

## ROME PORTABLE POWER CABLE

### Two- and Three-Conductor Round - Type G, 2000 Volts

<p><b>APPLICATION:</b> Heavy duty portable power cable for use with mobile mining equipment, such as continuous miners, cutting or loading machines, conveyors, drills or pumps. For use in circuits not exceeding 2000 volts, maximum conductor temperature of 90°C. Two conductor for single phase ac or dc where grounding is required. Three conductor for three phase ac where grounding is required.</p> <p><b>STANDARD:</b> Conforms to ICEA S-75-381 (NEMA WC58).</p> <p><b>CONSTRUCTION:</b> Two or three insulated conductors each consisting of flexible stranded annealed tinned copper, color coded Rome-EPR ethylene-propylene rubber insulation. Two or three insulated conductors cabled together with one green covered uninsulated grounding conductor in each valley. Overall two layer reinforced Neoprene jacket vulcanized in a metal mold. Embossed marking molded as an integral part of the jacket, including the inscription P-105-MSHA, indicating full compliance with Federal and State of Pennsylvania Safety Codes.</p>										
Size AWG or kcmil	No. of Strands	Insulation Thickness Mils	Two Conductor				Three Conductor			
			Grounding Cond. Size AWG	Nominal Diameter Inches	Approx. Net Wt. Lb./1000 Ft.	Ampacity * 40°C Ambient	Grounding Cond. Size AWG	Nominal Diameter Inches	Approx. Net Wt. Lb./1000 Ft.	Ampacity * 40°C Ambient
8	133	60	10	.81	540	72	10	.91	590	59
6	168	60	10	.93	640	95	10	1.01	760	79
4	259	60	8	1.08	890	127	8	1.17	1070	104
3	329	60	6	1.17	1060	145	8	1.24	1280	120
2	259	60	6	1.27	1290	167	8	1.34	1530	138
1	329	80	5	1.44	1650	191	7	1.51	1890	161
1/0	259	80	4	1.52	2180	217	6	1.65	2320	186
2/0	329	80	3	1.65	2320	250	5	1.75	2700	215
3/0	413	80	2	1.77	2720	286	4	1.89	3270	249
4/0	532	80	1	1.92	3300	328	3	2.04	3970	287
250	608	95	1/0	2.10	3730	363	2	2.39	5080	320
300	741	95	1/0	2.22	4410	400	1	2.56	6080	357
350	855	95	2/0	2.36	5280	436	1	2.68	7140	394
400	988	95	3/0	2.47	5690	470	1/0	2.82	7780	430
500	1221	95	4/0	2.70	6740	524	2/0	3.03	9065	487

\* AMPACITY based upon continuous duty at 90°C conductor temperature, 40°C ambient temperature, cable in free air. For other ambient temperatures and when cables are used with one or more layers wound on a reel, use correction factors shown in Appendix H, ICEA S-75-381.

Information on this sheet subject to change without notice.

## Specification

### ROME PORTABLE POWER CABLE

#### Two- and Three-Conductor Round - Type G, 2000 Volts

##### **1. SCOPE**

- 1.1 This specification describes two- or three-conductor round Type G portable power cable with Rome-EPR (ethylene-propylene rubber) insulation for use in circuits not exceeding 2000 volts at a maximum conductor temperature of 90°C. Cables are intended for use on equipment where a heavy power load is required, such as mining equipment, portable generator leads, welders and power supplies on barges.

##### **2. STANDARDS**

- 2.1 The following standard shall form a part of this specification:
  - 2.1.1 ICEA Pub. No. S-75-381 for Portable and Power Feeder Cables for Use in Mines and Similar Applications (NEMA WC58).

##### **3. CONDUCTORS**

- 3.1 Minimum Class H stranded, annealed, tinned copper per Part 2 of ICEA.

##### **4. INSULATION**

- 4.1 A homogeneous wall of Rome-EPR insulation shall be extruded over the conductor. The average thickness of the insulation shall be as specified in Table 3-8 for two-conductor and Table 3-9 for three-conductor of ICEA. The minimum thickness shall be not less than 90 percent of the specified average values.
- 4.2 Physical and electrical properties of the insulation shall be in accordance with Par. 3.15 of ICEA.

##### **5. CIRCUIT IDENTIFICATION**

- 5.1 Colored insulation meeting the requirements of Par.3.18 of ICEA.

##### **6. GROUNDING CONDUCTORS**

- 6.1 The grounding conductors shall be annealed tinned copper of not less than the size and number of wires in Table 3-24 of ICEA for the corresponding power conductor sizes.
- 6.2 Each grounding conductor shall have a green covering.

##### **7. ASSEMBLY**

- 7.1 The conductors shall be twisted together with a left-hand lay meeting the requirements of Table 3-5 of ICEA. Sizes 250 and larger shall have fillers and a binder tape applied over the assembly.

##### **8. JACKET**

- 8.1 A two-layer reinforced thermosetting jacket shall be extruded over the assembly in accordance with Par. 3.21 of ICEA. For sizes 4/0 and smaller, the first layer of jacket shall be extruded into the valleys.
- 8.2 The jacket shall be an extra-heavy duty Neoprene meeting the requirements of Table 3-3 of ICEA.

##### **9. COMPLETED CABLE**

- 9.1 The nominal outside diameter shall be in accordance with Table 3-8 for two-conductor or Table 3-9 for three-conductor of ICEA.
- 9.2 The tolerances shall be within the requirements of Par. 3.22.2 of ICEA.

##### **10. SURFACE MARKING**

- 10.1 All cable shall have an embossed print legend showing manufacturer, cable type, size, voltage, MSHA and State of Pennsylvania approval number.

##### **11. TESTS**

- 11.1 Cable shall be tested in accordance with ICEA.