



ARC-WELDING CABLE EP

UL 1581 -

Zero Halogen EP Insulated Welding Cable 105°C

APPLICATIONS

- Secondary voltage resistant welding leads
- Leads for motors, generators, batteries
- Other industrial applications

CONSTRUCTION

Conductor	Flexible stranded bare copper per ASTM B 172 Class K				
Separator	Paper separator between conductor and insulation				
Insulation	Ethylene-propylene rubber (EPR). Class 45, 105°C, Table 50.55 of UL 1581				
Color	Black or other color				

Features

Excellent flexibility	Heat resistant at 105°C			
Ozone, sun, weather resistant	Oil resistant			
Rated and flexible at -40°C				





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Standard leng	th cable packing	10	000ft on 0	drums. (Other forr	ns of pa	icking and deli	very are a	available on re	quest
Part Number	Size	Conductor	Nominal Insulation Thickness		Nominal O.D.		Approx. Weight		Maximum Direct Current Resistance at 20°C	Ampacity(1)
	AWG/ MCM	No./AWG	Inches	mm	Inches	mm	lbs/1000ft	kg/km	Ω/km	А
WC6	6AWG	253/30	0.06	1.52	0.315	8.0	110	163	1.38	133
WC4	4AWG	403/30	0.06	1.52	0.358	9.1	161	240	0.865	179
WC2	2AWG	636/30	0.06	1.52	0.422	10.7	242	360	0.549	237
WC1	1AWG	798/30	0.08	2.03	0.492	12.5	314	468	0.436	284
WC1/0	1/0AWG	1016/30	0.08	2.03	0.547	13.9	392	583	0.345	327
WC2/0	2/0AWG	1261/30	0.08	2.03	0.591	15.0	476	708	0.276	377
WC3/0	3/0AWG	1590 /30	0.08	2.03	0.657	16.7	589	877	0.219	449
WC4/0	4/0AWG	2007/30	0.08	2.03	0.705	17.9	727	1082	0.173	514
WC250	250MCM	2399/30	0.095	2.41	0.807	20.5	914	1361	0.147	577
WC350	350MCM	3327/30	0.095	2.41	0.894	22.7	1189	1770	0.106	719
WC500	500MCM	4746/30	0.095	2.41	1.122	28.5	1733	2579	0.0743	908
WC6-RED	6AWG	253/30	0.06	1.52	0.315	8.0	110	163	1.38	133
WC4-RED	4AWG	403/30	0.06	1.52	0.358	9.1	161	240	0.865	179
WC2-RED	2AWG	636/30	0.06	1.52	0.422	10.7	242	360	0.549	237
WC1-RED	1AWG	798/30	0.08	2.03	0.492	12.5	314	468	0.436	284
WC1/0-RED	1/0AWG	1016/30	0.08	2.03	0.547	13.9	392	583	0.345	327
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WC3/0-RED	3/0AWG	1590/30	0.08	2.03	0.657	16.7	589	877	0.219	449
WC4/0-RED	4/0AWG	2007/30	0.08	2.03	0.705	17.9	727	1082	0.173	514

(1) Ampacity – Free air measured. Based on continuous duty at 105°C conductor temperature and ambient temperature of 40°C.
*Not covered by 1523058 certificate



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Special Factory Options

Conductors:	Class M (34 AWG) stranding		
Jacket:	Polychloroprene		
CSA:	1523058 (LR 103932) for 8AWG÷300kcmil		

Standard Print Legend

TF CABLE (SIZE) ARC WELDING CABLE 600 V OIL RESISTANT -40°C +105°C

WELDING CABLES AMPACITIES SINGLE CONDUCTOR Required Cables Sizes: For Welding Cables Application

AMPS	Length in	feet for total circ	cuit for seconda	ry voltages only	(do not use this	table for 600 Vo	It in-line applications)		
	100′	150′	200′	250′	300′	350′	400′		
100	4	4	2	2	1	1/0	1/0		
150	4	2	1	1/0	2/0	3/0	3/0		
200	2	1	1/0	2/0	3/0	4/0	4/0		
250	1	1/0	2/0	3/0	4/0				
300	1/0	2/0	3/0	4/0					
350	1/0	3/0	4/0						
400	2/0	3/0							
450	2/0	4/0							
500	3/0	4/0							
550	3/0	4/0							
600	4/0		Required Cable Sizes Shown In AWG Numbers						
									

The total circuit length includes both welding and ground leads (based on 4 volt drop), 60% duty cycle. These values for current-carrying capacity are based on a copper temperature of 60° C (140° F), an ambient temperature of 40° C (104° F) and yield load factors of from approximately 32% for the No.2AWG cable to approximately 23% for the No. 3/0AWG cable, and higher for the smaller sizes. The sizes of cables generally used range from No.2AWG to No.3/0AWG. In actual service, the load factor may be much higher than indicated without overheating the cable as the ambient temperature will generally be substantially lower than 40° C.

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