

TIGER® BRAND

UNDERGROUND MINING CABLES





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Made in America

COMMITTED TO SAFER, MORE PRODUCTIVE MINING



Since the electrification of mines, Nexans AmerCable's core business has been powering mine equipment.

Surface or underground – Nexans AmerCable has a cable productivity solution for your mine. Our time-proven Tiger® Brand power cables are designed for your toughest conditions. As the leading producer of mining cables in North America, Nexans AmerCable is dedicated to producing:

- cables that last longer in harsh mining environments
- cables designed to help provide greater levels of safety and productivity
- **lowest cable cost per ton!**

MINING CABLE INNOVATION

- Power cables with insulating and jacketing materials that are more flexible while still offering greater resistance to abrasion and moisture
- Tiger Brand cables last longer, delivering reduced down time for increased production
- New product development addresses environmental, safety and cost-reduction issues specific to your mining application

OPERATING EXCELLENCE

- Industry leading On-Time delivery
- Standard lead-time of 8-to-10 weeks
- Urgent response shipment capability of 2-to-4 weeks
- Strategically located inventory throughout the major mining regions
- ISO-9001 certified manufacturer



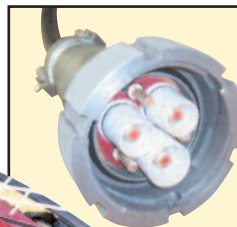
HANDS-ON FIELD SUPPORT

Our mine-experienced field application engineers are available 24/7 for on-site evaluation and solutions. They also conduct education and training sessions that address safety, splicing and cable handling issues. See page 35 for more information.



Factory Installed Cable Assemblies

See page 35 for more information.





36-311

TYPE W FLAT 2/C

MOLD-CURED JACKET • 600/2000 VOLTS

Conductors

Flexible tinned copper

Insulation

90°C ethylene-propylene rubber (EPR)

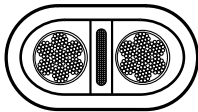
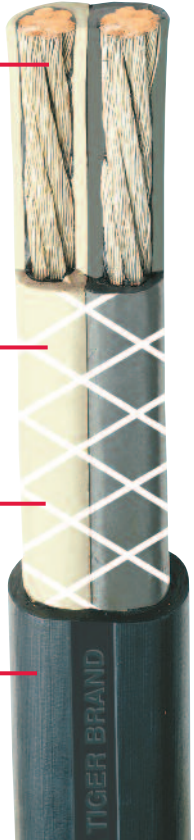
Reinforcement

Synthetic yarn over assembly

Jacket

Mold-cured thermoset with cable identification via permanent marking. Standard Jacket: **Black**

See Page 7 for
AWG/Metric Cross
References



APPLICATION

For use on D.C. off-track mining equipment. Especially designed for D.C. shuttle cars, drills, cutting and loading machines. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-07-KA11007 MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.

Primary Usage
Recommendation



Shuttle
Car



RATINGS & APPROVALS

- Mine Safety & Health Administration
- Pennsylvania Department of Environmental Protection
- Insulated Cable Engineers Association S-75-381. Design standard for mining cables.

36-311-	Power Conductors			Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Approx. Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils			
008	8	133 7x19	60	0.51 x 0.84	340	72
006	6	133 7x19	60	0.56 x 0.93	440	95
004	4	259 7x37	60	0.61 x 1.05	580	127
002	2	259 7x37	60	0.73 x 1.24	850	167
001	1	259 7x37	80	0.81 x 1.40	1070	191
010	1/0	259 7x37	80	0.93 x 1.51	1310	217
020	2/0	329 7x47	80	0.99 x 1.63	1600	250
040	4/0	532 19x28	80	1.10 x 1.89	2300	328

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

Tolerances – ± 0.030" Minor Dimension
± 0.040" Major Dimension

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-314

TYPE W FLAT 4/C**MOLD-CURED JACKET • 600/2000 VOLTS****Conductors**

Flexible tinned copper

Insulation

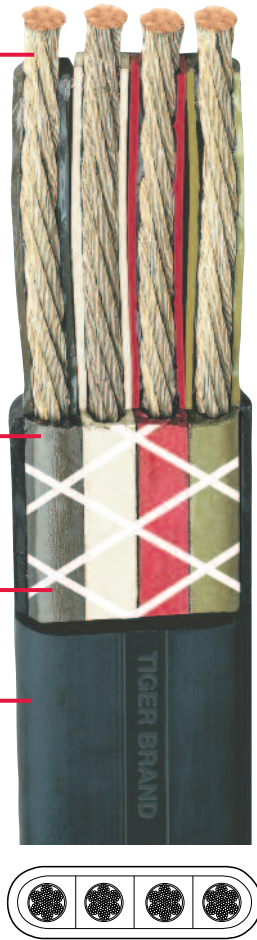
90°C ethylene-propylene rubber (EPR). Color coded black, white, red, green.

Reinforcement

Synthetic yarn over assembly

Jacket

Mold-cured thermoset with cable identification via permanent marking.
Standard Jacket: **Black**

**APPLICATION**

For use on A.C. off-track mining equipment. Especially designed for A.C. shuttle cars, drills, cutting and loading machines. Recommended maximum continuous conductor temperature is 90°C.

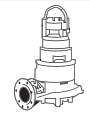
Cable carries "P-07-KA11007 MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58 ASTM B-33 and B-172.

Primary Usage
Recommendation



**Shuttle
Car**



Pump



**Roof
Bolter**

**RATINGS & APPROVALS**

- Mine Safety & Health Administration
- Pennsylvania Department of Environmental Protection
- Insulated Cable Engineers Association S-75-381. Design standard for mining cables.

36-314	Power Conductors			Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils			
006	6	133 7x19	60	0.68 x 1.71	910	72
004	4	259 7x37	60	0.76 x 1.91	1220	93
002	2	259 7x37	60	0.82 x 2.25	1720	122
001	1	259 7x37	60	0.98 x 2.54	2240	143

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

Tolerances – ± 0.050" Minor Dimension
± 0.080" Major Dimension





36-320

TYPE G FLAT 2/C

MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Ground Wire

Uni-directional lay
flexible tinned copper

Reinforcement

Synthetic yarn
over assembly

Insulation

90°C ethylene-propylene
rubber (EPR)

Jacket

Mold-cured thermoset
with cable identification
via permanent marking.

See Page 7 for
AWG/Metric Cross
References



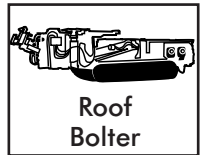
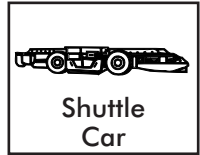
APPLICATION

For use on D.C. off-track mining equipment. Especially designed for D.C. shuttle cars, drills, cutting and loading machines. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-07-KA11007 MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.

Primary Usage
Recommendation



RATINGS & APPROVALS

- Mine Safety & Health Administration
- Pennsylvania Department of Environmental Protection
- Insulated Cable Engineers Association S-75-381. Design standard for mining cables.

36-320-	Power Conductors			Grounding Conductor		Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor			
006	6	133 7x19	60	8	270 6x45	0.56 x 1.02	500	95
004	4	259 7x37	60	7	180 6x30	0.61 x 1.15	660	127
002	2	259 7x37	60	5	168 6x28	0.73 x 1.35	990	167
001	1	259 7x37	80	4	168 6x28	0.81 x 1.55	1230	191
010	1/0	259 7x37	80	3	204 6x34	0.93 x 1.67	1540	217
020	2/0	329 7x47	80	2	246 6x41	0.99 x 1.85	1870	250

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

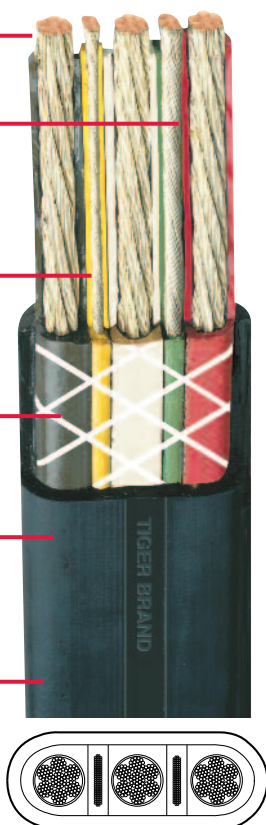
Tolerances – ± 0.030" Minor Dimension
± 0.040" Major Dimension

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36-322

TYPE G-GC FLAT 3/C**MOLD-CURED JACKET • 2000 VOLTS****Conductors**

Flexible tinned copper

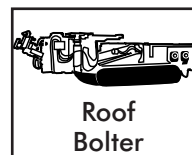
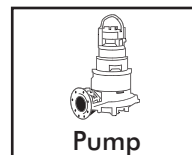
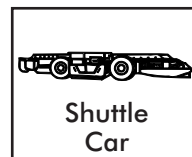
Ground WireUni-directional lay
flexible tinned copper
with green covering**Ground Check Wire**Uni-directional lay
flexible tinned copper
with yellow insulation**Reinforcement**Synthetic yarn
over assembly**Insulation**90°C ethylene-propylene
rubber (EPR)**Jacket**Mold-cured thermoset
with cable identification
via permanent marking.**APPLICATION**

For use on A.C. off-track mining equipment. Especially designed for A.C. shuttle cars, drills, cutting and loading machines. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-07-KA11007 MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/ NEMA WC-58, ASTM B-172 and B-33.

Primary Usage
Recommendation

**RATINGS & APPROVALS**

- Mine Safety & Health Administration
- Pennsylvania Department of Environmental Protection
- Insulated Cable Engineers Association S-75-381. Design standard for mining cables.

36-322-	Power Conductors			Grounding Conductor		Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor			
006	6	133 7x19	60	8	270 6x45	0.67 x 1.69	940	79
004	4	259 7x37	60	7	180 6x30	0.75 x 1.89	1240	104
002	2	259 7x37	60	5	168 6x28	0.81 x 2.23	1690	138
001	1	259 7x37	80	4	168 6x28	0.97 x 2.48	2170	161

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

Tolerances – ± 0.050" Minor Dimension
± 0.080" Major Dimension

Ground Check– #8 AWG minimum





36-431

TYPE W ROUND 3/C

MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Tape

Non-conducting

Insulation

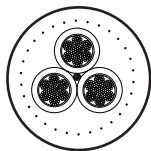
90°C ethylene-propylene rubber (EPR)

Jacket¹

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

See Page 36 for jacket color options.

See Page 37 for Tiger Stripe options



APPLICATION

Especially suitable for general use where bare grounding conductors are not required or desired. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-7K-184-MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



RATINGS & APPROVALS

- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381 & CSA Standards C 22.2 #96.
- Canadian Standards Association
File 82346, FT1, FT5, -50°C
Type SHD-GC, SHD-BGC up to 25kV
Type W, G, G-GC, G-BGC up to 2kV

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-431 • TYPE W ROUND 3/C • 2000 VOLTS

36-431-	Power Conductors			Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils			
008	8	133	60	0.91	550	59
006	6	133	60	1.01	730	79
004	4	259	60	1.17	1020	104
002	2	259	60	1.34	1430	138
001	1	259	80	1.51	1800	161
010	1/0	266	80	1.65	2140	186
020	2/0	323	80	1.75	2580	215
030	3/0	418	80	1.89	2922	249
040	4/0	532	80	2.04	3800	287

¹ Jacket – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request.

*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" 3/0 - 4/0 AWG

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

Reel Correction Factors

For use with ampacities when one or more layers of cable are wound on a reel. Cables must be derated to prevent over heating on reel.¹

Number of Layers	Multiplying Correction Factors
1	0.85
2	0.65
3	0.45
4	0.35

¹Tables reproduced from standards publication ICEA-S-75-381, NEMA WC-58

AWG/Metric Cross Reference

AWG/kcmil Size	Area of AWG/kcmil in mm ²	Nearest Standard Metric Cond. mm ²
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





36-432

TYPE W ROUND 4/C

MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Tape

Non-conducting

Insulation

90°C ethylene-propylene rubber (EPR)

Jacket¹

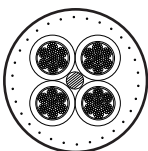
Reinforced mold-cured thermosetting Chlorinated Polyethylene (CPE) Jacket. Cable identification via permanent marking.

See Page 36 for jacket color options.

See Page 37 for Tiger Stripe options



Pure
Integral Fill
for greater
torsion
resistance



APPLICATION

Especially suitable for use with mobile mining equipment such as continuous miners, drills, cutters, loading machines and AC shuttle cars. Type W is for applications where bare grounding conductors are not required or desired. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-7K-184-MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



Cable shown with optional Tiger Stripes. See page 37.

RATINGS & APPROVALS

- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381 & CSA Standards C 22.2 #96.
- Canadian Standards Association File 82346, FT1, FT5, -50°C Type SHD-GC, SHD-BGC up to 25kV Type W, G, G-GC, G-BGC up to 2kV

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-432 • TYPE W ROUND 4/C • 2000 VOLTS

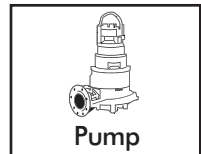
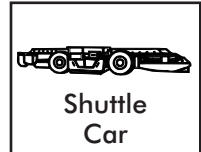
36-432-	Power Conductors			Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils			
008	8	133	60	0.99	670	54
006	6	133	60	1.10	890	72
004	4	259	60	1.27	1250	93
002	2	259	60	1.48	1800	122
001	1	259	80	1.68	2270	143
010	1/0	266	80	1.79	2680	165
020	2/0	323	80	1.93	3200	192
030	3/0	418	80	2.07	3627	221
040	4/0	532	80	2.26	4650	255

¹ Jacket – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request.

*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" 3/0 - 4/0 AWG

Primary Usage Recommendation



Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

Reel Correction Factors

For use with ampacities when one or more layers of cable are wound on a reel. Cables must be derated to prevent over heating on reel.¹

Number of Layers	Multiplying Correction Factors
1	0.85
2	0.65
3	0.45
4	0.35

¹Tables reproduced from standards publication ICEA-S-75-381, NEMA WC-58

AWG/Metric Cross Reference

AWG/kcmil Size	Area of AWG/kcmil in mm ²	Nearest Standard Metric Cond. mm ²
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





36-442

TYPE G-GC ROUND 3/C

MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Ground Check Conductor²

Flexible tinned copper with yellow polypropylene insulation

Insulation

90°C ethylene-propylene rubber (EPR)

Tape

Non-conducting

Ground Wires

Flexible tinned copper

Jacket¹

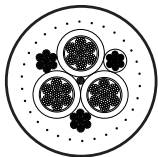
Reinforced mold-cured thermosetting Chlorinated Polyethylene (CPE) Jacket. Cable identification via permanent marking.

Pure
Integral Fill
for greater
torsion
resistance

See Page 36 for
jacket color options.

Also available with
Extra-Tough
Thermoplastic
Polyurethane (TPU) jacket
for extremely abrasive
environments! See Pg. 36

See Page 37 for
Tiger Stripe options



APPLICATION

Especially suitable for use with mobile mining equipment such as continuous miners, drills, cutters, loading machines, AC shuttle cars and pumps. Type G-GC is for applications where grounding conductors and a ground check conductor are required. Recommended maximum continuous conductor temperature is 90°C. Suitable for shallow water submersion.

Cable carries "P-7K-184-MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



Pump Application Construction

36-442 is available with insulated grounds for pump applications that require this specification.



RATINGS & APPROVALS

- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381 & CSA Standards C 22.2 #96.
- Canadian Standards Association File 82346, FT1, FT5, -50°C Type SHD-GC, SHD-BGC up to 25kV Type W, G, G-GC, G-BGC up to 2kV
- RETIE

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-442 • TYPE G-GC ROUND 3/C • 2000 VOLTS

36-442-	Power Conductors			Grounding Conductors		Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor			
008	8	133	60	10	49	0.97	600	59
006	6	259	60	10	49	1.05	750	79
004	4	259	60	8	133	1.19	1070	104
002	2	259	60	7	133	1.34	1480	138
001	1	259	80	6	133	1.51	1890	161
010	1/0	266	80	5	133	1.65	2340	186
020	2/0	323	80	4	259	1.75	2750	215
030	3/0	418	80	2	259	1.89	3377	249
040	4/0	532	80	2	259	2.04	3980	287
250	250	627	95	2	259	2.39	5000	320
350	350	888	95	1/0	266	2.68	6750	394
500	500	1221	95	2/0	323	3.03	8900	487

¹ **Jacket** – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request.

² **Ground Check Conductor** – 10 AWG (minimum 49 strand 7x7) ground check conductor on 8 AWG through 2 AWG cable.

8 AWG (minimum 133 strand 7x19) ground check conductor on 1 AWG through 4/0 AWG cable.

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

***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" 3/0 - 4/0 AWG

± 0.060" 250 - 500 kcmil

Primary Usage Recommendation



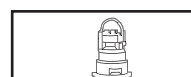
Shuttle Car



Continuous Miner



Roof Bolter



Pump

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

¹ Tables reproduced from standards publication ICEA-S-75-381, NEMA WC-58

Reel Correction Factors

For use with ampacities when one or more layers of cable are wound on a reel. Cables must be derated to prevent over heating on reel.¹

Number of Layers	Multiplying Correction Factors
1	0.85
2	0.65
3	0.45
4	0.35

See Page 13 for AWG/Metric Cross Reference





36-503

Type SHD-GC

MOLD-CURED JACKET • 2000 VOLTS

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

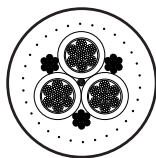
Tinned copper and color coded nylon braid

Pure
Integral Fill
for greater
torsion
resistance

See Page 36 for
jacket color options.

Also available with
Extra-Tough
Thermoplastic
Polyurethane (TPU) jacket
for extremely abrasive
environments! See Pg. 36

See Page 37 for
Tiger Stripe options



APPLICATION

Heavy duty portable power cable for use in circuits not exceeding 2,000 volts. Designed for applications such as longwall shearers, continuous miners, loaders, drills, conveyors, pumps and mobile equipment where grounding conductors, a ground check conductor and metallic shielding are required. Recommended maximum continuous conductor temperature is 90°C. Suitable for shallow water submersion.

Cable carries "P-7K-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58.



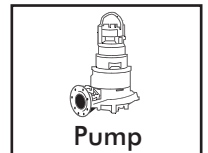
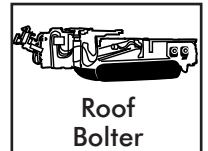
Ratings & Approvals

- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381 & CSA Standards C 22.2 #96.
- Canadian Standards Association File 82346, FT1, FT5, -50°C Type SHD-GC, SHD-BGC up to 25kV Type W, G, G-GC, G-BGC up to 2kV
- Canadian Standards Association Type SHD-GC FT4
- RETIE

36-503 • TYPE SHD-GC 3/C • 2000 VOLTS

36-503-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
006	6	133	70	10	49	155	1.29	1160	93
004	4	259	70	8	133	155	1.40	1490	122
002	2	259	70	6	133	170	1.59	2000	159
001	1	259	80	5	133	190	1.76	2450	184
010	1/0	266	80	4	259	190	1.86	2840	211
020	2/0	323	80	3	259	205	2.00	3400	243
030	3/0	418	80	2	259	205	2.13	3680	279
040	4/0	532	80	1	259	220	2.31	4860	321
250	250	627	95	1/0	266	220	2.51	5950	355
350	350	888	95	2/0	323	235	2.81	7400	435
500	500	1221	95	4/0	532	265	3.19	10100	536

Primary Usage Recommendation



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

¹ **Jacket** – Extra-Heavy-Duty (EHD) CPE jacket. Black is standard.
Colored EHD CPE jackets available upon request. See page 36.

² **Ground Check Conductor** – 10 AWG (minimum 49 strand 7x7) ground check conductor on 8 AWG through 2 AWG cable.

8 AWG (minimum 133 strand 7x19) ground check conductor on 1 AWG through 4/0 AWG cable.

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

Tolerances – ± 5% of nominal outside diameter

AWG/Metric Cross Reference

AWG/kcmil Size	Area of AWG/kcmil in mm ²	Nearest Standard Metric Cond. mm ²
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

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90



Tiger® Brand is a registered trademark of AmerCable Incorporated.



36-504

Type SHD-PCG • Longwall MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Control Group 3 Conductors

Flexible tinned copper
ethylene polypropylene rubber
insulation color coded black,
white, red and an overall
thermosetting jacket

Separator Tape

Non-conducting

Insulation Shielding

Tinned copper and
color-coded nylon braid

Ground Conductor

Flexible tinned copper
located in the center
of the cable

Jacket¹

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

Insulation

90°C ethylene-
propylene
rubber (EPR)

Tape

Non-conducting

Pure
Integral Fill
for greater
torsion
resistance

APPLICATION

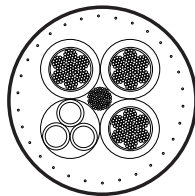
Heavy duty portable power cable designed for use on longwall shearers, where three shielded power conductors, three unshielded control conductors, and a grounding conductor are required. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-7K-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



See Page 36 for jacket
color options.



RATINGS & APPROVALS

- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.

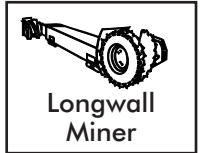
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381.

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-504 • TYPE SHD-PCG LONGWALL • 2000 VOLTS

36-504	Power Conductors		Grounding Conductors		Control Conductors		Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Size AWG	No. of Wires per Conductor	Size AWG	No. of Wires per Conductor			
020	2/0	323	2	246	8	133	2.23	3510	243
030	3/0	418	1	258	8	133	2.32	4075	279
040	4/0	532	1/0	426	6	133	2.67	4990	321

Primary Usage Recommendation



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

¹ Jacket – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request. See page 42.

Tolerances – ± 5% of nominal outside diameter



Factory Installed Cable Assemblies

See page 35 for more information.

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

AWG/Metric Cross Reference

AWG/kcmil Size	Area of AWG/kcmil in mm ²	Nearest Standard Metric Cond. mm ²
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





36-505

TYPE SHD-CGC 3/C

MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Ground Check Conductor²

Flexible tinned copper with yellow insulation located in the center of the cable

Insulation Shielding

Tinned copper and color-coded nylon braid

Insulation

90°C ethylene-propylene rubber (EPR)

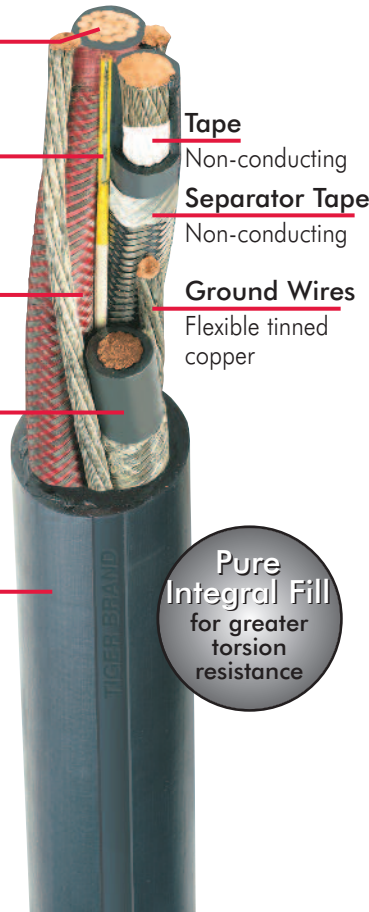
Jacket¹

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

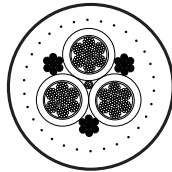
See Page 36 for jacket color options.

Also available with **Extra-Tough** Thermoplastic Polyurethane (TPU) jacket for extremely abrasive environments! See Pg. 36

See Page 37 for Tiger Stripe options



Pure Integral Fill for greater torsion resistance



APPLICATION

Heavy duty portable power cable for use in circuits not exceeding 2,000 volts. Designed for applications such as longwall shearers, continuous miners, loaders, drills, conveyors, pumps, and other mobile equipment requiring grounding conductors, where a ground check conductor, and metallic shielding are required. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-7K-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



RATINGS & APPROVALS

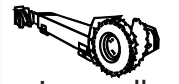
- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381 & CSA Standards C 22.2 #96.
- Canadian Standards Association File 82346, FT1, FT5, -50°C Type SHD-GC, SHD-BGC up to 25kV Type W, G, G-GC, G-BGC up to 2kV

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-505 • TYPE SHD-CGC 3/C • 2000 VOLTS

36-505-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
040	4/0	532	80	3	259	220	2.36	4860	321
350	350	888	95	1	259	250	2.81	7400	435

Primary Usage Recommendation



Longwall Miner



Continuous Miner

¹ **Jacket** – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request. See page 36.

² **Ground Check Conductor** – 16 AWG tinned copper conductor, designed to withstand extreme flexing and be extensible, insulated with yellow polypropylene

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

Tolerances – ± 5% of nominal outside diameter



Factory Installed Cable Assemblies

See page 35 for more information.

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

¹ Tables reproduced from standards publication ICEA-S-75-381, NEMA WC-58

AWG/Metric Cross Reference

AWG/kcmil Size	Area of AWG/kcmil in mm ²	Nearest Standard Metric Cond. mm ²
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





36-506

TYPE SHD-CGC 3/C

MOLD-CURED JACKET • 5000 VOLTS

Conductors

Flexible tinned copper

Ground Check Conductor²

Flexible tinned copper with yellow insulation located in the center of the cable

Insulation Shielding

Tinned copper and color-coded nylon braid

Insulation

90°C ethylene-propylene rubber (EPR)

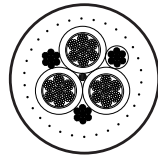
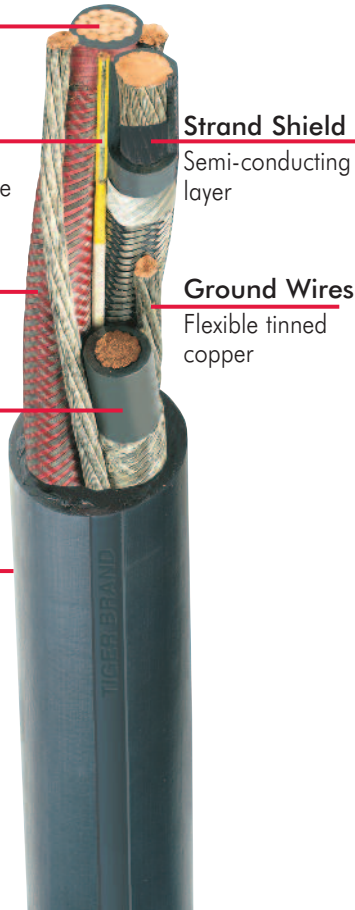
Jacket¹

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

See Page 36 for jacket color options.

Also available with **Extra-Tough** Thermoplastic Polyurethane (TPU) jacket for extremely abrasive environments! See Pg. 36

See Page 37 for Tiger Stripe options



APPLICATION

Heavy duty high voltage portable power cable for use in circuits not exceeding 5000 volts. Designed for applications such as longwall miners, continuous miners, conveyors, pumps, and other mobile equipment requiring grounding conductors, a ground check conductor, and metallic shielding overall. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-7K-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



RATINGS & APPROVALS

- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-7K-184.
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381 & CSA Standards C 22.2 #96.
- Canadian Standards Association File 82346, FT1, FT5, -50°C Type SHD-GC, SHD-BGC up to 25kV Type W, G, G-GC, G-BGC up to 2kV

36-506 • TYPE SHD-CGC 3/C • 5000 VOLTS

36-506-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
020	2/0	323	110	5	133	220	2.200	3716	243
030	3/0	418	110	4	259	235	2.360	4130	279
040	4/0	532	110	3	259	235	2.500	5190	321
350	350	888	120	1	259	265	2.950	7571	435

Primary Usage Recommendation



¹ **Jacket** – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request. See page 36.

² **Ground Check Conductor** – 16 AWG tinned copper conductor, designed to withstand extreme flexing and be extensible, insulated with yellow polypropylene.

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

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



Factory Installed Cable Assemblies

See page 35 for more information.

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

¹ Tables reproduced from standards publication ICEA-S-75-381, NEMA WC-58

AWG/Metric Cross Reference

AWG/ kcmil Size	Area of AWG/kcmil in mm ²	Nearest Standard Metric Cond. mm ²
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





36-510

TYPE SHD FLAT 3/C

MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Separator Tape

Insulation

90°C ethylene-propylene rubber (EPR)

Insulation Shielding

Tinned copper and textile braid

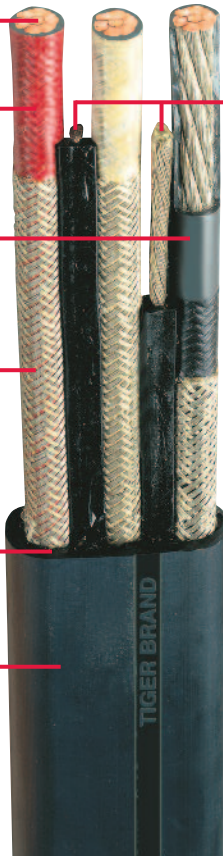
Reinforcement

Jacket¹

Mold-cured thermoset with cable identification via permanent marking.

Ground Wires

Flexible tinned copper covered with semi-conductive thermoset compound



APPLICATION

Heavy duty portable power cable for use in circuits not exceeding 2,000 volts. Especially designed for use on continuous miners requiring grounding conductors and metallic shielding over each conductor. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



RATINGS & APPROVALS

- Mine Safety & Health Administration 184-MSHA.
- Insulated Cable Engineers Association S-75-381. Design standard for mining cables.

- Pennsylvania Department of Environmental Protection P-184.

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-510 • TYPE SHD FLAT 3/C • 2000 VOLTS

36-510-	Power Conductors			Grounding Conductors		Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor			
020	2/0	329 7x47	80	3	204 6x34	1.205 x 2.970	3600	243

Primary Usage Recommendation



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

¹ Jacket – Extra-Heavy-Duty black neoprene is standard.

Tolerances – ± 0.050 inch minor dimension
± 0.080 inch major dimension

AWG/Metric Cross Reference

AWG/ kcmil Size	Area of AWG/kcmil in mm ²	Nearest Standard Metric Cond. mm ²
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

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

¹Tables reproduced from standards publication ICEA-S-75-381, NEMA WC-58





36-515

TYPE SHD-GC 3/C

MOLD-CURED JACKET • 5000 VOLTS

Conductors

Flexible tinned copper

Ground Check Conductor²

Flexible tinned copper with yellow polypropylene insulation

Strand Shield

Semi-conducting layer

Ground Wires

Flexible tinned copper

Insulation

90°C ethylene-propylene rubber (EPR)

Separator Tape

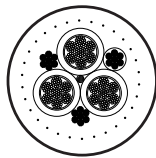
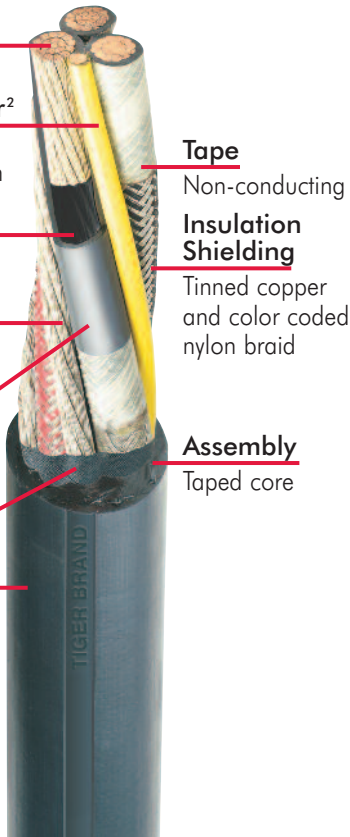
Jacket¹

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

See Page 36 for jacket color options.

Also available with **Extra-Tough** Thermoplastic Polyurethane (TPU) jacket for extremely abrasive environments! See Pg. 36

See Page 37 for Tiger Stripe options



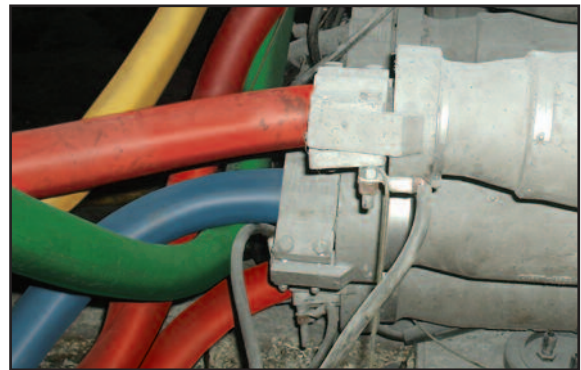
APPLICATION

Heavy duty portable power cable for use in circuits not exceeding 5,000 volts (see next page for continuous miner circuit requirements exceeding 2000 volts). Designed for applications such as longwall shearers, continuous miners and mobile equipment such as shovels, dredges and drills. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-7K-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58.

Tiger® Brand Cable meets or exceeds ASTM B-172 and B-33. Suitable for shallow water submersion.



Tiger® Brand cables come in six colors for safer, easier circuit identification. See page 42 for details.

RATINGS & APPROVALS

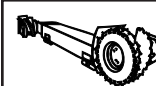
- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-7K-184.
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381 & CSA Standards C 22.2 #96.
- Canadian Standards Association File 82346, FT1, FT5, -50°C Type SHD-GC, SHD-BGC up to 25kV Type W, G, G-GC, G-BGC up to 2kV
- Canadian Standards Association Type SHD-GC FT4
- RETIE

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-515 • TYPE SHD-GC 3/C • 5000 VOLTS

36-515-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
006	6	133	110	10	49	185	1.56	1560	93
004	4	259	110	8	133	185	1.68	1920	122
002	2	259	110	6	133	205	1.87	2500	159
001	1	259	110	5	133	205	1.95	2860	184
010	1/0	266	110	4	259	220	2.08	3390	211
020	2/0	323	110	3	259	220	2.20	3830	243
030	3/0	418	110	2	259	235	2.36	4418	279
040	4/0	532	110	1	259	235	2.50	5300	321
250	250	627	120	1/0	266	250	2.69	6450	355
350	350	888	120	2/0	323	265	2.95	7880	435
500	500	1221	120	4/0	532	280	3.31	10440	536

Primary Usage Recommendation



Longwall Miner



Continuous Miner

¹ **Jacket** – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request. See page 36.

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.

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

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

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

¹Tables reproduced from standards publication ICEA-S-75-381, NEMA WC-58

See Page 21 for AWG/Metric Cross Reference

2300V CONTINUOUS MINER

APPLICATIONS

Extra heavy duty orange/green jacketed portable power cable for use in continuous miner circuits exceeding 2,000 volts.

Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-7K-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58.





36-516

TYPE SHD-PCG • LONGWALL

MOLD-CURED JACKET • 5000 VOLTS

Conductors

Flexible tinned copper

Control Group 3 Conductors

Flexible tinned copper
ethylene polypropylene rubber
insulation color coded black,
white, red and an overall
thermosetting jacket

Separator Tape

Non-conducting

Insulation Shielding

Tinned copper and
color-coded nylon braid

Ground Conductor

Flexible tinned copper
located in the center
of the cable

Jacket¹

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

Insulation

90°C ethylene-
propylene
rubber (EPR)

Tape

Non-conducting

Strand Shield

Semi-conducting
layer

Pure
Integral Fill
for greater
torsion
resistance

APPLICATION

Heavy duty portable power cable designed for use on longwall shearers, where three shielded power conductors, three unshielded control conductors, and a grounding conductor are required. Recommended maximum continuous conductor temperature is 90°C.

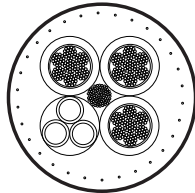
Cable carries "P-7K-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



Photo courtesy 20 Mile Coal Mine

See Page 36 for jacket
color options.



RATINGS & APPROVALS

- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-7K-184.
- Tiger® Brand Mining Cables meet or exceed ICEA Standards S-75-381.

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-516 • TYPE SHD-PCG 3/C • 5000 VOLTS

36-516-	Power Conductors		Grounding Conductors		Control Conductors		Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Size AWG	No. of Wires per Conductor	Size AWG	No. of Wires per Conductor			
002	2	259	4	168	8	133	2.03	2769	159
010	1/0	266	3	222	8	133	2.27	3571	211
020	2/0	323	2	246	8	133	2.45	3774	243
030	3/0	418	1	259	8	133	2.58	4752	279
040	4/0	532	1/0	426	6	133	2.76	6030	321

Primary Usage Recommendation



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

¹ Jacket – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request. See page 36.

Tolerances – +8%-5% of nominal outside diameter



Factory Installed Cable Assemblies

See page 35 for more information.

Correction Factors

For ampacities for various ambient temperatures above or below 40°C.¹

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

¹Tables reproduced from standards publication ICEA-S-75-381, NEMA WC-58

AWG/Metric Cross Reference

AWG/kcmil Size	Area of AWG/kcmil in mm ²	Nearest Standard Metric Cond. mm ²
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





36-601/602/604

TYPE MP-GC 3/C

MINE POWER FEEDER • MOLD-CURED JACKET
100% LEVEL (GROUNDED)

Conductors

Copper

Ground Check Conductor

8 AWG 7-wire copper with
yellow polypropylene insulation

Strand Shield

Semi-conducting layer

Insulation

90°C ethylene-propylene
rubber (EPR)

Ground Wires

Tinned copper

Insulation Shielding

Semi-conducting
layer under
copper tape
(phase
identification
provided)

Assembly

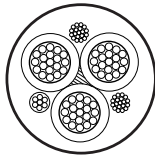
Taped core

Jacket¹

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

See Page 36 for jacket
color options.

Available
in 25kV &
35kV



APPLICATION

Connections between units of mine distribution systems not exceeding the rated voltage when installed in duct, conduit or open air and for direct burial in wet and dry locations. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-7K-184096-MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-8 and B-33.



Cable may be suspended vertically by using a messenger and special mechanical connectors.

RATINGS & APPROVALS

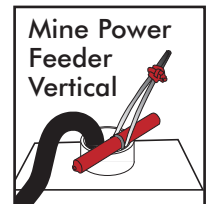
- Mine Safety & Health Administration.
- Pennsylvania Department of Environmental Protection.
- Insulated Cable Engineers Association S-75-381.
- Canadian Standards Association C22.2 #96.1, File 82346, FT5, -35°C Type MP-GC, MPF up to 35kV
- RETIE

Tiger® Brand is a registered trademark of AmerCable Incorporated.

5000 VOLTS • 36-601 • TYPE MP-GC 3/C

36-601-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
004	4	7	90	8	7	110	1.42	1441	122
002	2	7	90	6	7	110	1.56	1827	159
001	1	19	90	5	7	110	1.65	2168	184
010	1/0	19	90	4	7	110	1.76	2602	211
020	2/0	19	90	3	7	110	1.88	3010	243
040	4/0	19	90	1	19	140	2.14	4190	321
250	250	37	90	1/0	19	140	2.23	4825	355
350	350	37	90	2/0	19	140	2.47	6062	435
500	500	37	90	4/0	19	140	2.70	8427	536

Primary Usage Recommendation



Note:
Cable may be suspended vertically by using a messenger and special mechanical connectors.

8000 VOLTS • 36-602 • TYPE MP-GC 3/C

36-602-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
004	4	7	115	8	7	110	1.54	1608	122
002	2	7	115	6	7	110	1.66	1919	159
001	1	19	115	5	7	110	1.78	2507	184
010	1/0	19	115	4	7	110	1.89	2660	211
020	2/0	19	115	3	7	110	2.03	3257	243
040	4/0	19	115	1	19	140	2.28	4382	321
250	250	37	115	1/0	19	140	2.31	4965	355
350	350	37	115	2/0	19	140	2.58	6484	435
500	500	37	115	4/0	19	140	2.88	8857	536

15000 VOLTS • 36-604 • TYPE MP-GC 3/C

36-604-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
002	2	7	175	6	7	110	1.98	2517	164
001	1	19	175	5	7	110	2.11	3023	187
010	1/0	19	175	4	7	110	2.18	3296	215
020	2/0	19	175	3	7	110	2.30	3679	246
040	4/0	19	175	1	19	140	2.54	5146	325
250	250	37	175	1/0	19	140	2.61	5618	359
350	350	37	175	2/0	19	140	2.80	7055	438
500	500	37	175	4/0	19	170	3.15	9405	536

¹ Jacket – CPE jacket. Black is standard. Colored CPE jackets available upon request. See page 42.

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

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





36-621/622/624

TYPE MP-GC 3/C MINE POWER FEEDER

PVC JACKET • 100% LEVEL (GROUNDED)

Conductors

Copper

Ground Check Conductor

8 AWG 7-wire copper with yellow polypropylene insulation

Strand Shield

Semi-conducting layer

Insulation

90°C cross-linked polyethylene

Fillers

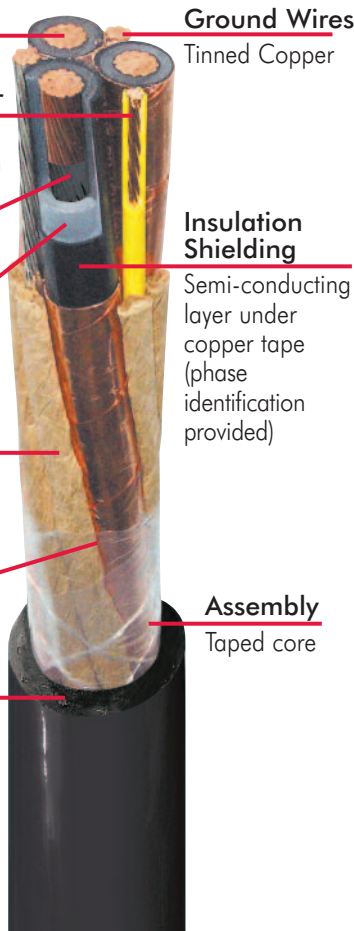
Binder Tape

Jacket¹

Polyvinyl chloride (PVC), cable identification via permanent surface marking.

PVC jacket color options are the same as CPE. See Page 36

Available
in 25kV



Ground Wires

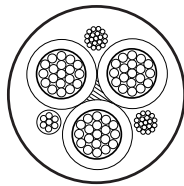
Tinned Copper

Insulation Shielding

Semi-conducting layer under copper tape (phase identification provided)

Assembly

Taped core



APPLICATION

Connections between units of mine distribution systems not exceeding the rated voltage when installed in duct, conduit or open air. For direct burial in wet and dry locations. Recommended maximum continuous conductor temperature is 90°C.

Cable carries "P-07-KA130008 MSHA" marking indicating listing by the Mine Safety and Health Administration and the Pennsylvania Department of Environmental Protection.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-8 and B-33.



970' vertical single-messenger MPF borehole installation.

RATINGS & APPROVALS

- Mine Safety & Health Administration.
- Pennsylvania Department of Environmental Protection.
- Insulated Cable Engineers Association S-75-381 up to 25kV.
- Canadian Standards Association C22.2 #96, File 82346, FT5, -35°C
Type MP-GC, MPF up to 25kV
- RETIE

Tiger® Brand is a registered trademark of AmerCable Incorporated.

5000 VOLTS • 36-621 • TYPE MP-GC 3/C

36-621-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
004	4	7	90	8	7	110	1.42	1224	122
002	2	7	90	6	7	110	1.56	1653	159
001	1	19	90	5	7	110	1.65	1950	184
010	1/0	19	90	4	7	110	1.76	2200	211
020	2/0	19	90	3	7	110	1.88	2721	243
040	4/0	19	90	1	19	140	2.14	3845	321
250	250	37	90	1/0	19	140	2.23	4321	355
350	350	37	90	2/0	19	140	2.47	5652	435
500	500	37	90	4/0	19	140	2.70	7721	536

Primary Usage Recommendation



8000 VOLTS • 36-622 • TYPE MP-GC 3/C

36-622-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
004	4	7	115	8	7	110	1.54	1366	122
002	2	7	115	6	7	110	1.66	1727	159
001	1	19	115	5	7	110	1.78	2174	184
010	1/0	19	115	4	7	140	1.89	2656	211
020	2/0	19	115	3	7	140	2.03	2895	243
040	4/0	19	115	1	19	140	2.28	3983	321
250	250	37	115	1/0	19	140	2.31	4484	355
350	350	37	115	2/0	19	140	2.58	5827	435
500	500	37	115	4/0	19	140	2.88	7893	536

15000 VOLTS • 36-624 • TYPE MP-GC 3/C

36-624-	Power Conductors			Grounding Conductors		Jacket Thickness mils	Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Insulation Thickness mils	Size AWG	No. of Wires per Conductor				
002	2	7	175	6	7	140	1.98	2021	164
001	1	19	175	5	7	140	2.11	2503	187
010	1/0	19	175	4	7	140	2.18	2658	215
020	2/0	19	175	3	7	140	2.30	3066	246
040	4/0	19	175	1	19	140	2.54	4369	325
250	250	37	175	1/0	19	140	2.61	4875	359
350	350	37	175	2/0	19	140	2.80	6412	438
500	500	37	175	4/0	19	170	3.15	8610	536

¹ Jacket – PVC

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

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





36-202-018

LONGWALL SIGNAL CABLE

2- 9 CONDUCTORS • 50 VOLTS

Power Conductors

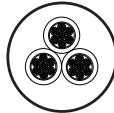
Extra flexible stranded
per ASTM B-174

Insulation

Chemically
cross-linked,
non-chlorinated
thermosetting,
flame retardant
polyolefin

Jacket

Thermoplastic
Polyurethane (TPU).
Black - standard
Orange - optional



COMPOSITE FIBER OPTIC SIGNAL CABLES

Nexans AmerCable has a unique
composite Signal Cable design in
which any MSHA approved fiber
optic may be added. These products
are cabled for optimum data
signaling and performance.



RATINGS & APPROVALS

- 90°C Temperature Rating
- Tiger® Brand Mining Cables materials meet or exceed industry specifications
- Mine Safety and Health Administration
07-KA - - MSHA
- Pennsylvania Department of Environmental
Protection P-07-KA

APPLICATION

A flexible signal cable for use in Longwall and other underground
mining applications. The TPU jacket provides extra-tough physical
characteristics needed in the underground mining environment.
Cable is available with full copper braid shielding upon request.

Part Number 36-	Size AWG	Number of Conductors	Diameter Over Insulation (Inches)	Overall Diameter (Inches)	Weight (lbs./ft.)
202-018	18	2	0.115	0.440	0.087
203-018	18	3	0.115	0.460	0.100
204-018	18	4	0.115	0.490	0.117
205-018	18	5	0.115	0.520	0.136
206-018	18	6	0.115	0.560	0.156
207-018	18	7	0.115	0.560	0.163
208-018	18	8	0.115	0.630	0.197
209-018	18	9	0.115	0.660	0.215
202-016	16	2	0.125	0.460	0.099
203-016	16	3	0.125	0.480	0.114
204-016	16	4	0.125	0.510	0.133
205-016	16	5	0.125	0.550	0.158
206-016	16	6	0.125	0.590	0.183
207-016	16	7	0.125	0.590	0.190
208-016	16	8	0.125	0.660	0.225
209-016	16	9	0.125	0.690	0.247
202-014	14	2	0.140	0.490	0.118
203-014	14	3	0.140	0.510	0.138
204-014	14	4	0.140	0.550	0.166
205-014	14	5	0.140	0.590	0.196
206-014	14	6	0.140	0.630	0.225
207-014	14	7	0.140	0.630	0.238
208-014	14	8	0.140	0.710	0.278
209-014	14	9	0.140	0.750	0.300
209-012	12	2	0.160	0.526	0.148
209-012	12	3	0.160	0.555	0.177
209-012	12	4	0.160	0.596	0.213
209-012	12	5	0.160	0.642	0.254
209-012	12	6	0.160	0.690	0.297
209-012	12	7	0.160	0.690	0.316
209-012	12	8	0.160	0.770	0.388
209-012	12	9	0.160	0.815	0.426
209-010	10	2	0.180	0.570	0.186
209-010	10	3	0.180	0.598	0.226
209-010	10	4	0.180	0.645	0.276
209-010	10	5	0.180	0.696	0.331
209-010	10	6	0.180	0.750	0.391
209-010	10	7	0.180	0.750	0.462
209-010	10	8	0.180	0.835	0.519
209-010	10	9	0.180	0.875	0.626

Tolerances – ± 5% of nominal outside diameter

UNDERGROUND LIGHTING CABLE**2- 9 CONDUCTORS • 110 VOLTS****Power Conductors**Extra flexible stranded
per ASTM B-174**Insulation**Chemically
cross-linked,
non-chlorinated
thermosetting,
flame retardant
polyolefin
**Colors
Available:**
Black (standard)
Orange (optional)
JacketThermoplastic
Polyurethane
(TPU)
**ALSO AVAILABLE WITH
CRUSH & IMPACT RESISTANT
(CIR®) JACKET (No External Armor)**

- MSHA approved
- 600V
- Up to 7 conductors
- Highly flexible

RATINGS

- 90°C Temperature Rating
- Tiger® Brand Mining Cables materials meet or exceed industry specifications

APPLICATION

A flexible insulated cable for use in mine lighting systems. The TPU jacket provides extra-tough physical characteristics needed in the underground mining environment. Cable is available with full copper braid shielding upon request.

Part Number 36-	Size AWG	Number of Conductors	Diameter Over Insulation (Inches)	Overall Diameter (Inches)	Weight (lbs./ft.)
202-118	18	2	0.115	0.440	0.087
203-118	18	3	0.115	0.460	0.100
204-118	18	4	0.115	0.488	0.116
205-118	18	5	0.115	0.520	0.135
206-118	18	6	0.115	0.560	0.156
207-118	18	7	0.115	0.560	0.163
208-118	18	8	0.115	0.640	0.198
209-118	18	9	0.115	0.660	0.215
202-116	16	2	0.125	0.460	0.106
203-116	16	3	0.125	0.480	0.114
204-116	16	4	0.125	0.512	0.134
205-116	16	5	0.125	0.550	0.158
206-116	16	6	0.125	0.590	0.183
207-116	16	7	0.125	0.590	0.191
208-116	16	8	0.125	0.670	0.225
209-116	16	9	0.125	0.690	0.247
202-114	14	2	0.140	0.490	0.119
203-114	14	3	0.140	0.510	0.138
204-114	14	4	0.140	0.550	0.166
205-114	14	5	0.140	0.588	0.195
206-114	14	6	0.140	0.630	0.225
207-114	14	7	0.140	0.630	0.238
208-114	14	8	0.140	0.720	0.278
209-114	14	9	0.140	0.755	0.302
202-112	12	2	0.160	0.526	0.148
203-112	12	3	0.160	0.555	0.177
204-112	12	4	0.160	0.596	0.213
205-112	12	5	0.160	0.642	0.254
206-112	12	6	0.160	0.690	0.297
207-112	12	7	0.160	0.690	0.316
208-112	12	8	0.160	0.770	0.388
209-112	12	9	0.160	0.815	0.426
202-110	10	2	0.180	0.570	0.186
203-110	10	3	0.180	0.598	0.226
204-110	10	4	0.180	0.645	0.276
205-110	10	5	0.180	0.698	0.331
206-110	10	6	0.180	0.750	0.401
207-110	10	7	0.180	0.750	0.462
208-110	10	8	0.180	0.835	0.519
209-110	10	9	0.180	0.875	0.626

Tolerances – ± 5% of nominal outside diameter



37-119

FLEXIBLE POWER CABLE • DLO

EP/CPE • RHH, RHW-2 • 2000 VOLTS

Conductor

Flexible-stranded,
tin-coated annealed
copper

Separator

Suitable separator tape
provides easy stripping
of insulation

Insulation

Ethylene-Propylene
rubber (EPR)

Jacket

Flame retardant,
oil and sunlight
retardant thermoset
Chlorinated
Polyethylene (CPE)

See Page 36
for jacket
color options.



**Extremely flexible stranding
for increased overall cable
flexibility and ease of installation**

APPLICATION

Nexans AmerCable's 2000V Diesel Locomotive Cable (DLO) is a single conductor portable power cable suitable for use in applications needing great flexibility and excellent durability. Applications include motor and generator leads, battery leads, shipyards, telecommunications power, heavy earth moving equipment and renewable energy applications.

FEATURES

- A two layer composite of flame retardant, oil and sunlight resistant Chlorinated Polyethylene (CPE) outer layer and Ethylene-Propylene rubber (EPR) inner layer. Composite design provides significant diameter reductions compared to designs using full thickness jackets.
- Suitable for continuous operating temperatures of 90°C, wet or dry
- Rated RHH, RHW-2; 2/0 – 1111 kcmil listed and marked "for CT use"
- UL listed as Sunlight Resistant
- UL listed as Marine Shipboard Cable (4/0 and larger) *Special order only*
- Insulation and jacket meet hazardous waste regulations, per Code of Federal Regulations 40 Section 261 (40CFR261) for characteristic lead content
- Flame Resistance: FT-4/IEEE1202 for 2/0 1111 kcmil and UL VW-1
- Meets smoke release and other requirements of Vertical Cable Tray Test UL 1685 and is marked "ST-1" for 2/0 – 1111 kcmil

RATINGS & APPROVALS

- UL Standard 44: Thermoset Insulated Wires & Cables, Types RHH, RHW-2. UL VW-1.
- UL Standard 1685: Vertical Tray Fire propagation and Smoke Release Test for Electrical and optical Fiber Cables. (UL, LS)
- AAR 591 Wire and Cable Insulating Material: Strand Construction except 3/0 and 4/0.
- ASTM B-33: Standard Specification for Tinned Soft or Annealed Copper Wire for Electrical Purposes.
- ASTM B-172: Standard Specification for Rope-Lay-Stranded Copper Conductors having Bunch-Stranded Members, for Electrical Conductors.
- MSHA P-184

37-119 • PORTABLE POWER CABLE • 2000 VOLTS

Part No. 37-119-	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
201	14	19	0.045	0.015	0.214	31	35
202	12	19	0.045	0.015	0.233	41	40
203	10	27	0.045	0.015	0.257	58	55
204	8	37	0.055	0.030	0.326	86	80
205	6	61	0.055	0.030	0.365	124	105
207	4	105	0.055	0.030	0.460	198	140
209	2	147	0.055	0.030	0.498	261	190
210	1	224	0.065	0.045	0.618	400	220
211	1/0	266	0.065	0.045	0.664	468	260
212	2/0	323	0.065	0.045	0.704	561	300
213	3/0	418	0.065	0.045	0.789	725	350
214	4/0	532	0.065	0.045	0.839	888	405
215	262	646	0.075	0.065	0.973	1048	467
216	313	777	0.075	0.065	1.029	1227	522
217	373	925	0.075	0.065	1.094	1436	591
218	444	1110	0.075	0.065	1.169	1691	652
219	535	1332	0.090	0.065	1.295	2034	728
220	646	1591	0.090	0.065	1.368	2395	815
221	777	1924	0.090	0.065	1.488	2837	904
222	929	2318	0.090	0.065	1.583	3448	1005
223	1111	2745	0.130	0.065	1.707	4156	1119

*Ampacity – Calculated with at 90°C conductor temperature and 30°C ambient air, per 2002 NEC, Table 310-17

- Cable diameters are subject to +/-5% manufacturing tolerance
- Sizes above 1000 kcmil are not UL listed





36-501

VFD POWER CABLE

**SHIELDED • 2000 VOLTS • 3 CONDUCTORS + 3
GROUNDS + GROUND CHECK(S)**

Ground Conductors (x3)

Flexible tinned rope stranded conductors per ASTM-B-172 and B-33, Insulated and colored green

Insulation

Type II EPDM (EPR) suitable for continuous operation at 90°C. Ozone resistant.

Shield

Overall tinned copper braid plus aluminum/polyester tape providing 100% coverage

Jacket

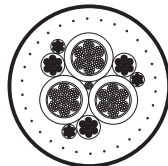
Reinforced mold-cured thermosetting Chlorinated Polyethylene (CPE) Jacket. Cable identification via permanent marking.

Power Conductor

Extra flexible tinned rope stranded conductors per ASTM-172 and B-33

Ground Check¹ Wire(s) Optional

Flexible tinned copper with yellow insulation. Center ground check available



Round-shaped cross-section

See Page 36 for jacket color options.

APPLICATION

A flexible, braid and foil shielded, 2kV power cable specifically engineered for use in variable frequency AC motor drive (VFD) applications.

Cable carries "P-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Mining Cable materials meet or exceed ICEA Standard S-75-381/NEMA WC-58 for Type SHC constructions. ASTM B-172 and B-33.

RATINGS & APPROVALS

- 90°C Temperature Rating
- Tiger® Brand Mining Cable materials meet or exceed ICEA Standard S-75-381/NEMA WC-58.
- Mine Safety & Health Administration 7K-184-MSHA.
- Pennsylvania Department of Environmental Protection P-7K-184.
- Canadian Standards Association File 82346 2kV CSA Phase Color ID available on MTO

Part No. 36-501-	Power Conductor Size AWG/ kcmil	Grounding Conductors Size AWG ¹	Nominal Jacket Thickness in.	Nominal Diameter in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 90°C
002	2	8	0.155	1.43	1790	159
001	1	7	0.170	1.64	2150	184
010	1/0	6	0.170	1.74	2550	211
020	2/0	5	0.190	1.89	3100	243
030	3/0	4	0.190	2.01	4050	279
040	4/0	3	0.220	2.17	4390	321
250	250	3	0.220	2.40	5950	355
350	350	1	0.220	2.68	7840	405
500	500	1	0.265	3.03	9730	536

• Tolerance = +/- 5% of nominal outside diameter.

¹ Ground Check Conductor – #16 AWG extensible strand for center ground check.

#14 AWG is the minimum size for non-center ground check wires

*Ampacity Ratings – based on continuous duty at 90°C conductor temperature

CORRECTION FACTORS

For ampacities for various ambient temperatures above or below 40°C.

Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

SAFETY, TRAINING & EDUCATION

MineCable-Safe is an investment in **Safety** and **Productivity** that brings the knowledge and experience of our field engineers to your mine. High voltage cables require special handling to get maximum service life and keep personnel safe. **Can you identify the difference between a productivity problem and a safety issue?**

Our experts can. We deliver a highly-valuable report that clearly identifies safety and productivity issues. The report includes recommendations on how to deploy, move and utilize cables more safely and to make your mine more productive. Follow-up can also include training sessions and engineered solutions.



FIELD TECHNICAL SUPPORT

Safety and maximized cable productivity are Nexans AmerCable's top priorities for our customers.



Surface or underground – 24/7 – all shifts – Nexans AmerCable's mine-experienced field reps are ready to provide on-site cable evaluation, safe handling training and innovative productivity solutions.

CABLE SPLICING TRAINING

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



FACTORY INSTALLED CABLE ASSEMBLIES

Factory Installed Cable Assemblies from Nexans AmerCable are professionally assembled in our El Dorado, Arkansas manufacturing facility. Our team of experienced handlers join cables and connectors that match your exact specifications. Our assemblies are designed to perform in your harshest operating conditions.

Factory prepared cable assemblies or terminations are a reliable way to lower your overall cable connectivity costs through enhanced reliability, reduced handling and lower installation time.



Constructions

- 2 – 25kV
- Stress Cones & fill
- ID Labeling
- Pothead Assemblies

Applications

- Surface Mining
- Underground Mining
- Reeling



Lower
Overall
Cost
Enhanced
Reliability
Reduced
Installation
Time

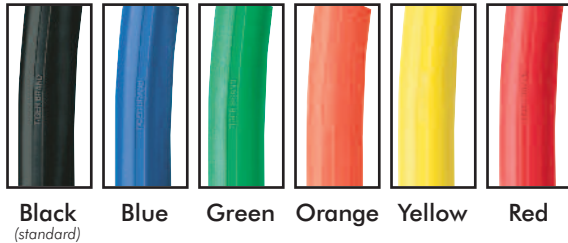


JACKET MATERIALS & COLOR OPTIONS

Nexans AmerCable CPE Jackets

Nexans AmerCable's thermoset Chlorinated Polyethylene jacket provides the physical performance and strength needed to resist wear, tear, abrasion and compression cuts caused by everyday mining use.

This tough, durable jacket is a proven performer in mines throughout the world. Nexans AmerCable's engineered cable construction includes a taped-core, integral fill and tandem extrusion of the jacket layers. Two-pass jackets, extruded in tandem, yield an inseparable bond between the layers. Integral filling of the cable core reduces torsion-induced damage.



Colored jackets maintain physical properties equal to the standard black jacket.

Nexans AmerCable TPU Jackets

For extremely abrasive environments, AmerCable's Thermoplastic Polyurethane (TPU) jacket provides the **extra-tough** physical characteristics needed in the roughest mining environments.

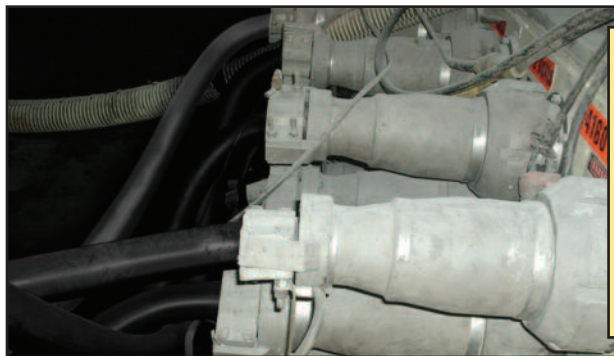
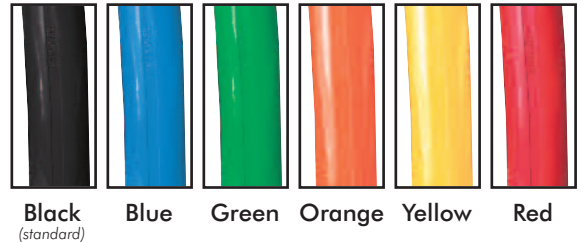
Compared to Nexans AmerCable's standard CPE jacketing material, TPU provides:

5X more abrasion resistance

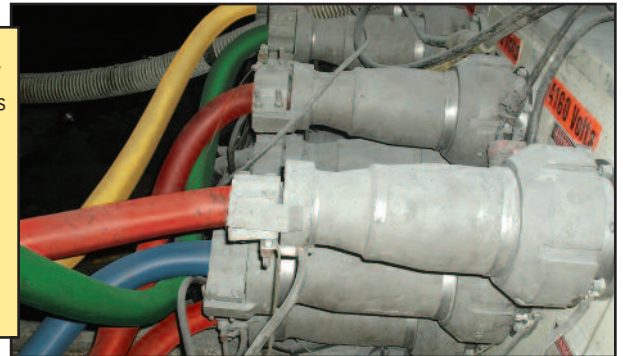
2X more tear resistance

2X more tensile strength

Up to
8% Less
Jacket
Weight

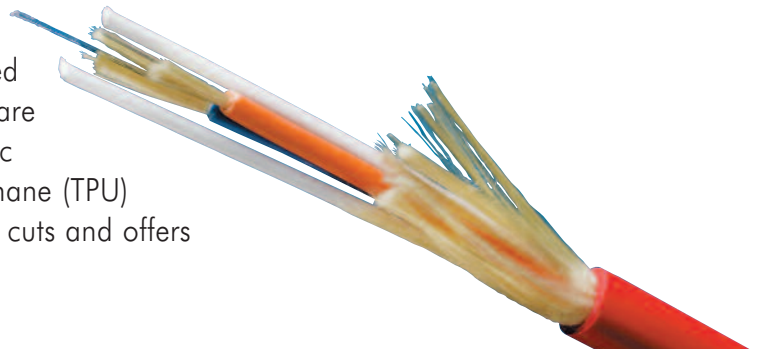


These brightly colored cables can improve mine safety by providing easy circuit identification.



COMPOSITE SIGNAL CABLE

Nexans AmerCable has a unique composite Signal Cable design in which any MSHA approved fiber optic cable may be added. These products are cabled for optimum data signaling and fiber optic performance. The overall Thermoplastic Polyurethane (TPU) jacket has the highest resistance to abrasion and cuts and offers excellent protection for the fiber.

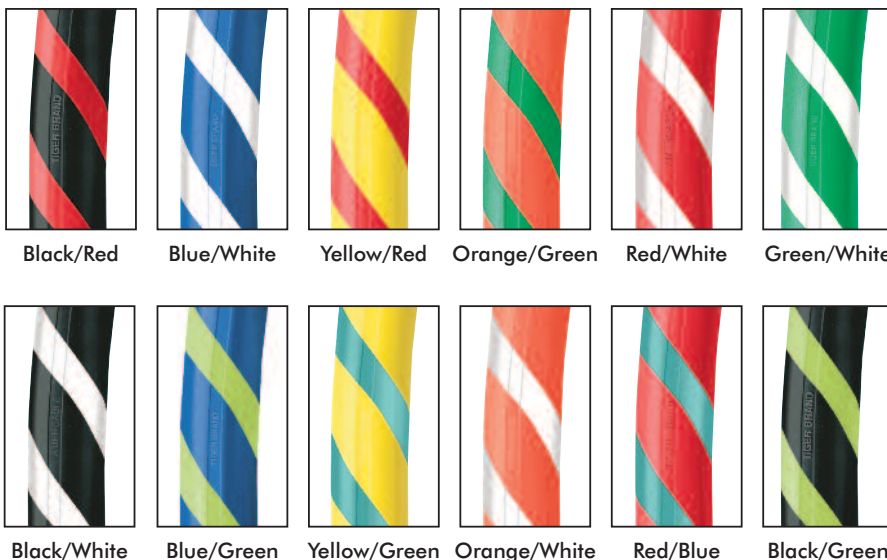


TIGER STRIPES – STANDARD



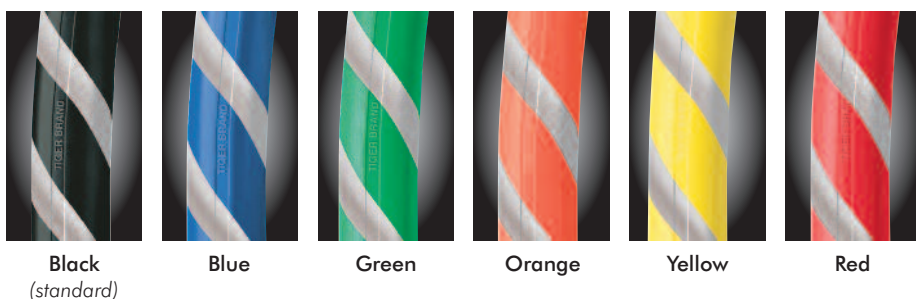
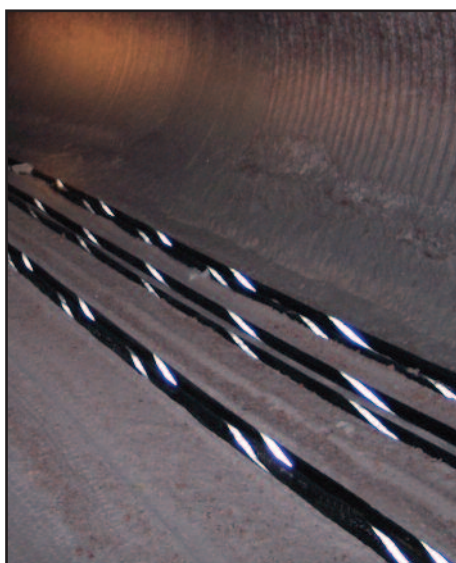
Nexans AmerCable's standard **Tiger Stripes** provide additional color combinations by vulcanizing a contrasting colored stripe into the jacket of our round CPE cables.

Shown below are a few examples of the many possible jacket / stripe combinations.



Consult with your Nexans AmerCable rep or the factory for a complete list of available stripe options.

TIGER STRIPES – REFLECTIVE



Nexans AmerCable's reflective **Tiger Stripes** can extend cable life by reducing run-overs in low visibility situations and **improve mine safety** by providing easier visual circuit identification.

- Increased safety for personnel through easier circuit identification
- Available on CPE round jacketed cables only.

Safety
through easier
circuit
identification

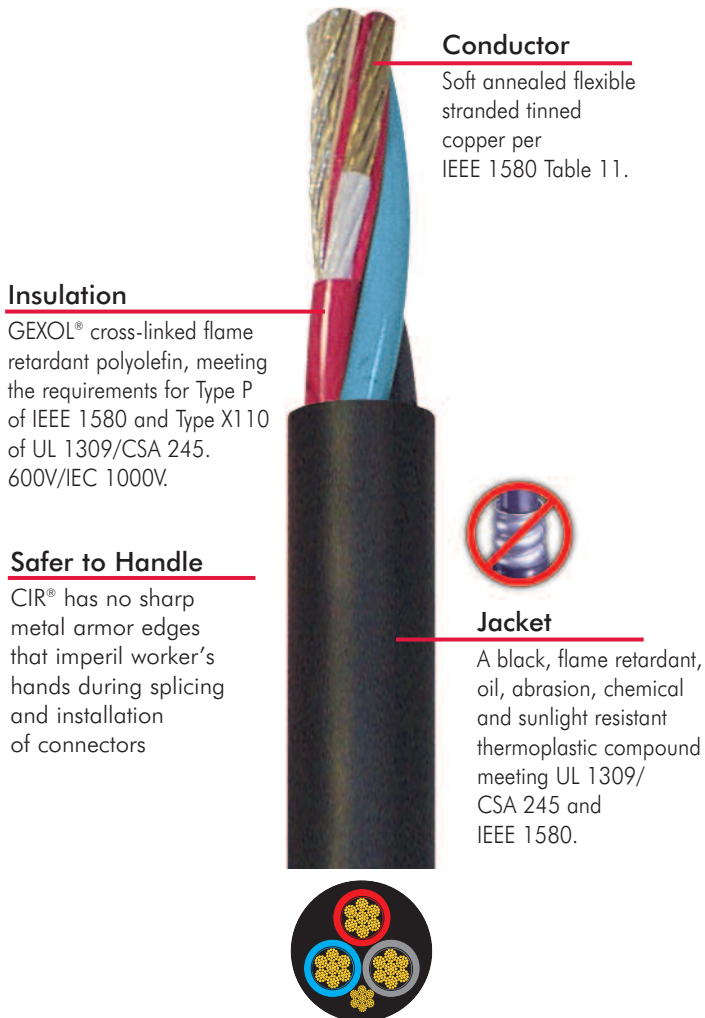
Assign to specific
equipment to
make visual
inventory simpler

Available only
on round CPE
jacketed cables

CIR® POWER CABLE (CRUSH & IMPACT RESISTANT)

THREE & FOUR CONDUCTOR + GROUND

UL LISTED AS TYPE TC-ER • 0.6/1KV • RATED 90°C



APPLICATION

Designed and constructed as a flexible alternative to Type MC cable where application requires crush and impact protection.

FEATURES

- MSHA approved
- Passes the same stringent crush and impact testing required by UL 2225 for Type MC-HL
- Gas & vapor tight – impervious to water and air
- Smaller bend radius (up to 40% smaller) than Type MC
- Reduced tray fill (up to 35% less) compared to Type MC
- Considerably more flexible than Type MC
- Reduced installation time and cost compared to Type MC
- Glands for this product cost up to 50% LESS than those for Type MC

RATINGS & APPROVALS

- 90°C temperature rating
- UL Listed as Type TC-ER (E123629)
- MSHA Approved
- Flame Retardant – IEEE 1202
- Suitable for use in Class I, Div 2 and Zone 2 environments
- Sunlight resistant
- Direct burial

ALSO AVAILABLE:
UL Listed Type TC-ER-HL
(Cables Up to 1" Diameter)



37-102 CIR • CIR POWER CABLE

Conductor Size		Number of Conductors	Grounding Conductor AWG/kcmil	Part No. 37-102	Nominal Diameter (inches)	Weight (lbs/1000 ft.)	90°C NEC Ampacity	75°C NEC Ampacity	DC Resistance at 25°C Ampacity	AC Resistance at 90°C, 60Hz (ohms/1000 ft.)	Inductive Reactance (ohms/1000 ft.)	Voltage Drop (Volts/Amp/1000 ft.)
AWG/kcmil	mm2											
14	2.1	3	14	-508CIRG	0.500	161	15	15	2.91	3.64	0.04	5.069
14	2.1	4	14	-509CIRG	0.525	187	15	15	2.91	3.64	0.04	5.072
12	3.3	3	12	-516CIRG	0.537	210	20	20	1.83	2.28	0.03	3.195
12	3.3	4	12	-517CIRG	0.580	246	20	20	1.83	2.28	0.04	3.198
10	5.2	3	10	-308CIRG	0.580	277	30	30	1.15	1.44	0.03	2.028
10	5.2	4	10	-408CIRG	0.728	367	30	28	1.15	1.44	0.03	2.031
8	7.6	3	10	-309CIRG	0.760	431	55	50	0.708	0.885	0.034	1.261
8	7.6	4	10	-409CIRG	0.821	513	44	40	0.708	0.885	0.037	1.263
6	12.5	3	8	-310CIRG	0.860	585	75	65	0.445	0.556	0.032	0.803
6	12.5	4	8	-410CIRG	0.915	705	60	52	0.445	0.556	0.035	0.806
4	21	3	6	-312CIRG	0.944	774	95	85	0.300	0.376	0.029	0.550
4	21	4	6	-412CIRG	1.039	956	76	68	0.300	0.376	0.032	0.553
2	34	3	6	-314CIRG	1.094	1105	130	115	0.184	0.230	0.028	0.347
2	34	4	6	-414CIRG	1.203	1381	104	92	0.184	0.230	0.030	0.350
1/0	54	3	6	-316CIRG	1.331	1669	170	150	0.117	0.147	0.028	0.232
1/0	54	4	6	-416CIRG	1.475	2107	136	120	0.117	0.147	0.030	0.235
2/0	70	3	4	-317CIRG	1.445	2062	195	175	0.0929	0.1174	0.0270	0.190
2/0	70	4	4	-417CIRG	1.602	2585	156	140	0.0929	0.1174	0.0296	0.193
4/0	109	3	4	-319CIRG	1.769	3151	260	230	0.0585	0.0753	0.0261	0.131
4/0	109	4	4	-419CIRG	1.953	3972	208	184	0.0585	0.0753	0.0287	0.134
250	127	3	3	-330CIRG	1.925	3493	290	255	0.0488	0.0635	0.0263	0.115
250	127	4	3	-430CIRG	2.125	4510	232	204	0.0488	0.0635	0.0290	0.118
350	177	3	3	-331CIRG	2.171	4594	350	310	0.0344	0.0456	0.0256	0.090
350	177	4	3	-431CIRG	2.402	5900	280	248	0.0344	0.0456	0.0283	0.093
500	253	3	2	-333CIRG	2.521	6207	430	380	0.0251	0.0348	0.0258	0.075
500	253	4	2	-433CIRG	2.855	8178	344	304	0.0251	0.0348	0.0284	0.078
750	380	3	1	-334CIRG	3.081	9165	535	475	0.0166	0.0253	0.0252	0.061
750	380	4	1	-434CIRG	3.365	11883	428	380	0.0166	0.0253	0.0278	0.063

Ampacities are based on Table 310.15 (B) (16) of the National Electrical Code (NEC) for conductors rated 90°C, in a multi-conductor cable, at an ambient temperature of 30°C. The 75°C column is provided for additional information. The ampacities shown apply to open runs of cable, installation in any approved raceway. Derating for more than three current carrying conductors within the cable is in accordance with NEC Table 310.15 (B) (3) (a). The ampacities shown also apply to cables installed in cable tray in accordance with NEC Section 392.80.

BEND RADIUS

	Type CIR
IEEE 45	6X Diameter
NEC	< 1" (25mm)
	4X Diameter
	> 1" (25mm) < 2" (50mm)
	5X Diameter
	> 2" (50mm) 6X Diameter



TYPE SOOW CABLE

600 VOLTS • 90°C

UL Certified Portable Cord • MSHA Approved*

Conductors

Flexible bare copper strand

Insulation

Color-coded
Ethylene Propylene
(EP) rubber
(see chart for color coding)

Jacket

Black heavy-duty
Chlorinated Polyethylene
(CPE) Jacket.

Cable identification
via permanent
ink marking.

Suitable for
extra-hard
usage
per NEC
Article 400

COLOR CODE			
2/C	3/C	4/C	5/C
Black	Black	Black	Black
White	White	White	White
-	Green	Red	Red
-	-	Green	Green
-	-	-	Orange

Cable Legend Example:

AMERCABLE (UL) WATER RESISTANT TYPE SOOW 90C 3/C 12 AWG 600V-40C FT2 07-KA150010-MSHA

APPLICATION

Nexans AmerCable's Type SOOW is a flexible, highly durable portable power cable manufactured for indoor or outdoor commercial and industrial-grade applications. Suitable for extra-hard usage per NEC Article 400.

FEATURES

- Available in 2 - 18 AWG
- Highly flexible and durable
- Excellent resistance to oil, water and moisture
- Excellent tensile strength, elongation and aging characteristics for longer service life
- Excellent abrasion resistance
- UL Listed for indoor and outdoor use
- Sunlight (UV), ozone and weather exposure resistant
- Suitable for immersion in water if properly terminated and installed

RATINGS & APPROVALS

- 600V (UL) SOOW
- UL Flexible Cord - UL 62
- MSHA P-07-KA150010*
- Flame Rated FT-2
- Rated -40°C up to 90°C



* MSHA approved on 3- & 4-Conductor cables. Other sizes pending

37-102 CIR • CIR POWER CABLE

Part No.	No. of Conductors	AWG Size	Conductor Strand	Insulation Thickness in.	Jacket Thickness in.	Nominal Outside Diameter in.	Approx. Weight Lbs./ 1,000 ft.
37921802	2	18	16/30	0.030	0.060	0.355	67
37921803	3	18	16/30	0.030	0.060	0.375	76
37921804	4	18	16/30	0.030	0.060	0.405	92
37921558	5	18	16/30	0.030	0.080	0.480	130
37921501	2	16	26/30	0.030	0.060	0.375	74
37921502	3	16	26/30	0.030	0.060	0.395	90
37921524	4	16	26/30	0.030	0.060	0.425	108
37921559	5	16	26/30	0.030	0.080	0.501	152
37921507	2	14	41/30	0.045	0.080	0.500	125
37921508	3	14	41/30	0.045	0.080	0.525	153
37921509	4	14	41/30	0.045	0.080	0.570	188
37921510	5	14	41/30	0.045	0.095	0.645	251
37921515	2	12	65/30	0.045	0.095	0.570	178
37921516	3	12	65/30	0.045	0.095	0.598	207
37921517	4	12	65/30	0.045	0.095	0.649	254
37921560	5	12	65/30	0.045	0.095	0.701	310
37921208	2	10	104/30	0.045	0.095	0.615	221
37921308	3	10	104/30	0.045	0.095	0.650	267
37921408	4	10	104/30	0.045	0.095	0.701	322
37921561	5	10	104/30	0.045	0.095	0.765	396

Other Sizes
Available.
Contact
Nexans
AmerCable for
more
information



**Suitable for extra-hard usage
per NEC Article 400**



TIGER® BRAND

UNDERGROUND MINING CABLES

Nexans AmerCable is the leading global manufacturer of surface and underground mining cables.

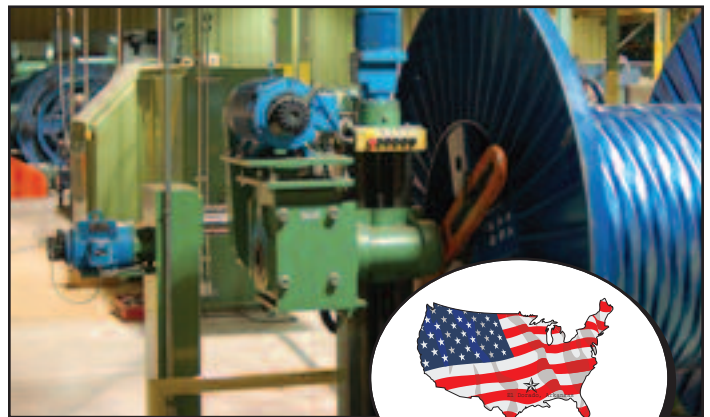


Nexans AmerCable is an ISO 9001 certified cable manufacturer that combines leading-edge technology, proven manufacturing techniques and high quality service to deliver the finest mining cable products available.

Nexans AmerCable serves a worldwide customer base from our manufacturing facility in El Dorado, Arkansas. Our professional field engineers and customer support team work directly, or in partnership with a network of independent distributors, to deliver productivity enhancing cable solutions.

WHAT CAN YOU EXPECT FROM NEXANS AMERCABLE?

- High-Quality Cable with an Emphasis on Safety
- On-Time Delivery
- Professional Sales, Support and Service
- Strategic Inventory Locations
- Short Lead Times



Made in America

CLICK HERE TO
FOLLOW US!



Nexans AmerCable

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