381	433
500	0.023	0.031	0.039	12000	17.3	392	470	536

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

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