

## ROME PORTABLE POWER CABLE

### Flat Twin - Type W, 2000 Volts

<p><b>APPLICATION:</b> For portable trailing cable on dc shuttle cars and other mobile mining equipment, such as cutting or loading machines and drills, and where the cable must withstand constant flexing and reeling. For use in circuits not exceeding 2000 volts, maximum conductor temperature of 90°C.</p> <p><b>STANDARDS:</b> Conforms to ICEA S-75-381 (NEMA WC58).</p> <p><b>CONSTRUCTION:</b> Two insulated conductors, each consisting of flexible stranded annealed coated copper, color coded ethylene-propylene rubber insulation, reinforcing braid. Two conductors assembled parallel, with Neoprene jacket compound between conductors as an integral part of the overall jacket. Overall 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	No. of Strands	Insulation Thickness Mils	Nominal Diameter Inches	Approx. Net Weight Lb./1000 Ft.	Ampacity*		
					20°C Ambient	40°C Ambient	
8	133	60	.51 x .84	340	85	72	
6	168	60	.56 x .93	425	112	95	
4	259	60	.61 x 1.05	565	150	127	
3	329	60	.68 x 1.14	690	171	145	
2	259	60	.73 x 1.24	830	197	167	
1	329	80	.81 x 1.40	1050	225	191	
1/0	259	80	.93 x 1.51	1290	256	217	
2/0	329	80	.99 x 1.51	1570	295	250	
3/0	418	80	1.03 x 1.77	1730	337	286	
4/0	532	80	1.10 x 1.89	2200	387	328	

\*AMPACITY based upon continuous duty at 90°C conductor temperature, ambient temperature as indicated, 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

#### Flat Twin - Type W, 2000 Volts

#### 1. SCOPE

- 1.1 This specification describes two-conductor flat Type W 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 dc shuttle cars and other mobile mining equipment.

#### 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 coated 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 specified in Table 3-7 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 with one conductor black and one conductor white meeting the requirements of Par. 3.18 of ICEA.

#### 6. REINFORCING BRAID

- 6.1 Each conductor shall have an open braid to facilitate adhesion between the insulated conductor and jacket.

#### 7. JACKET

- 7.1 Two insulated conductors are laid parallel and a thermosetting jacket shall be extruded over the assembly in accordance with Par. 3.21 of ICEA.
- 7.2 The jacket shall be an extra-heavy duty Neoprene meeting the requirements of Table 3-3 of ICEA.

#### 8. COMPLETED CABLE

- 8.1 The nominal outside diameter shall be in accordance with Table 3-7 of ICEA.
- 8.2 The tolerances shall be within the requirements of Par. 3.22.2 of ICEA.

#### 9. SURFACE MARKING

- 9.1 All cable shall have an embossed print legend showing manufacturer, cable type, size, voltage, and Mine Safety and Health Administration (MSHA) Approval Number.

#### 10. TESTS

- 10.1 Cable shall be tested in accordance with ICEA.