



ARC STAR

WELDING CABLES

ARC Star™ offers a variety of welding cable assemblies in sizes 4, 2, 1, 1/0, 2/0, 3/0, and 4/0. We have leads, grounds, and extensions in any length and configuration. We also offer cut cable in multiple lengths without ends. We can supply ground clamps, electrode holders, lugs, and cable connectors with our ARC Star™ brands on the ends or OEM's such as, Tweco, or for any of the assemblies you may need.

Features

- Premium USA made welding cable
- High strength tear-resistant flexible EPDM jacket
- Excellent resistance to cuts, abrasion, slag and impact
- Superior flexibility, even at cold temperatures to -50°C
- Resistant to heat, flame, solvents, water, grease, oil, weather and ozone
- Special stranded conductor for added flexibility and easy handling
- Sequentially marked; Class K stranding
- Available in custom cut sections fully assembled with ends
- Boxed cable kits optimized for shipping and display
- Private labeling available. MOQs and lead times will apply
- Only the highest quality cable accessories are used in our custom cable kits
- RoHS Compliant
- Lead-free
- Silicone-free
- Made in the USA

Applications

- Used as power feed leads from the welding power source unit to the electrodes for arc welders; NEC article 630 electric welders
- Highly flexible lead cable used on battery cable, and temporary or permanent lead cables
- For use in all welding applications requiring leads, grounds and stingers/whips.
- Manufacturing - Architectural and Structural Metals, Mining, Agricultural, Motor Vehicles, Aerospace, Shipbuilding
- Construction - Residential, Commercial, Bridges, Dams, Utilities
- Or any other industry where welders may work

Technical Specifications

Spark Tested for 600V

Voltage rating procedure incorporating the IPCEA-S-19-81 D.C. spark test.

AWG	Voltage (KV)
6 to 2	22.5
1 to 4/0	27.0

Separators: Paper separator for ease of strip ability

Colours: Black, Blue, Red, Green, Orange, Pink, Yellow, White
Other colors available upon request

Packaging:

- Standard lengths: 250' and 500' reels; also available in 1,000' and 100 m reels
- Coiled, boxed, and shrink-wrapped package options for 25, 50, and 100 ft. lengths
- Custom lengths available upon request

Insulation: EDPM

Conductor: Annealed rope-stranded Class M, bare copper as per ASTM B3.34
AWG; Meets CMA requirements of ASTM B172

Operating Temperature Range: - 50°C to + 105°C (- 58°F to + 221°F)
ASTM D-4313 compliant

Usage Instructions

1. Determine cable size and length for application
2. Determine proper connector for cable
3. Strip and properly prepare cable tips
4. Select proper installing die tool with correct die in proper position on connector and activate tool or select proper installing dieless tool.
5. Crimp as directed by the manufacturer's instructions.
6. Properly secure connectors

WARNING: This product contains or produces a chemical known to the State of California to cause cancer and birth defects (or other reproductive harm) (California Health and Safety Code Section 25249.5 et seq.) for more information visit <https://www.p65warnings.ca.gov>

AVAILABLE IN BLACK OR ASSORTED COLOURS AND REEL SIZE

Item#	Diameter	Colour	Ft/Reel
PRE4 0	#4/0	Black	250 & 500
PRE30	#3/0	Black	250 & 500
PRE20	#2/0	Black	250 & 500
PRE10	#1/0	Black	250 & 500
PRE1	#1	Black	250 & 500
PRE2	#2	Black	250 & 500
PRE4	#4	Black	250 & 500

CABLE CROSS SECTION:



SEQUENTIALLY MARKED CABLE

USA 489 FT.

MEASUREMENTS ARE PRINTED DIRECTLY ON THE CABLE

Item#	Diameter	Colour	Ft/Reel
PRE200250	#2/0	Orange	250
PRE100250	#1/0	Orange	250
PRE10250	#1	Orange	250
PRE20250	#2	Orange	250

Item#	Diameter	Colour	Ft/Reel
PRE2R	#2	Red	500
PRE1R	#1	Red	250 & 500
PRE10R	#1/0	Red	500
PRE10Y	#1/0	Yellow	500
PRE10P	#1/0	Pink	500
PRE10G	#1/0	Green	500
PRE10BLUE	#1/0	Blue	500
PRE20R	#2/0	Red	250 & 500
PRE20Y	#2/0	Yellow	500
PRE20P	#2/0	Pink	500
PRE20G	#2/0	Green	500
PRE20BLUE	#2/0	Blue	500

ALL ARC STAR CABLE CONFORMS TO AWG CABLE SPECIFICATIONS

AWG	Diameter (in)	Diameter (mm)	Area(kcmil)	Area (mm ²)	Resistance(Ω /1000ft,Cu)	Ampacity (60°C/75°C)	Insulation Thickness	Voltage (KV)
4/0	0.4600	11.684	211.6	107.2	0.00490	195 A / 230 A	0.115	27
3/0	0.4096	10.405	167.8	85.0	0.0618	165 A / 200 A	0.105	27
2/0	0.3648	9.266	133.1	67.4	0.0779	145 A / 175 A	0.104	27
1/0	0.3249	8.251	105.6	53.5	0.0983	125 A / 150 A	0.105	27
1	0.2893	7.348	83.7	42.4	0.1239	110 A / 130 A	0.005	27
2	0.2576	6.544	66.4	33.6	0.1563	95 A / 115 A	0.003	22.5
3	0.2294	5.827	52.6	26.7	0.1970	85 A / 100 A	---	---
4	0.2043	5.189	41.7	21.2	0.2485	70 A / 85 A	0.003	22.5
5	0.1819	4.621	33.1	16.8	0.3133	---	---	---
6	0.162	4.115	26.3	13.3	0.3951	55 A / 65 A	0.003	22.5

SUGGESTED AMPACITY FOR WELDING CABLE DISTANCE MEASURED IN FEET*

AMPS	50'	75'	100'	125'	150'	175'	200'	225'	250'	275'	300'	325'	350'
100	#4	#2	#2	#1	#1	1/0	2/0	2/0	3/0	3/0	3/0	4/0	4/0
150	#2	#2	#1	1/0	2/0	3/0	3/0	4/0	4/0	250 _{mcm}	250 _{mcm}	250 _{mcm}	350 _{mcm}
200	#2	#1	2/0	3/0	3/0	4/0	4/0	250 _{mcm}	350 _{mcm}	350 _{mcm}	350 _{mcm}	350 _{mcm}	
250	#1	1/0	3/0	4/0	4/0	250 _{mcm}	350 _{mcm}	350 _{mcm}	350 _{mcm}				
300	#1	2/0	3/0	4/0	250 _{mcm}	350 _{mcm}	350 _{mcm}	350 _{mcm}					
350	1/0	3/0	4/0	250 _{mcm}	350 _{mcm}	350 _{mcm}							
400	2/0	3/0	250 _{mcm}	350 _{mcm}	350 _{mcm}								
450	2/0	4/0	250 _{mcm}	350 _{mcm}	350 _{mcm}								
500	3/0	4/0	350 _{mcm}	350 _{mcm}									
550	4/0	250 _{mcm}	350 _{mcm}										
600	4/0	250 _{mcm}	350 _{mcm}										

This table is for reference only. There are variables in welding applications, therefore it is recommended the user consult an electrical engineer for a particular welding application.

*Distance from power source (per lead)