

REELING APPLICATION CABLES



AmerCable



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Tiger® Brand Reeling Cable – Type SHD-GC2-3
2kV and 5kV, 3/C Flexible reeling cables.

Tiger® Brand Reeling Cable – Type SHD-GC4-5
2kV and 5KV 3/C Flexible reeling cables with special Aramid anti-torsion reinforcement for high tensile loads.

Tiger® Brand Reeling Cable – Type SHD-GC6-7
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Tiger® Brand Reeling Cable – Type G-GC8-9
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AmerCable's
400,000 sq. ft.
manufacturing facility
and corporate
headquarters in
El Dorado, Arkansas.



Our Commitment to the Reeling



Harsh reeling environments require specially engineered cables for longer service life and increased productivity.

No matter what type of crane you're operating, AmerCable has a reeling cable productivity solution for you. Our innovatively engineered and manufactured **Reeling Cable Family** is designed for your toughest conditions. As a leading producer of reeling cables in North America, AmerCable is dedicated to producing:

- cables that last longer in harsh reeling environments
- cables designed to help provide greater levels of safety and productivity

REELING CABLE INNOVATION

- Designing insulating and jacketing materials that are more flexible with greater resistance to abrasion and moisture
- Cable constructions that last longer providing reduced down time for increased production
- New product development that addresses environmental, safety and cost reduction issues specific to your mining application.

OPERATING EXCELLENCE

- On-time delivery
- Standard lead-time of 6 to 8 weeks
- Urgent response shipment capability of 2 to 4 weeks
- AmerCable is an ISO-9001 certified manufacturer



FIELD SUPPORT

Our experienced field application engineers are available for on-site evaluation and solutions. They also conduct education and training sessions that address safety, splicing and cable handling issues.



TYPE SHD-GC MOLD-CURED JACKET • 2000 VOLTS 90°C

Conductors

Flexible tinned copper

Ground Check Conductor²

Flexible tinned copper with yellow polypropylene insulation

Ground Wires

Flexible tinned copper

Insulation

90°C ethylene-propylene rubber (EPR)

Separator Tape

Insulation

90°C ethylene-propylene rubber (EPR)

Jacket¹

Reinforced mold-cured thermosetting Chlorinated Polyethylene (CPE) Jacket. Cable identification via permanent marking.

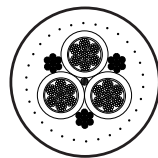
Tape

Non-conducting

Insulation Shielding

Tinned copper and color coded nylon braid

Pure Integral Fill
for greater torsion resistance



Round-shaped cross-section

APPLICATION

Tiger® Brand reeling cables are designed to provide safe, reliable performance on cable reels and festoons operating worldwide at temperatures from -50°C to +50°C at speeds up to 750/min. These three conductor cables are designed for use with monospiral, level wind and random wind reels on gantry cranes, container cranes, log handling cranes, stacker/reclaimers and other similar lifting equipment. They are suitable for outdoor use in ports, shipyards, lumber mills, steel mills and mines.



RATINGS & SPECIFICATIONS

Mine Safety & Health Administration 184-MSHA.

Pennsylvania Department of Environmental Protection P-184.

ICEA S-75-381/NEMA WC-58

Design standard for mining cables

- Natural Resources Canada Certification No. 910.
Type SHD-GC, SHD-BGC up to 25kV
- Canadian Standards Association File 82346, FT1, FT5, -50°
Type SHD-GC, SHD-BGC up to 25kV

36-503 INT • TYPE SHD-GC 3/C • 2000 VOLTS • 90°C

36-503-	Power Conductors		Ground Conductors		Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity ³ 30°C Ambient Temp	Maximum Tensile Load (lbs.)
	Size AWG	No. of Wires per Conductor	Size AWG	No. of Wires per Conductor				
006 INT	6		10	49 7x7	1.29	1160	102	184
004 INT	4	133 7x19	8	133 7x19	1.40	1490	134	292
002 INT	2	259 7x37	6	133 7x19	1.59	2000	175	466
001 INT	1	259 7x37	5	133 7x19	1.76	2450	202	587
010 INT	1/0	259 7x37	4	259 7x37	1.86	2840	232	741
020 INT	2/0	266 19x14	3	259 7x37	2.00	3400	267	934
030 INT	3/0	342 19x18	2	259 7x37	2.13	3680	306	1178
040 INT	4/0	418 19x22	1	259 7x37	2.31	4860	353	1178
250 INT	250	532 19x28	1/0	266 19x14	2.51	5950	390	1178
350 INT	350	627 19x33	2/0	342 19x18	2.81	7400	478	1178
500 INT	500	888 37x24	4/0	532 19x28	3.19	10100	589	1178

36-515 INT • TYPE SHD-GC 3/C • 5000 VOLTS • 90°C

36-515-	Power Conductors		Ground Conductors		Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity ³ 30°C Ambient Temp	Maximum Tensile Load (lbs.)
	Size AWG	No. of Wires per Conductor	Size AWG	No. of Wires per Conductor				
006 INT	6	133 7x19	10	49 7x7	1.56	1560	102	184
004 INT	4	259 7x37	8	133 7x19	1.68	1920	134	292
002 INT	2	259 7x37	6	133 7x19	1.87	2500	175	466
001 INT	1	259 7x37	5	133 7x19	1.95	2860	202	587
010 INT	1/0	266 19x14	4	259 7x37	2.08	3390	232	741
020 INT	2/0	342 19x18	3	259 7x37	2.20	3830	267	934
030 INT	3/0	418 19x22	2	259 7x37	2.36	4418	306	1178
040 INT	4/0	532 19x28	1	259 7x37	2.50	5300	353	1178
250 INT	250	627 19x33	1/0	266 19x14	2.69	6450	390	1178
350 INT	350	888 37x24	2/0	342 19x18	2.95	7880	478	1178
500 INT	500	1221 37x33	4/0	532 19x28	3.31	10440	589	1178

¹ **Jacket** – CPE or chlorosulfonated polyethylene (Hypalon®) jackets. Black CPE is standard. Colored CPE and black Hypalon® jackets available upon request.

² **Ground Check Conductor** –

8 AWG (minimum 133 strand 7x19) ground check conductor on 6 AWG through 4/0 AWG cable.

6 AWG (minimum 133 strand 7x19) ground check conductor on 250 kcmil and larger cable.

³ **Ampacity** – Based on continuous duty at 90°C conductor temperature.

Tolerances – +8%/- 5% of nominal outside diameter on 5000 Volt cables

± 5% of nominal outside diameter on 2000 Volt cables

Minimum bend radius = 6X Diameter.

TIGER® BRAND REELING CABLE

TYPE SHD-GC • 2-5KV OR 2000V

ARAMID REINFORCEMENT • 90°C

Conductors

Flexible tinned copper

Ground Check Conductor²

Flexible tinned copper with yellow polypropylene insulation

Tape

Non-conducting

Insulation Shielding

Tinned copper and color coded nylon braid

Jacket¹

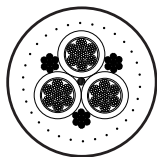
Two layer reinforced mold-cured Black Hypalon® with Aramid fiber ropes encapsulated between layers

Ground Wires

Flexible tinned copper

Insulation

90°C ethylene-propylene rubber (EPR)



Round-shaped cross-section

APPLICATION

Tiger® Brand Reeling Cables are designed to provide safe, reliable performance on cable reelers and festoons operating worldwide at temperatures from -50°C to +50°C at speeds up to 75 feet per minute. These three conductor cables have been specially reinforced with Aramid fibers, encapsulated within an extra heavy thermoset jacket. This special reinforcement allows these cables to be used in long unsupported lengths and in reeling applications where high tension is involved. These cables are designed to deliver superior performance with monospiral, level wind and random wind reelers on gantry cranes, stacker/reclaimers and other similar lifting equipment. They are suitable for outdoor use in ports, shipyards, lumber mills, steel mills and mines.

FEATURES

- Extra flexible, tinned, rope stranded conductors used for maximum flexibility and long life.
- Two bare grounds are used giving a total cross sectional area equal to at least 60% of the power conductor.
- Ground check is insulated with abrasion and kink resistant polypropylene to maximize performance and ensure maximum circuit integrity.
- An Extra Heavy Duty Jacket is applied for maximum abrasion, mechanical and weather protection. The pure integral fill inner jacket gives resistance to torsion and longitudinal movement of the components under the jacket.
- The unique combination of design features (very flexible conductors, pure integral fill, Aramid fiber reinforcing braid encapsulated in an extra heavy duty weather resistant thermoset jacket) gives a high degree of resistance to torsion and extremely high tensile strength and shock load.

RATINGS & SPECIFICATIONS

- Mine Safety & Health Administration 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- ICEA S-75-381/NEMA WC-58
Design standard for mining cables
- Natural Resources Canada Certification No. 910.
Type SHD-GC, SHD-BGC up to 25kV
- Canadian Standards Association File 82346, FT1, FT5, -50°
Type SHD-GC, SHD-BGC up to 25kV

36-503 ARA • TYPE SHD-GC 3/C • 2KV • ARAMID REINFORCEMENT • 90°C

Power Conductors			Ground Conductors		Nominal Outside Diameter (in.)	Approx. Weight lbs. per 1,000 ft.	Ampacity ³ 30°C Ambient Temp	Maximum Tensile Load (lbs.)
36-503-	Size AWG	Power Conductor Diameter (in.)	Size AWG/kcmil	Ground Conductor Diameter (in.)				
006 ARA	6	0.204	10	0.129	1.29	1160	102	—
004 ARA	4	0.259	8	0.164	1.40	1490	134	850
002 ARA	2	0.321	6	0.204	1.59	2000	175	850
001 ARA	1	0.366	5	0.238	1.76	245	202	1050
010 ARA	1/0	0.413	4	0.259	1.86	2840	232	1250
020 ARA	2/0	0.468	3	0.291	2.00	3400	267	1450
030 ARA	3/0	0.518	2	0.321	2.13	3680	306	1650
040 ARA	4/0	0.584	1	0.366	2.31	4860	353	1850
250 ARA	250	0.634	1/0	0.413	2.51	5950	390	1850
350 ARA	350	0.757	2/0	0.468	2.81	7400	478	1850
500 ARA	500	0.888	4/0	0.584	3.19	10100	589	1850

36-515 ARA • TYPE SHD-GC 3/C • 5KV • ARAMID REINFORCEMENT • 90°C

Power Conductors			Ground Conductors		Nominal Outside Diameter (in.)	Approx. Weight lbs. per 1,000 ft.	Ampacity ³ 30°C Ambient Temp	Maximum Tensile Load (lbs.)
36-515-	Size AWG	Power Conductor Diameter (in.)	Size AWG/kcmil	Ground Conductor Diameter (in.)				
006 ARA	6	0.204	10	0.129	1.56	1560	102	—
004 ARA	4	0.259	8	0.164	1.68	1920	134	850
002 ARA	2	0.321	6	0.204	1.87	2500	175	850
001 ARA	1	0.366	5	0.238	1.95	2860	202	1050
010 ARA	1/0	0.413	4	0.259	2.08	3390	232	1250
020 ARA	2/0	0.468	3	0.291	2.20	3830	267	1450
030 ARA	3/0	0.518	2	0.321	2.36	4418	306	1650
040 ARA	4/0	0.584	1	0.366	2.50	5300	353	1850
250 ARA	250	0.634	1/0	0.413	2.69	6450	390	1850
350 ARA	350	0.757	2/0	0.468	2.95	7880	478	1850
500 ARA	500	0.888	4/0	0.584	3.31	10440	589	1850

¹ **Jacket** – Black CPE is standard. Colored CPE available upon request.

² **Ground Check Conductor** –

10 AWG ground check conductor on 6 AWG.

6 AWG ground check on 250 kcmil and larger cable.

8 AWG ground check conductor on 4 AWG through 4/0 AWG cable.

³ **Ampacity** – Based on continuous duty at 90°C conductor temperature.

Tolerances – ±5% of nominal outside diameter on 2000 Volt cables

+8%/-5% of nominal outside diameter on 5000 Volt cables

Minimum Bend Radius = 6X Diameter.

Tiger® Brand is a registered trademark of AmerCable Incorporated.

TIGER® BRAND REELING CABLE

TYPE SHD-GC • 8-15KV • 90°C

Conductors

Flexible tinned copper

Ground Check Conductor²

Flexible tinned copper
with yellow polypropylene

Strand Shield

Semi-conducting layer

Ground Wires

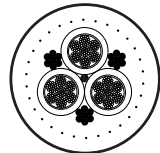
Flexible tinned copper

Assembly

Pure integral fill

Jacket¹

Two layer reinforced
mold-cured chlorinated
polyethylene (CPE)



Round-shaped
cross-section

RATINGS & SPECIFICATIONS

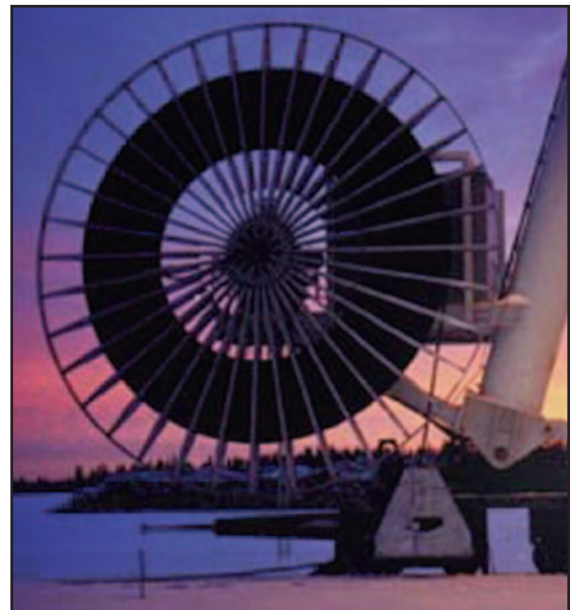
- Mine Safety & Health Administration 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- ICEA S-75-381/NEMA WC-58
Design standard for mining cables
- Natural Resources Canada Certification
No. 910.
Type SHD-GC, SHD-BGC up to 25kV
- Canadian Standards Association File
82346, FT1, FT5, -50°
Type SHD-GC, SHD-BGC up to 25kV

APPLICATION

Tiger® Brand Reeling Cables are designed to provide safe, reliable performance on cable reelers and festoons operating worldwide at temperatures from -50°C to +50°C at speeds up to 75 feet per minute. These three conductor cables are designed for use with monospiral, level wind and random wind reelers on gantry cranes, stacker/reclaimers and other similar lifting equipment. They are suitable for outdoor use in ports, shipyards, lumber mills, steel mills and mines.

FEATURES

- Extra flexible, tinned, rope stranded conductors used for maximum flexibility and long life.
- Two bare grounds are used giving a total cross sectional area equal to at least 60% of the power conductor. Ground check is insulated with abrasion and kink resistant polypropylene to maximize performance and ensure maximum circuit integrity.
- An Extra Heavy Duty Jacket is applied for maximum abrasion, mechanical and weather protection. The pure integral fill inner jacket gives resistance to torsion and longitudinal movement of the components under the jacket.



36-517 INT • TYPE SHD-GC 3/C • 8-15KV • 90°C

Power Conductors			Ground Conductors		Nominal Outside Diameter (in.)	Approx. Weight lbs. per 1,000 ft.	Ampacity ³ 30°C Ambient Temp	Maximum Tensile Load (lbs.)
36-517-	Size AWG	Power Conductor Diameter (in.)	Size AWG/kcmil	Ground Conductor Diameter (in.)				
004 INT	4	0.259	8	0.164	1.94	2180	134	293
002 INT	2	0.321	6	0.204	2.12	2830	175	466
001 INT	1	0.366	5	0.238	2.21	3350	202	587
010 INT	1/0	0.413	4	0.259	2.32	3590	232	741
020 INT	2/0	0.468	3	0.291	2.46	4190	267	934
030 INT	3/0	0.518	2	0.321	2.62	5075	306	1178
040 INT	4/0	0.584	1	0.366	2.75	5660	353	1178
250 INT	250	0.634	1/0	0.413	2.89	6740	390	1178
350 INT	350	0.757	2/0	0.468	3.20	8460	478	1178
500 INT	500	0.888	4/0	0.584	3.56	10700	589	1178

36-519 INT • TYPE SHD-GC 3/C • 8-15KV • 90°C

Power Conductors			Ground Conductors		Nominal Outside Diameter (in.)	Approx. Weight lbs. per 1,000 ft.	Ampacity ³ 30°C Ambient Temp	Maximum Tensile Load (lbs.)
36-519-	Size AWG	Power Conductor Diameter (in.)	Size AWG/kcmil	Ground Conductor Diameter (in.)				
002 INT	2	0.321	6	0.204	2.42	3500	180	466
001 INT	1	0.366	5	0.238	2.52	4080	205	587
010 INT	1/0	0.413	4	0.259	2.64	4610	236	741
020 INT	2/0	0.468	3	0.291	2.73	4890	270	934
030 INT	3/0	0.518	2	0.321	2.90	5589	311	1178
040 INT	4/0	0.584	1	0.366	3.05	6820	357	1178

¹ **Jacket** – Black CPE is standard. Colored CPE available upon request.

² **Ground Check Conductor** –

8 AWG ground check conductor on 6 AWG through 4/0 AWG cable.

6 AWG ground check on 250 kcmil and larger cable.

³ **Ampacity** – Based on continuous duty at 90°C conductor temperature.

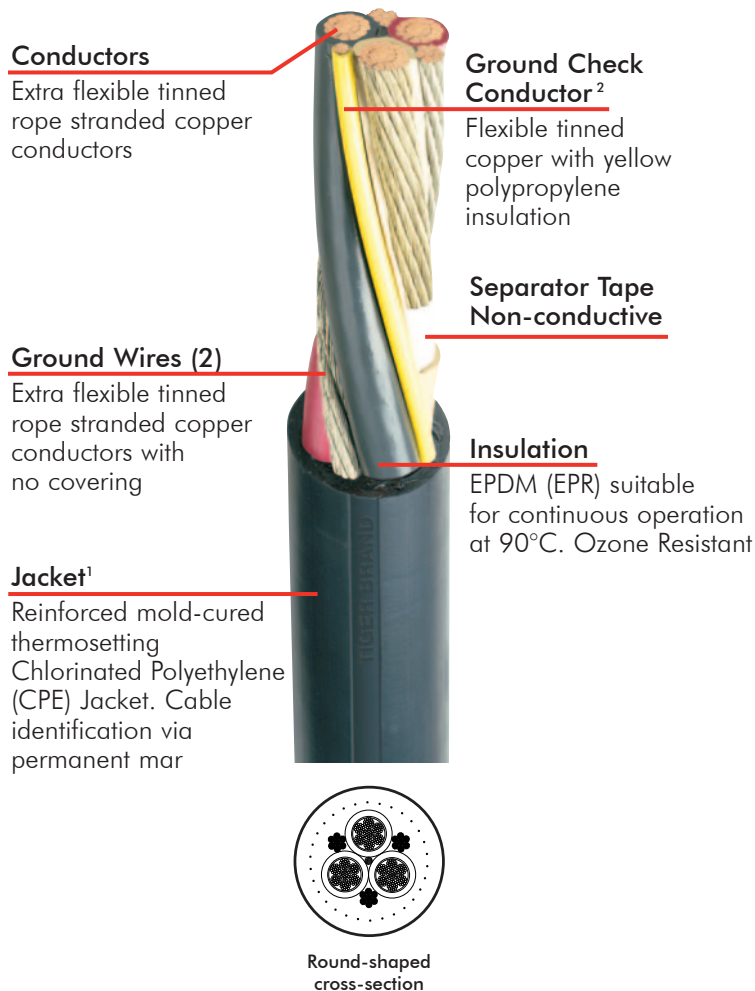
Tolerances – +8%/±5% of nominal outside diameter

Minimum Bend Radius = 8X Diameter.

TIGER® BRAND REELING CABLE

TYPE G-GC • 2000 VOLTS

90°C



APPLICATION

Tiger® Brand Reeling Cables are designed to provide safe, reliable performance on cable reelers and festoon systems operating worldwide at temperatures from -50°C to +50°C at speeds up to 750ft./min. These three conductor cables are designed for use with monospiral, level wind, random wind reelers and festoon tracks on gantry cranes, container cranes, log handling cranes, stacker/reclaimers and other similar lifting equipment. They are suitable for outdoor use in ports, shipyards, lumber mills, steel mills and mines.

Features

- Extra flexible, tinned, rope stranded conductors used for maximum flexibility and long life.
- Two bare grounds are used giving a total cross sectional area equal to at least 60% of the power conductor.
- Ground Check is insulated with abrasion and kink resistant polypropylene to maximize performance and ensure maximum circuit integrity.
- An Extra Heavy Duty Jacket is applied for maximum abrasion, mechanical and weather protection. The pure integral fill inner jacket gives resistance to torsion and longitudinal movement of the components under the jacket.

RATINGS & SPECIFICATIONS

- Mine Safety & Health Administration 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Insulated Cable Engineers Association S-75-381/NEMA WC-58. Design standard for mining cables
- Canadian Standards Association C22.2 No. 96File 82346, FT1, FT5, -40°C. CSA Phase Color ID available on Type W, G, G-GC, G-BGC up to 35kV.
- RETIE

36-442 • TYPE G-GC • 2000 VOLTS • 90°C

Power Conductors		Ground Conductors		Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity ³ 30°C Ambient Temp
36-442-	Size AWG/kcmil	Size AWG	Size AWG			
008	8	10	10	0.97	600	64
006	6	10	10	1.05	750	86
004	4	8	8	1.19	1070	114
002	2	7	7	1.34	1480	151
001	1	6	6	1.51	1890	177
010	1/0	5	5	1.65	2340	204
020	2/0	4	4	1.75	2750	236
030	3/0	2	2	1.89	3777	273
040	4/0	2	2	2.04	3980	315
250 INT	250	2	2	2.39	5000	352
350 INT	350	1/0	1/0	2.68	6750	433
500 INT	500	2/0	2/0	3.03	8900	535

¹ **Jacket** – Black CPE is standard. Colored CPE jackets available upon request.

² **Ground Check Conductor** – 10 AWG ground check conductor on 8 AWG through 2 AWG cable.

8 AWG ground check conductor on 1 AWG through 4/0 AWG cable.

6 AWG ground check conductor on 250 kcmil and larger cable.

Minimum Bend Radius = 6X Diameter.

³ **Ampacity** – Based on continuous duty at 90°C conductor temperature.

Tolerances – ± 0.030" 8-1 AWG
 ± 0.040" 1/0 - 2/0 AWG
 ± 0.050" 4/0 AWG
 ± 0.060" 250 - 500 kcmil



Tiger® Brand is a registered trademark of AmerCable Incorporated.

TYPE W MAGNET CRANE REELING CABLE • 600-2000V 2-CONDUCTOR • 90°C

Conductors

Bunched strands of tinned annealed copper per ASTM B33. Stranding other than those listed in the table are available upon special order

Insulation

ASTM D-2802. Insulation material color coded through AWG size #2. Larger sizes are coded with fabric tape wraps. One black, one white.



Separator

A suitable separator provides for easy stripping of insulation

Fillers

Fibrous filler provides great impact resistance and flexibility. Rubber fillers are available upon special order.

Jacket

Flame retardant, oil and sunlight resistant Chlorinated Polyethylene (CPE). Reinforced, two layer jacket construction is used on AWG size 4/0 and larger cables. Black is standard. Consult factory for colored jackets

Ratings & Specifications

- UL Listed as Type W
- UL Listed as Type TC
- ASTM B-33: Standard specification for tinned soft or annealed copper wire for electrical purposes
- ASTM D2802: Standard specification for ozone-resistant ethylene-alkene polymer insulation for wire and cable
- ICEA S-95-658/ NEMA WC-70: Nonshielded Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- MSHA P-184
- Flame Resistance: FT4

APPLICATION

AmerCable's Type W 600-2000 Volt two conductor cables are recommended for installations where long flex life, great flexibility, and wearability are desired. Applications include heavy duty or temporary power supply service, AC or DC, to motor or generators, portable and stationary heavy duty equipment, cranes, conveyors and other mobile equipment. They are especially recommended to supply power for magnet crane applications. They may be installed in air, in ducts, immersed in water or directly buried in the earth. However, they are not UL Type USE. For cables requiring reduced flame propagation, refer to the factory.

FEATURES

- Suitable for continuous operating temperatures of 90°C
- Suitable for use in festoons, suspended loops and power tracks
- Suitable for use on Payout and Retractable reels (P&R)
- Heavy Duty jacket offers excellent protection against abrasion, impact, heat, oil, flame, ozone, alkali and acids.
- Extremely flexible stranding used for increased flexibility and ease of installation
- Dual Rated 600V and 2kV

36-430 • TYPE W • MAGNET CRANE • 2-CONDUCTOR

Part No. 37-430-	Size AWG/ kcmil	Minimum Wires per Conductor	Nominal Insulation Thickness in.	Nominal Jacket Thickness in.	Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 90°C Conductor 30°C Ambient Temp
008	8	133	0.060	0.109	0.830	369	74
006	6	133	0.060	0.109	0.960	518	99
004	4	133	0.060	0.109	1.080	715	130
002	2	259	0.060	0.141	1.280	1045	174
010	1/0	266	0.080	0.156	1.560	1464	234
020	2/0	342	0.080	0.156	1.660	1788	271
040	4/0	532	0.080	0.172	1.973	2530	361
250	250	627	0.095	0.165	2.100	2664	402
350	350	888	0.095	0.176	2.360	3854	495
500	500	1221	0.095	0.214	2.700	5191	613

* Ampacity is calculated with a 90°C conductor temperature and 30°C ambient air, per 1999 NEC, Table 400-5(B)

Cable diameters and weights are subject to +/- 5% manufacturing tolerance.
 Sizes 8 awg through 1/0 are labeled "MAGNET CRANE CABLE"

A full line of UL Listed Type G cables with grounding conductors is available. Consult factory.



Tiger® Brand is a registered trademark of AmerCable Incorporated.

TYPE W REELING CABLE

2000 VOLTS • 3-CONDUCTOR

90°C

Conductors

Extra flexible tinned rope stranded copper conductors

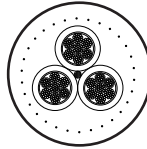


Insulation

EPDM (EPR) suitable for continuous operation at 90°C. Ozone Resistant

Jacket¹

Two layer reinforced mold-cured chlorinated polyethylene (CPE)



Round-shaped cross-section

A full line of UL Listed Type G cables with grounding conductors is available. Consult factory.

APPLICATION

AmerCable’s Type W reeling cables are designed to provide safe, reliable performance on cable reelers and festoon systems operating worldwide at temperatures from -50°C to +50°C at speeds up to 750ft./min. These three conductor cables are designed for use with monospiral, level wind, random wind reelers and festoon tracks on gantry cranes, container cranes, log handling cranes, stacker/reclaimers and other similar lifting equipment. They are suitable for outdoor use in ports, shipyards, lumber mills, steel mills and mines.

FEATURES

- Extra flexible, tinned, rope stranded conductors used for maximum flexibility and long life.
- An Extra Heavy Duty Jacket is applied for maximum abrasion, mechanical and weather protection. The pure integral fill inner jacket gives resistance to torsion and longitudinal movement of the components under the jacket.

RATINGS & SPECIFICATIONS

- Mine Safety & Health Administration 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- ICEA S-75-381/NEMA WC-58 Design standard for mining cables
- Natural Resources Canada Certification No. 910. Type W, G, G-GC, G-BGC up to 2kV
- Canadian Standards Association File 82346, FT1, FT5, -50° Type W, G, G-GC, G-BGC up to 2kV
- NEC 1999 Listed and labeled per article 400

Power Conductors			Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity ² 90°C Conductor 30°C Ambient Temp
36-442-	Size AWG	Insulation Thickness mils			
008	8	60	0.91	550	64
006	6	60	1.01	730	86
004	4	60	1.17	1020	114
002	2	60	1.34	1430	151
001	1	80	1.51	1800	177
010	1/0	80	1.65	2140	204
020	2/0	80	1.75	2580	236
030	3/0	80	2.07	3800	273
040	4/0	80	1.89	2922	315

¹ **Jacket** – Black CPE is standard. Tolerances – ± 0.030" 8-1 AWG
 Colored CPE jackets available upon request. ± 0.040" 1/0 - 2/0 AWG
 ± 0.050" 4/0 AWG

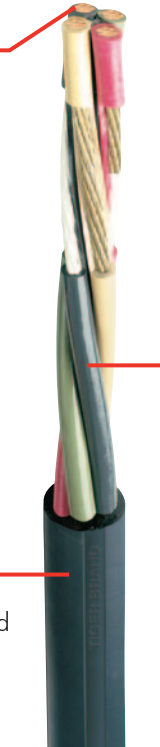
² **Ampacity** – Based on continuous duty at 90°C conductor temperature.
 Minimum Bend Radius = 6X Diameter.

TYPE W REELING CABLE

2000 VOLTS • 4-CONDUCTOR • 90°C

Conductors

Extra flexible tinned rope stranded copper conductors

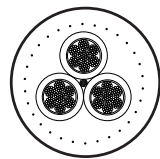


Insulation

EPDM (EPR) suitable for continuous operation at 90°C. Ozone Resistant

Jacket¹

Two layer reinforced mold-cured chlorinated polyethylene (CPE)



Round-shaped cross-section

A full line of UL Listed Type G cables with grounding conductors is available. Consult factory.

APPLICATION

AmerCable’s Type W reeling cables are designed to provide safe, reliable performance on cable reelers and festoon systems operating worldwide at temperatures from -50°C to +50°C at speeds up to 750ft./min. These four-conductor cables are designed for use with monospiral, level wind, random wind reelers and festoon tracks on gantry cranes, container cranes, log handling cranes, stacker/reclaimers and other similar lifting equipment. They are suitable for outdoor use in ports, shipyards, lumber mills, steel mills and mines.

FEATURES

- Extra flexible, tinned, rope stranded conductors used for maximum flexibility and long life.
- An Extra Heavy Duty Jacket is applied for maximum abrasion, mechanical and weather protection. The pure integral fill inner jacket gives resistance to torsion and longitudinal movement of the components under the jacket.

RATINGS & SPECIFICATIONS

- Mine Safety & Health Administration 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- ICEA S-75-381/NEMA WC-58 Design standard for mining cables
- Natural Resources Canada Certification No. 910. Type W, G, G-GC, G-BGC up to 2kV
- Canadian Standards Association File 82346, FT1, FT5, -50° Type W, G, G-GC, G-BGC up to 2kV
- NEC 1999 Listed and labeled per article 400

Power Conductors			Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity ² 90°C Conductor 30°C Ambient Temp
36-442-	Size AWG	Insulation Thickness mils			
008	8	60	.99	670	59
006	6	60	1.10	890	79
004	4	60	1.27	1250	102
002	2	60	1.48	1800	134
001	1	80	1.68	2270	157
010	1/0	80	1.79	2680	181
020	2/0	80	1.93	3200	211
030	3/0	80	2.07	3627	243
040	4/0	80	2.26	4650	280

¹ **Jacket** – Black CPE is standard. Tolerances – ± 0.030" 8-1 AWG
 Colored CPE jackets available upon request. ± 0.040" 1/0 - 2/0 AWG
 ± 0.050" 4/0 AWG

² **Ampacity** – Based on continuous duty at 90°C conductor temperature.

Minimum Bend Radius = 6X Diameter.

TERMINATION

Jacket removal is best accomplished by the use of a hawk-bill or long knife. Cut a 1 to 1.5 inch wide swatch of jacket down to the core starting at the end of the jacket cut-off location and work towards the lug end. Keep the knife blade angle low. This will prevent nicking the underlying shielding or fiber optic. Loosen the jacket and pull it back, then finish cutting it off circumferentially.

Separate the conductors, measure and mark them for the creepage distance, and the lugs. Removal of the extruded insulation shield (EIS) is next. The tenacious bond between the insulation and extruded semi-conducting insulation shield can be broken with the use of heat. After making two or three longitudinal cuts 90% through the EIS, heat one strip with a torch until it smokes. Grip the very end of the strip with pliers. (Do not clamp down on the insulation) Pull the strip off right away. Repeat on the next strip. After the proper length of semi-con rubber is removed, clean the insulation surface and install the stress relief according to kit manufacturer's instructions. Cut, pencil and remove the insulation plugs at the end just prior to lug installation.

If there is a ground check wire in the cable, but the ground check circuit is not used, the yellow insulated ground check wire should be connected with the ground conductors.

SPLICE

Any splice that is made must have all components (conductors, grounds, ground check and Aramid fibers) of the cable rebuilt and in their original factory helix. After removal of the damaged area, mark the length of jacket to be stripped based on the instructions in the splicing kit. Take off 10 to 12 inches extra jacket on each end to facilitate rebuilding the helix of the Aramid ropes.

Cut the outer jacket into 5 or 6 equal width strips down the length of the cable. Make a shallow 360 degree cut at the end of the section to be stripped. Do not cut into the Aramid ropes. Heat one strip until it becomes extremely hot, but does not ignite. Using pliers or hoof-nippers, grip the outer jacket at the open end and pull steadily and evenly toward the opposite end. (Be patient. This is also a very tenacious bond.) Repeat until all ropes are exposed. Note and measure the helix of the ropes. Pull the ropes back and tape them down. Carefully strip the inner jacket without nicking any components. Make the splice in the conductors according to kit instructions. All layers of the conductor must be rebuilt, including the semi-conductive shield. The ground wires must also be covered with semi-conductive material.

Next, use rubber jacketing tape to build up approximately 30 mils of inner jacket. Rebuild the helix of the Aramid ropes one at a time. Slide the sleeves (see below) onto one rope and match it with its opposite rope. Slide the other rope into the sleeves also. Tension this pair of ropes and mark the rope end locations. Bend the cable in a U-shape to make room for the crimping tool and make the crimps. Make sure the tension in each of the ropes is the same and the sleeves are staggered along the length of the splice.

After the conductors, grounds and Aramid ropes are rebuilt and spliced, use the rubber jacketing tape to build up the outer jacket to the original diameter.



Sometimes, getting the most life out of your cables means making repairs.

A few extra minutes spent in cable repair can save hours of costly downtime.

Our field reps can conduct on-site training (all shifts) on the correct way to splice cables to extend their service life.

MECHANICAL DE-RATING

The splicing procedure shown here can be used to repair damaged cables and return them to their original electrical performance but there will be some loss in physical properties. Cables spliced by this procedure should have their maximum tensile force de-rated by a factor of 0.10. Some loss in flexibility will also occur.

FIBER OPTICS

Splicing procedures for fiber optics have not resulted in splices that give acceptable service life in dynamic reeling applications. For this reason, AmerCable does not recommend splicing the optical fibers.

AWG/Metric Cross Reference

AWG/ kcmil Size	Area of AWG/kcmil in mm	Nearest Standard Metric Cond. mm
22	0.35	0.50
20	0.52	0.50
18	0.82	1.00
16	1.31	1.50
14	2.08	2.50
12	3.31	4
10	5.26	6
8	8.37	10
6	13.30	16
4	21.15	25
2	33.62	35
1	42.41	50
1/0	53.49	50
2/0	67.43	70
3/0	85.01	95
4/0	107.2	120
250	126.7	120
300	152.0	150
350	177.3	185
400	202.7	240
500	253.4	240
600	304.0	300
750	380.0	400
800	405.4	400
1000	506.7	500
1250	633.4	630

Derating Factors

No. of Layers	1*	2	3	4
Correction Factor	0.85	0.65	0.45	0.35

*Derating factor for ventilated monospiral reels is 0.85. Derating factor non-ventilated monospiral reels is 0.75.

Ambient (°F)	50	68	86	104	122
Temp. (°C)	10	20	30	40	50
Correction Factor	1.14	1.07	1.00	0.91	0.82



REELING APPLICATION CABLES

AmerCable manufactures high quality jacketed electrical cables for a wide variety of specialized industrial applications.



AmerCable is an ISO 9001 certified cable manufacturer that combines leading-edge technology, proven manufacturing techniques, and high quality service to deliver the finest cable products available.

AmerCable serves a worldwide customer base from our manufacturing facility in El Dorado, Arkansas. Our professional field engineering and sales force work in partnership with our network of independent distributors to identify and fulfill your specific cable requirements.

What can you expect from AmerCable?

- High Quality Cable
- Shortest Lead Times in the cable industry
- On Time Delivery
- Professional Sales, Support and Service
- Strategic Inventory Locations
- Operational Excellence



Made in America

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