



# welding

**PRODUCTS**





### **Welding Cable Applications**

- NEC Article 630 electric welders
- Electrode holder & clamp connections to arc welder, bus, welding box or transformer
- Permanent or temporary lighting
- Battery chargers & battery cables
- Hoists, cranes & power supply

**Coleman Cable Inc.** is a worldwide leader in the development, design, manufacture, marketing and distribution of wire and cable products. A broad range of products, innovative solutions, recognized brands, and a solid service platform are the foundation that Coleman Cable's dedicated professional people build upon to create customer value. These characteristics, combined with strategic acquisitions, such as Copperfield, TRC and Watteredge, establish and strengthen Coleman Cable's leadership position as the premier US-based manufacturer of electrical, electronic and assembled wire and cable products. Coleman Cable utilizes more than 2 million square feet of strategically located, state-of-the-art, ISO-certified manufacturing and distribution facilities throughout the United States.

**Coleman Cable's Royal/Excelene®** brand of welding cable covers a wide variety of performance requirements for the industrial and construction markets for welding, power supply and battery power applications. Our welding cables are available in a variety of constructions, all backed by widely recognized brand names, such as Royal®/Excelene® (EPR), Seoprene® (TPE) and Super Excelene® (CPE). CCI's advanced manufacturing processes, quality controls and vertically integrated copper fabrication facilities enable us to be a leading manufacturer of top-quality welding cable products. Royal® industrial cords and cables have been a leading choice for job sites and industrial plants for over five decades. These products, produced in the USA, continue to meet the needs of our customers for a myriad of applications. From the factory floor to mining and heavy-duty construction to the harsh demands of process industries and drilling rigs, Royal® brand is your best choice. Royal® products are manufactured with advanced compounds — providing exceptional performance and durability.



# Cable Size Matters

Proper sizing of welding cable for welding equipment is **ESSENTIAL** for machine safety, machine longevity, and quality welds. Undersized copper welding cables can be the hidden safety hazard that costs less up-front but substantially adds more cost and needless safety risks in the long-term. Make sure that all welding cable meets a publicized specification for gauge sizing. If not, undersized copper welding cables will create more resistance, more heat and run welding machines harder.

- Undersized cables **DO NOT MEET** any published wire size specifications or published cable size standards for performance
- Undersized cables **DO NOT MEET** welding machine manufacturers' performance criteria for sizing or voltage drop
- After testing Undersized cables vs. Excelene<sup>®</sup>, the Undersized cables had up to **31% LESS COPPER CONTENT**
- Less copper in an Undersized cable can produce up to **33% MORE ELECTRICAL RESISTANCE** which can:
  - Create more heat and wear while in use
  - Reduce welding machine life
  - Reduce the quality & integrity of the actual weld joint

## WELDING CABLE SIZE

AMPACITY COMPARISON CHART <sup>(3), (4)</sup>												
LENGTH Ft. <sup>(1)</sup>	25		50		75		100		150		200	
	Excelene <sup>®</sup>	Undersized	Excelene <sup>®</sup>	Undersized	Excelene <sup>®</sup>	Undersized	Excelene <sup>®</sup>	Undersized	Excelene <sup>®</sup>	Undersized	Excelene <sup>®</sup>	Undersized
AMPS	WIRE GAUGE, AWM OR MM <sup>(2)</sup>											
100	6	4	4	4	2	2	2	1	1/0	1/0	1/0	2/0
120	6	4	4	2	2	1	2	1	1/0	2/0	2/0	3/0
140	6	4	4	2	2	1	1	1/0	2/0	3/0	3/0	4/0
160	6	4	2	2	2	1	1/0	1/0	3/0	3/0	3/0	4/0
180	6	4	2	1	1	1/0	1/0	2/0	3/0	4/0	4/0	
200	4	4	2	1	1/0	1/0	2/0	2/0	4/0	4/0	4/0	
220	4	2	2	1	1/0	2/0	2/0	3/0	4/0		250	
240	4	2	2	1	1/0	2/0	3/0	3/0	4/0		250	
260	4	2	1	1	2/0	2/0	3/0	3/0	250		250	
280	4	2	1	1/0	2/0	3/0	3/0	4/0	250		350	
300	2	2	1/0	1/0	2/0	3/0	250	4/0	250		350	
320	2	2	1/0	1/0	3/0	3/0	250	4/0	350		350	
340	2	1	1/0	2/0	3/0	3/0	250		350		350	
360	2	1	1/0	2/0	3/0	4/0	250		350		350	
380	2	1	1/0	2/0	3/0	4/0	250		350		500	
400	2	1	2/0	2/0	4/0	4/0	250		350		500	
420	2	1	2/0	3/0	4/0	4/0	250		350		500	
440	2	1	2/0	3/0	4/0		250		350		500	
460	2	1	2/0	3/0	4/0		250		500		500	
480	2	1	3/0	3/0	4/0		350		500			
500	1	1	3/0	3/0	4/0		350		500			

**NOTES:**

(1) Footage shown infers total circuit length, i.e., from welding unit to electrode holder and return. A 25 ft. length means that there is 50 ft. of cable.

(2) Excelene and Undersized conductor sizes are in standard AWM or CMA notation.

(3) The ampacity comparison is based on the conductor circular mill area (CMA) and a voltage drop of 4-volts for copper conductors. There is no "duty cycle" factor to consider when calculating voltage drop. Time is not involved with the calculation of voltage drop, unless the cable used is too small. If this is the case the heating effect of current flowing in the cables may become a factor. Current-carrying capacity is predicated on a copper temperature of 60°C (140°F) and an ambient temperature of 40°C (104°F).

(4) The 4-volt voltage drop first appeared in the 1938 edition of the American Welding Society's (AWS) Welding Handbook and continued in its second volume in 1942. These AWS recommendations were adopted in the first edition of the ANSI Standard Z49.1, "Safety in Welding, Cutting and Allied Processes."

(5) Undersized cables measured from November 2009 samples.

# Welding Cable, Cords & Adapters



**Features:**

- EPR insulation provides outstanding cut, abrasion and slag resistance
- -50°C to 105°C
- Resistant to oil, chemicals, water, ozone, & solvents
- Sequential foot-marks
- Red & black jacket in stock
- Other colors available upon request\*

## Royal/Excelene® Welding Cable

Globally recognized for over 50 years for its flexibility, overall quality and durability. The proprietary insulation material delivers unparalleled performance and consistency.

Part Number	Description	Stranding	Nom. Jacket Thickness	Nom. OD	WT/M'
10411	6-EPR (EPDM)	259	0.065	0.305	116
10412	4-EPR (EPDM)	385	0.064	0.340	159
10413	2-EPR (EPDM)	651	0.065	0.420	254
10414	1-EPR (EPDM)	798	0.084	0.490	323
10415	1/0-EPR (EPDM)	1026	0.082	0.525	395
10416	2/0-EPR (EPDM)	1254	0.085	0.570	473
10417	3/0-EPR (EPDM)	1615	0.084	0.635	598
10418	4/0-EPR (EPDM)	2052	0.084	0.695	749
F25001*	250 MCM-EPR (EPDM)	2451	0.148	0.875	1060
F35003*	350 MCM-EPR (EPDM)	3458	0.125	0.960	1393
F50001*	500 MCM-EPR (EPDM)	4921	0.160	1.150	1809

\*Minimums & lead times may apply



**Features:**

- EPR insulation provides outstanding cut, abrasion and slag resistance
- Fine copper stranding contains up to four times the standard strands of Class K design
- Stranding and insulation designs provide ultimate flexibility
- Orange jacket color helps to easily identify “Whip” cable

## Excelene® “Whip” Welding Cable

The most flexible welding cable available, designed to give the welder the ultimate in maneuverability with the toughness of Royal/Excelene®.

Part Number	Description	Stranding	Nom. Jacket Thickness	Nom. OD	WT/M'
10613	2-EPR (EPDM)	2698	0.064	0.427	257
10614	1-EPR (EPDM)	3306	0.084	0.498	324
10615	1/0-EPR (EPDM)	4214	0.084	0.536	405
10618	2/0-EPR (EPDM)	5292	0.0935	0.617	546





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# Welding Cable, Cords & Adapters

## Seoprene® Welding Cable

A thermoplastic jacket that has enhanced abrasion resistance, MSHA approved.

Part Number	Description	Stranding	Nom Jacket Thickness	Nom.OD	WT/M'
10011	6-TPE	259	0.073	0.322	121
10012	4-TPE	385	0.073	0.358	166
10013	2-TPE	651	0.073	0.437	260
10014	1-TPE	798	0.073	0.476	315
10015	1/0-TPE	1026	0.087	0.536	397
10016	2/0-TPE	1254	0.087	0.574	496
10017	3/0-TPE	1615	0.105	0.677	654
10018	4/0-TPE	2052	0.105	0.738	817

Minimums and lead times may apply.



### Features:

- Seoprene TPE jacket
- Easy-to-strip
- -50°C to 105°C
- Resistant to flame, oil grease, solvents & ozone
- Abrasion resistant
- MSHA approved

## Super Excelene® Welding Cable

For the stricter specifications, our UL listed welding cable is designed for flexibility, durability and abrasion resistance.

Part Number	Description	Stranding	Nom Jacket Thickness	Nom. OD	WT/M'
F06016	6-CPE	266	0.0895	0.359	147
F04038	4-CPE	420	0.08	0.414	205
F02033	2-CPE	644	0.094	0.482	288
F01020	1-CPE	833	0.091	0.522	357
F1T010	1/0-CPE	1026	0.102	0.582	456
F2T008	2/0-CPE	1330	0.107	0.637	555
F4T009	4/0-CPE	2052	0.1025	0.75	830

Minimums and lead times may apply.



### Features:

- Thermoset CPE jacket
- -50°C to 90°C
- Class “K” soft-annealed, bare copper
- Resistant to chemicals, oils, acids, weather, ozone & sunlight resistant
- Specials Available
- UL listed

## Welder Adapters and Extension Cords

Maximize power and efficiency by moving welders closer to the work.

Part Number	Description	Length	Male End	Female End	Std Pk Qty	WT/Ea.
01940-88-08	8/3 STW Black	1.5 ft	14-50P	Lighted 6-50R	12	2
01941-88-08	8/3 STW Black	10 ft	14-50P	Lighted 6-50R	4	6
01917-88-06	8/3 STW Blue	25 ft	6-50P	Lighted 6-50R	2	11
01922-88-06	8/3 STW Blue	50 ft	6-50P	Lighted 6-50R	1	22

### Features:

- Heavy-duty STW jacket
- Lighted receptacle indicates when power is on
- Molded ends offer safety and convenience on the jobsite
- 40A/250V/10,000W



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# Portable Cord, Control Cable & Safety



## Royal® Portable Cord & Control Cable

The Royal® series of portable cords are manufactured with advanced synthetic rubber compounds that provide exceptional flexibility and excellent resistance to flame, ozone, oils, acids and chemicals. These designs are rated for service from -40°C to 90°C and meet MSHA flame test requirements. Unless otherwise noted, these are also UL listed and CSA approved.



Part Number	Size	Type	Jacket Color	Wt/1000'
823225	18/2	SJ00W	Black	51
823325	18/3	SJ00W	Black	64
822225	18/2	S00W	Black	72
822325	18/3	S00W	Black	89
822425	18/4	S00W	Black	103
830605	18/6	S00W	Black	150
830805	18/8	S00W	Black	173
831005	18/10	S00W	Black	204
831205	18/12	S00W	Black	229
831405	18/14	S00W	Black	256
822226	16/2	S00W	Black	86
822326	16/3	S00W	Black	99
822426	16/4	S00W	Black	122
830806	16/8	S00W	Black	206
831006	16/10	S00W	Black	256
831206	16/12	S00W	Black	334
831406	16/14	S00W	Black	339

Part Number	Size	Type	Jacket Color	Wt/1000'
822227	14/2	S00W	Black	146
822327	14/3	S00W	Black	182
822427	14/4	S00W	Black	214
822228	12/2	S00W	Black	206
822328	12/3	S00W	Black	236
822428	12/4	S00W	Black	299
822229	10/2	S00W	Black	242
822329	10/3	S00W	Black	314
822429	10/4	S00W	Black	371
822320*	8/3	S00W	Black	321
822420*	8/4	S00W	Black	458
822321*	6/3	S00W	Black	488
822421*	6/4	S00W	Black	656
822322*	4/3	S00W	Black	696
822422*	4/4	S00W	Black	897
822323*	2/3	S00W	Black	976
822423*	2/4	S00W	Black	1256



\*Not UL Listed or CSA Approved



Other sizes, styles and colors are available — minimums and lead times may apply.

## HD-PRO™ High Power GFCI

Actively Protects Workers, Equipment, and Overall Productivity

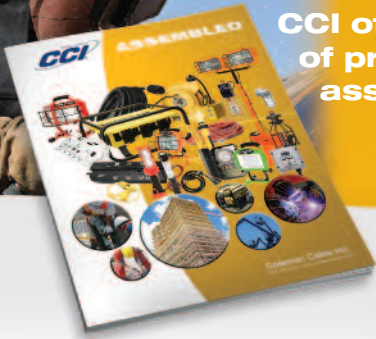
Coleman Cable offers the broadest line of portable GFCI & ELCI (equipment leakage circuit interruptor) products featuring the advanced technology from TRC®. The HD-PRO™ line integrates patented Shock Shield® and Fire Shield® features with an adjustable trip selector for the ultimate in protection and versatility. Installing HD-PRO™ on industrial equipment increases safety, productivity and addresses the requirements of OSHA and Federal Standard 29CFR1910.



- High Power GFCI-30A &40A
- High Power ELCI-30A &60A
- 6.10.30 Trip Selector Series
- 10.30.50 Series EGFPDS



\*Contact Coleman Cable for more information.



CCI offers a full line of professional grade assembled products.



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# Extension Cords & Work Lights

## Extension Cords

Bring electrical tools closer to the job with the industry's largest variety of extension cords and adapters.

Part Number	Description	Length	Color	Std Pack	Wt/Ea
04112	12/3 STW TriSource Adapter	2'	Yellow	12	0.96
02588	12/3 SJTW Extension Cord	50'	Yellow	6	6.17
02589	12/3 SJTW Extension Cord	100'	Yellow	4	12.06
02688	10/3 SJTW Extension Cord	50'	Yellow	4	11.21
02689	10/3 SJTW Extension Cord	100'	Yellow	3	21.9
02548USA1	12/3 SJTW Striped Extension Cord	50'	Red/White/Blue Striped	6	6.17
02549USA1	12/3 SJTW Striped Extension Cord	100'	Red/White/Blue Striped	4	12.06

Many more gauge sizes, lengths and varieties available in stock. Custom cords also available upon request. Minimums and lead times may apply.



02688



04112



02548USA1

## Work Lights

The industry's widest variety of portable lighting utilizing Incandescent, Fluorescent, LED and Metal Halide technologies.

### Contractor Series Halogen

Part Number	Description	Cord Length	Std Pack	Wt/ Ea
L33	500W Portable Handheld Worklight	3'	6	3.75
L14SLED	1000W (2x500W) Tripod Base Worklight	5'	2	13.75

Many more styles available in stock.



L14SLED



L33

### Goliath Series Metal Halide

Part Number	Description	Cord Length	Std Pack	Wt/ Ea
L4211	2 x 1000W Metal Halide Telescoping Worklight	15'	1	198



L4211

### LED Hand Lamps

Part Number	Description	Cord Length	Std Pack	Wt/ Ea
L1925	Rechargeable 72 LED Worklight	n/a	4	1.97
L1407	16+8 LED Task Light w/Magnetic Base	n/a	12	0.35

Many more styles available in stock



L1925



L1407

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- Innovative solutions
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- Solid service platform
- Dedicated professional people
- Customer value