

Carolprene® 105°C Welding Cable

105°C, 600 Volt, MSHA Approved



Product Construction:

Conductors:

- 6 AWG through 4/0 AWG fully annealed stranded bare copper

Jacket:

- Carolprene® 105°C, black
- Temperature range: -50°C to +105°C

Jacket Marking:

- CAROLPRENE (SIZE) AWG 105°C WELDING CABLE 600 VOLT P-07-KA100015-MSHA MADE IN USA (TRU-MARK SEQUENTIAL FOOTAGE)

Applications:

- Secondary voltage resistance welding leads in heavy duty or mining applications
- Power supply applications not exceeding 600 volts AC
- Sizes 1/0 and larger for permanent wiring in conduit or tray of 600 V power supplies, hoists, cranes or other applications where flexible power leads must be installed in conduit, raceways or trays

Features:

- Sunlight-resistant
- Designed to withstand severe environmental conditions
- Withstands exposure to oil, acids, alkalies, heat, flame, moisture and chemicals
- Meets or exceeds flame test requirements of MSHA
- TRU-Mark® marking system and indent printed MSHA number

Industry Approvals:

- MSHA Approved
- RoHS Compliant

Packaging:

- 250' (76.2 m), 1000' (304.8 m) reels
- Other put-ups available on special order

Suggested Ampacities For 600 Volt In-Line Applications

AWG	AMPERES	AWG	AMPERES
4/0	405	1	220
3/0	350	2	190
2/0	300	4	140
1/0	260	6	105

Ampacities for portable cable in accordance with NEC Table 400.5(A)(2). May not be suitable for all installations per National Electrical Code®.



CAROLPRENE® 105°C WELDING CABLE – 600 VOLT – 30 AWG STRANDING

CATALOG NUMBER	AWG SIZE	NOMINAL STRAND	NOMINAL O.D.		APPROX. NET WT. LBS/M ^(S)	STD. CTN.
			INCHES	mm		
01758*	6	259/30	0.420	10.67	140	1000'
01757*	4	416/30	0.475	12.07	200	1000'
01756*	2	655/30	0.520	13.21	280	1000'
01755*	1	827/30	0.575	14.61	350	1000'
01754*	1/0	1042/30	0.600	15.24	415	1000'
01753*	2/0	1316/30	0.645	16.38	510	1000'
01752*	3/0	1660/30	0.715	18.16	620	1000'
01751*	4/0	2062/30	0.765	19.43	760	1000'

* Non-stock item; minimum quantity required.
 (S) Actual shipping weight may vary.

WELDING CABLE AMPACITIES SINGLE CONDUCTOR

Required Cable Sizes: For Welding Cable 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 from approximately 32% for the No. 2 AWG cable to approximately 23% for the No. 3/0 AWG cable, and higher for the smaller sizes. The sizes of cables generally used range from No. 2 AWG to No. 3/0 AWG. 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.