



ARC-WELDING EP

600 V

In line with 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

Conductors	Flexible stranded bare copper per ASTM B 172 Class K.
Separator	Paper tape separator between conductor and insulation
Insulation	Ethylene-propylene rubber (EPR). Class 45 105 OC , Table 50.55 of UL 1581
Color	Black 6AWG-500 MCM. Red 6AWG-4/0AWG

Features

Excellent flexibility. Ozone, sun, weather resistant. Rated and flexible at -50°C. Heat resistant at 105°C. Oil resistant

Part Number	Size	Conductor strand	Nominal insulation thickness		Overall diameter		Weight		Max. Direct Current Resistance 20°C Ω/km	Ampacity(1) A
	AWG		Inches	mm	Inches	mm	Lbs./1000ft.	kg/km		
WC6	6	253/30	0.06	1.52	0.315	8.0	114	169	1.38	133
WC4	4	403/30	0.06	1.52	0.358	9.1	168	250	0.865	179
WC2	2	636/30	0.06	1.52	0.422	10.7	249	370	0.549	237
WC1	1	798/30	0.08	2.03	0.492	12.5	299	445	0.436	284
WC1/0	1/0	1016/30	0.08	2.03	0.547	13.9	387	576	0.345	327
WC2/0	2/0	1261/30	0.08	2.03	0.591	15.0	470	699	0.276	377
WC3/0	3/0	1590/30	0.08	2.03	0.657	16.7	588	875	0.219	449
WC4/0	4/0	2007/30	0.08	2.03	0.705	17.9	722	1075	0.173	514
WC250	250	2399/30	0.095	2.41	0.807	20.5	890	1324	0.147	577
WC350	350	3327/30	0.095	2.41	0.894	22.7	1193	1775	0.106	719



Part Number	Size	Conductor strand	Nominal insulation thickness		Overall diameter		Weight		Max. Direct Current Resistance	Ampacity(1)
			Inches	mm	Inches	mm	Lbs./1000ft.	kg/km	20°C Ω/km	A
WC500	500	4746/30	0.095	2.41	1.122	28.5	1724	2565	0.0743	908
WC6-RED	6 AWG	253/30	0.060	1,52	0.319	8.1	115	171	1.38	133
WC4-RED	4 AWG	403/30	0.060	1,52	0.366	9.3	169	252	0.865	179
WC2-RED	2 AWG	636/30	0.060	1,52	0.429	10.9	255	379	0.549	237
WC1-RED	1 AWG	798/30	0.080	2,03	0.508	12.9	303	451	0.436	284
WC1/0-RED	1/0 AWG	1016/30	0.080	2,03	0.555	14.1	396	589	0.345	327
WC2/0-RED	2/0 AWG	1261/30	0.080	2,03	0.598	15.2	482	719	0.276	377
WC3/0-RED	3/0 AWG	1590/30	0.080	2,03	0.673	17.1	595	887	0.219	449
WC4/0-RED	4/0 AWG	2007/30	0.080	2,03	0.716	18.2	734	1092	0.173	514

(1) Ampacity –Free air measured. Based on continuous duty at 90°C conductor temperature

Standard print legend:

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

Special factory option

Conductors	Class M (34 AWG) stranding
Jacket:	Neoprene
CSA:	1101275-FT2 ;Oil Resistant (Optional)

WELDING CABLES AMPACITIES SINGLE CONDUCTOR

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.