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)

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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
570103	10	3	104	0.125	60	2 x 12	1x12	120	0.788	408
560537	8	3	71	0.145	60	2 x 10	1x10	145	0.980	655
558168	6	3	65	0.186	60	2 x 10	1x10	145	1.055	815
558169	4	3	112	0.235	60	2 x 8	1x8	130	1.172	1116
558170	2	3	168	0.290	60	2 x 7	1x8	165	1.289	1405
570098	1	3	224	0.300	80	2 x 6	1x8	145	1.455	1733
558165	1/0	3	259	0.379	80	2 x 5	1x8	185	1.660	2096
558166	2/0	3	324	0.400	80	2 x 4	1x8	215	1.704	2519
560065	3/0	3	418	0.480	80	2 x 3	1x8	205	1.830	3015
558167	4/0	3	532	0.530	80	2 x 2	1x8	175	1.970	3710
570239	250	3	608	0.605	95	2 x 1	1x8	260	2.284	4691
559281	350	3	855	0.670	95	2 x 1/0	1x8	330	2.681	6135
570243	500	3	1221	0.858	95	2 x 3/0	1x8	290	2.891	8028

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
10	1.081	1.302	0.050		3.1	37	43	49
8	0.679	0.818	0.052		3.9	48	57	65
6	0.435	0.524	0.051		5.2	63	77	87
4	0.274	0.330	0.048		5.8	84	101	114
2	0.172	0.207	0.045		6.4	112	133	152
1	0.137	0.164	0.046		7.2	131	156	177
1/0	0.109	0.131	0.044		8.3	151	181	205
2/0	0.087	0.104	0.043		8.5	174	208	237
3/0	0.069	0.083	0.042		9.1	201	241	274
4/0	0.055	0.067	0.041		9.8	232	277	316
250	0.047	0.057	0.041		13.7	259	310	352
350	0.033	0.042	0.040		16.0	318	381	433
500	0.023	0.031	0.039		17.3	392	470	536

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