



# ARC-WELDING CABLE EP

## 600 V

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 length cable packing

1000ft on drums. Other forms of packing and delivery are available on request

Part Number	Size	Conductor strand	Nominal Insulation Thickness		Nominal O.D.		Approx. Weight		Maximum Direct Current Resistance at 20°C	Ampacity(1)
			Inches	mm	Inches	mm	lbs/1000ft	kg/km		
WC8	8AWG	161/30	0.06	1.52	0.291	7.4	79	117	2.18	100
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

(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

## 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

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

AMPS	Length in feet for total circuit for secondary voltages only (do not use this table for 600 Volt 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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