

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:

- Conductor:** Bare, soft drawn, annealed, flexible, rope-lay stranded copper per ASTM B3/B172
- Separator Tape:** Non-conducting tape applied between the conductor and insulation to facilitate stripping
- Insulation:** Ethylene Propylene Diene Monomer (EPDM). Color coded black, white, red
- Ground Check:** One insulated, bare, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B3/B172
- Ground Conductors:** Two insulated, bare, soft drawn, annealed, rope stranded, flexible lay copper per ASTM B3/B172
- Fillers:** Paper fillers applied as needed to round the cable core
- Reinforcement Binder:** Reinforcing binder with twine applied over the core
- 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 Standard Specification for 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{D}C - WET OR DRY 2000V OIL RESISTANT 60{D}C SUN RES. {UL}
P-136-35-MSHA - AIW{TM} E172226 MASTER-DESIGN --- c{UL} FT1/FT5 (-40{D}C)



Table 1 – Weights and Measurements

Stock Number	Cond. Size	Cond. Number	Cond. Strands	Diameter Over Conductor	Insul. Thickness	Diameter Over Insulation	Ground Size	Ground Strands	Ground Check Size	Ground Check Strands	Jacket Thickness	Approx. OD	Approx. Weight
	AWG/Kcmil	No.	No.	inch	mil	inch	AWG	No.	AWG	No.	mil	inch	lb/1000ft
570103	10	3	104	0.115	60	0.245	12	104	12	104	120	0.820	427
560537	8	3	71	0.148	60	0.3	10	104	10	104	140	0.95	610
558168	6	3	65	0.184	60	0.33	10	104	10	104	140	1.03	730
558169	4	3	112	0.235	60	0.39	8	41	10	104	130	1.11	970
558170	2	3	168	0.315	60	0.47	7	52	10	104	160	1.31	1340
570098	1	3	224	0.362	80	0.55	6	273	8	71	140	1.5	1770
558165	1/0	3	259	0.385	80	0.58	5	133	8	71	185	1.58	2070
558166	2/0	3	324	0.42	80	0.61	4	133	8	71	155	1.65	2450
560065	3/0	3	418	0.47	80	0.66	3	133	8	71	205	1.844	3156
558167	4/0	3	532	0.535	80	0.73	2	259	8	71	170	1.93	3630
570239	250	3	608	0.605	95	0.83	2	259	8	71	240	2.29	4460
559281	350	3	855	0.67	95	0.89	1/0	259	8	71	325	2.43	5810
570243	500	3	1221	0.858	95	1.08	2/0	324	8	71	270	2.89	7970

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

Stock Number	Cond. Size	Cond. Number	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	No.	Ω/1000ft	Ω/1000ft	MΩ/1000ft	inch	Amp	Amp	Amp
570103	10	3	1.61	2.01	0.038	6	20	20	20
560537	8	3	0.6530	0.816	0.038	6	48	57	65
558168	6	3	0.4190	0.524	0.035	6	63	77	87
558169	4	3	0.2630	0.329	0.033	7	84	101	114
558170	2	3	0.1660	0.208	0.031	8	112	133	152
570098	1	3	0.1310	0.164	0.031	9	131	156	177
558165	1/0	3	0.1050	0.131	0.031	9	151	181	205
558166	2/0	3	0.0834	0.104	0.030	10	174	208	237
560065	3/0	3	0.0662	0.083	0.030	11	201	241	274
558167	4/0	3	0.0525	0.066	0.029	12	232	277	316
570239	250	3	0.0448	0.056	0.029	14	259	310	352
559281	350	3	0.0320	0.040	0.028	15	318	381	433
570243	500	3	0.0224	0.028	0.027	17	392	470	536

† Ampacity based on NEC 400.5(A)(2) and is for a single isolated cable in air operated at an ambient temperature of 30°C connected to utilization equipment so that only three conductors are current-carrying.

