



Applications

Direct’s Flex-A-Prene® is the industry’s most recognized brand name of industrial welding cable. Highly durable and versatile, the cable is designed for use in stingers/whips, leads, and ground clamp welding assemblies as well as battery applications such as chargers and wire harnesses. Flex-A-Prene is SAE J1127 (#6 to 250 MCM) and RoHS compliant and manufactured in the USA.

Construction

- Rope-lay, bunch-stranded 30 AWG SAE 99.99% oxygen-free electronic (OFE) high-purity copper conductor
- Wrapped paper separator
- Jacketed with proprietary LSHF EPDM compound

[See reverse for construction details and technical specifications](#)

FLEX-A-PRENE INDUSTRIAL WELDING CABLE						
AWG SIZE¹	# COND STRAND	NOMINAL INSULATION THICKNESS		NOMINAL OUTSIDE DIAMETER (+JACKET)		APPROX LBS PER 1K'
	/ DIAM (OR) GA	INCHES	MM	INCHES	MM	
#8	182 / 30	.060	1.52	.270	6.85	80
#6	260 / 30	.060	1.52	.305	7.74	110
#4	364 / 30	.065	1.65	.333	8.45	145
#2	624 / 30	.065	1.65	.415	10.54	235
#1	767 / 30	.065	1.65	.443	11.25	282
1 / 0	975 / 30	.065	1.65	.488	12.39	351
2 / 0	1,196 / 30	.065	1.65	.526	13.36	423
3 / 0	1,547 / 30	.078	1.98	.609	15.46	553
4 / 0	1,950 / 30	.078	1.98	.674	17.11	685
250 MCM	2,432 / 30	.078	1.98	.764	19.40	846
350 MCM	3,330 / 30	.095	2.41	.908	23.06	1,172
500 MCM	4,847 / 30	.095	2.41	1.054	26.77	1,663

¹SAE J1127 standard does not apply to #8 AWG, 350 MCM, and 500 MCM.

All data and specifications contained herein are current and subject to change without notification. All values are nominal and/or approximate and may vary. All styles and standards dependent on conductor size.

FLEX-A-PRENE® INDUSTRIAL WELDING CABLE

TECHNICAL SPECIFICATIONS

Construction

Conductors	<ul style="list-style-type: none">Rope-lay, bunch-stranded 30 AWG SAE 99.99% oxygen-free electronic (OFE) high-purity copper conductor
Voltage Rating	<ul style="list-style-type: none">600 V
Insulation & Jacket	<ul style="list-style-type: none">Wrapped paper separatorJacketed with proprietary low-smoke, halogen-free EPDM compoundResistant to abrasion, battery acid, diesel fuel, engine coolant, engine oil, ethanol, extreme temperatures, flame, gasoline, power-steering fluid, and transmission fluid
Temperature Range	<ul style="list-style-type: none">-50°C (-58°F) to 105°C (221°F)

Standards & Certifications

Industry Approvals	<ul style="list-style-type: none">SAE J1127 Compliant (#6 to 250 MCM)NEC Article 630 (Electric Welders)Suitable for battery use per UL 558 and 583REACH, RoHS, CMRT, and Prop 65 Compliant
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Standard Stock

Available Lengths	<ul style="list-style-type: none">Coils/Assemblies at 25', 50', and 100'Reels at 250', 500', 1,000', 2,500' and 5,000'Custom lengths available upon request
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Customization

Jacket Colors	<ul style="list-style-type: none">● Black (standard) ● Blue ● Green ● Red ● Yellow ● OrangeCustom colors available upon request
Sample Print Legend	<ul style="list-style-type: none">{AWG SIZE} FLEX-A-PRENE WELDING CABLE 600V -50°C +105°C * MADE IN USA * RoHS * SAE J1127
Marking Options	<ul style="list-style-type: none">Quick Print®; Surface Print; Indent Print; Logo/Icon; Sequential Marking



WELDING CABLE

SIZES & SUGGESTED AMPACITY



WELDING CABLE SIZES						
#4	#2	#1	1 / 0	2 / 0	3 / 0	4 / 0

NOTE 1: Welding cable sizes are drawn to scale.

SUGGESTED IN-LINE AMPACITY FOR WELDING CABLE													
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										

NOTE 2: For reference only. Due to variables within welding applications, it is recommended the user consult an electrical engineer for a particular welding application.
NOTE 3: Distance from power source (per lead).

Customization

- Jacket Colors
 - Black (standard) ● Blue ● Green ● Red ● Yellow ● Orange
 - Custom colors available upon request
- Marking Options
 - Quick Print®; Surface Print; Indent Print; Logo/Icon; Sequential Marking