

## ROME WELDING CABLE 90°C, 600 VOLTS

### Class K (30 AWG) Stranding, EPR Insulation - Jacket

<p><b>APPLICATION:</b> As flexible welding leads connecting the electrode holder to the welding machine in the secondary circuit of electric arc welding systems.</p> <p><b>FEATURES:</b></p> <ol style="list-style-type: none"> <li>1. Class K 30 AWG flexible copper conductors.</li> <li>2. Conforms to ICEA Welding Cable requirements.</li> <li>3. Rated 600 volts.</li> <li>4. Temperature ratings: +90°C , -40°C.</li> <li>5. Passes VW-1 flame test.</li> <li>6. Resistant to chemicals, oils, abrasion, heat and flame.</li> </ol> <p><b>CONSTRUCTION:</b> Flexible Class K rope strand soft bare copper conductor, paper separator, special EPR insulation-jacket, surface printed.</p>			<p>The diagram shows a cross-section of the welding cable. It consists of an outer EPR Insulation-Jacket, a middle layer of Separator Tape, and an inner Flexible Bare Copper Conductor. The conductor is made of multiple strands of soft bare copper.</p>					
Size		No. of Strands	Conductor O.D.		Cable O.D.		Weight	
AWG or kcmil	mm <sup>2</sup>		In.	mm	In.	mm	lb./kft.	kg/km
6	13	259	.202	5.13	.370	9.40	124	185
4	21	420	.257	6.53	.420	10.7	180	268
3	27	532	.293	7.44	.450	11.4	219	326
2	34	665	.328	8.33	.490	12.5	268	399
1	42	836	.367	9.32	.525	13.3	319	475
1/0	54	1045	.411	10.4	.585	14.9	415	618
2/0	67	1330	.463	11.8	.640	16.3	508	756
3/0	85	1672	.519	13.2	.700	17.8	628	935
4/0	107	2107	.630	16.0	.810	20.7	775	1153
250	127	2499	.680	17.3	.880	22.4	934	1390
350	177	3458	.810	20.6	1.01	25.6	1267	1886
500	253	5054	.980	24.9	1.18	30.0	1801	2680

Information on this sheet subject to change without notice.

## Specification

### ROME WELDING CABLE 90°C, 600 VOLTS

#### Class K (30 AWG) Stranding, EPR Insulation - Jacket

#### 1. SCOPE

- 1.1 This specification describes a single conductor portable electrode holder or trailing cable with an EPR insulation - jacket intended for use in the secondary circuit of portable and stationary arc welding machines. Cable is suitable for use at an operating temperature of 90°C and for low temperature applications down to minus 40. The cable is 600 volt rated in accordance with ICEA standards.

#### 2. STANDARDS

- 2.1 The following standard shall form a part of this specification to the extent specified herein:  
2.1.1 ICEA S-75-381/NEMA WC58 for Portable and Power Feeder Cables for use in Mines and Similar Applications.

#### 3. CONDUCTORS

- 3.1 Conductors shall be Class K stranded bare soft copper per Part 2 of ICEA.

#### 4. SEPARATOR

- 4.1 A suitable separator tape shall be applied over the conductor.

#### 5. INSULATION - JACKET

- 5.1 An integral insulation - jacket of EPR compound shall be extruded over the conductor. The insulation - jacket compound when tested in accordance with applicable test procedures in Part 6 of the ICEA standards, shall demonstrate suitability for a 90°C rated 600 volt cable having outstanding physicals, agings, tear strength, oil and moisture resistance and flame retardant properties.

#### 6. IDENTIFICATION

- 6.1 Cable shall be surface printed with a legend indicating "Rome Cable Size Welding Cable 90C 600 Volts".

#### 7. TESTS

- 7.1 Cable shall be tested in accordance with the requirements of this specification at a test frequency determined by the Rome Cable Quality Department.