

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
- 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 29 for
more information.



36-311

TYPE W FLAT 2/C MOLD-CURED JACKET • 600/2000 VOLTS

Conductors

Flexible tinned copper

Insulation

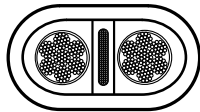
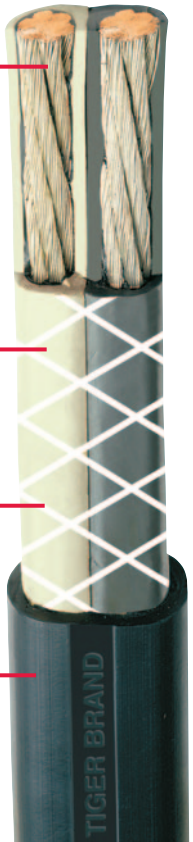
90°C ethylene-propylene rubber (EPR)

Reinforcement

Synthetic yarn over assembly

Jacket

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



See Page 28 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.



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

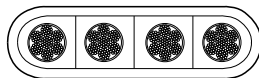
90°C ethylene-propylene rubber (EPR). Color coded black, white, red, green.

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.



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

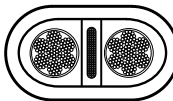
Synthetic yarn
over assembly

Insulation

90°C ethylene-propylene
rubber (EPR)

Jacket

Mold-cured thermoset
with cable identification
via permanent marking.



See Page 28 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.



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

Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-322

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



Conductors

Flexible tinned copper

Ground Wire

Uni-directional lay flexible tinned copper with green covering

Ground Check Wire

Uni-directional lay flexible tinned copper with yellow insulation

Reinforcement

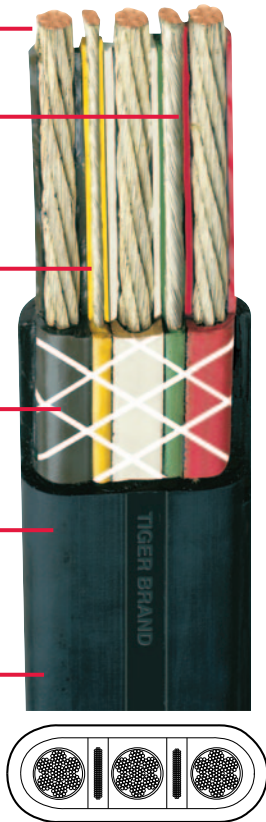
Synthetic yarn over assembly

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.



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





36-510

TYPE SHD FLAT 3/C MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Separator Tape

Insulation

90°C ethylene-propylene rubber (EPR)

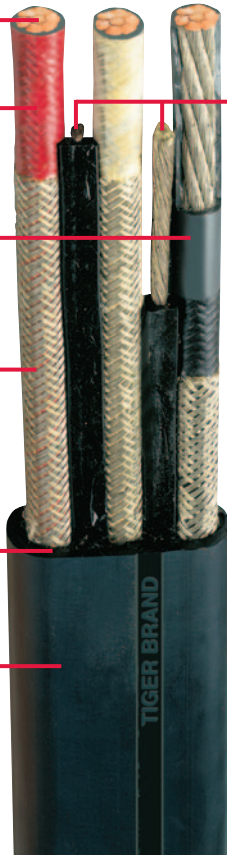
Insulation Shielding

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,

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.

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

*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



Tiger® Brand is a registered trademark of AmerCable Incorporated.

36-431

TYPE W ROUND 3/C MOLD-CURED JACKET • 2000 VOLTS



Conductors

Flexible tinned copper

Tape

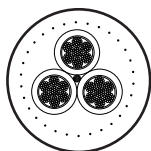
Non-conducting

Insulation

90°C ethylene-propylene rubber (EPR)

Jacket¹

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



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

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

CPE JACKET COLORS



Color/Stripe Combinations For CPE Jackets Only



36-432

TYPE W ROUND 4/C MOLD-CURED JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Tape

Non-conducting

Insulation

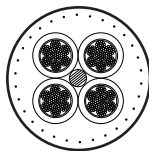
90°C ethylene-propylene rubber (EPR)

Jacket¹

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



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..

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

CPE JACKET COLORS



Color/Stripe Combinations For CPE Jackets Only

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

Tiger® Brand is a registered trademark of AmerCable Incorporated.

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)

Ground Wires

Flexible tinned copper

Jacket¹

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



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.

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

CPE JACKET COLORS



Color/Stripe Combinations For CPE Jackets Only

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



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

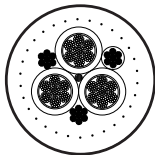
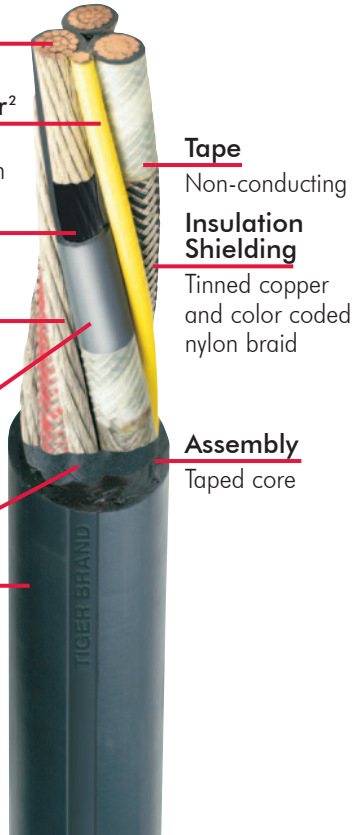
Insulation

90°C ethylene-propylene rubber (EPR)

Separator Tape

Jacket¹

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



CPE JACKET COLORS



Color/Stripe Combinations For CPE Jackets Only

APPLICATION

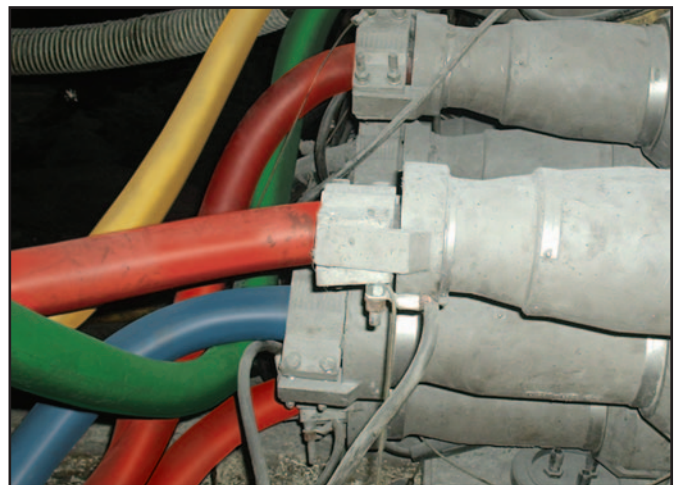
Heavy duty portable power cable for use in circuits not exceeding 5,000 volts (see next page for continuous miner circuit requirements exceeding 2000 volts). Designed for applications such as longwall shearers, continuous miners and mobile equipment such as shovels, dredges and drills. Recommended maximum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

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 cables come in six colors for safer, easier circuit identification.

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

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

*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 29 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.





36-503

TYPE SHD-GC CPE JACKET • 2000 VOLTS

Conductors

Flexible tinned copper

Ground Check Conductor²

Flexible tinned copper with yellow polypropylene insulation

Ground Wires (2)

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. Black jacket is standard. Other colors available.



Tape

Non-conducting

Insulation Shielding

Tinned copper and color coded nylon braid

APPLICATION

Heavy duty portable power cable for use in circuits not exceeding 2,000 volts. Designed for applications such as 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-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

Tiger® Brand Cables meet or exceed ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.

RATINGS & APPROVALS

- 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. 96. File 82346, FT1, FT5, -50°C. CSA Phase Color ID available on Type SHD-GC, SHD-BGC up to 35kV. SHD-GC meets FT4 requirement.
- CSA Rated TC-ER
- Suitable for direct burial
- RETIE

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

CPE JACKET COLORS



Color/Stripe Combinations For CPE Jackets Only

¹ Jacket – CPE jacket. Black CPE is standard. Colored CPE 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 – ± 5% of nominal outside diameter

36-504

TYPE SHD-PCG • LONGWALL MOLD-CURED JACKET • 2000 VOLTS



Conductors
Flexible tinned copper

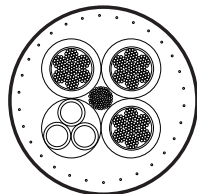
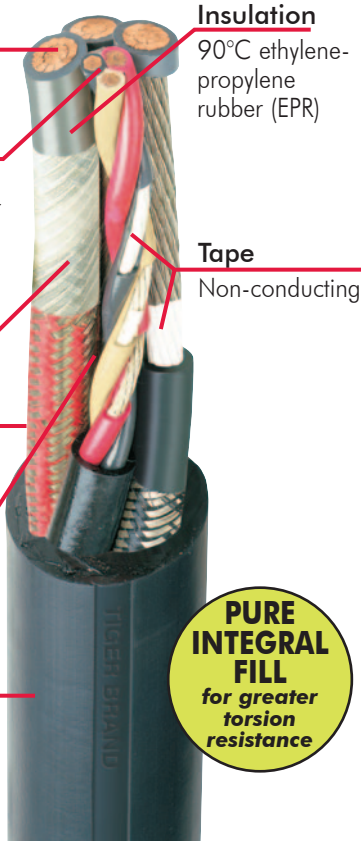
Control Group 3 Conductors
Flexible tinned copper ethylene polypropylene rubber insulation color coded black, white, red and an overall thermosetting jacket

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.



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.

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.



Factory Installed Cable Assemblies

See page 29 for more information.

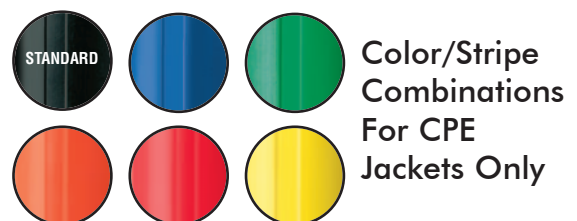
36-504-	Power Conductors		Grounding Conductors		Control Conductors		Nominal Outside Dimensions in.	Approx. Weight lbs. per 1,000 ft.	Ampacity* 40°C Ambient Temp
	Size AWG	No. of Wires per Conductor	Size AWG	No. of Wires per Conductor	Size AWG	No. of Wires per Conductor			
020	2/0	323	2	246	8	133	2.23	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

*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.

Tolerances – ± 5% of nominal outside diameter

CPE JACKET COLORS



Tiger® Brand is a registered trademark of AmerCable Incorporated.



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

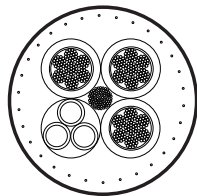
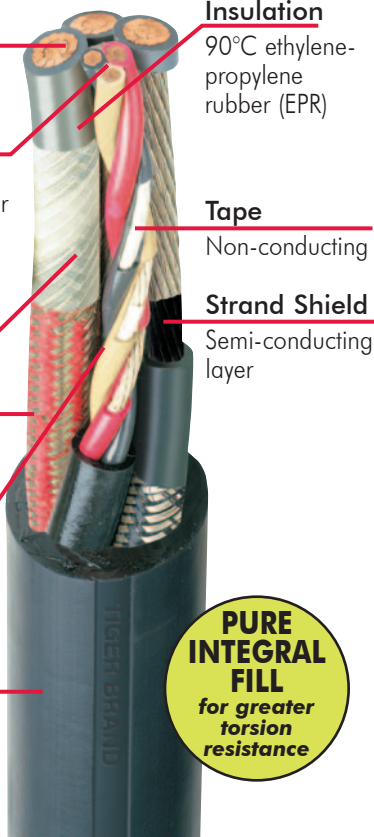
Tinned copper and color-coded nylon braid

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

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.

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.

CPE JACKET COLORS



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

*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. .

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

Tiger® Brand is a registered trademark of AmerCable Incorporated.

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

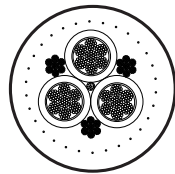
Tinned copper and color-coded nylon braid

Insulation

90°C ethylene-propylene rubber (EPR)

Jacket¹

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



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

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

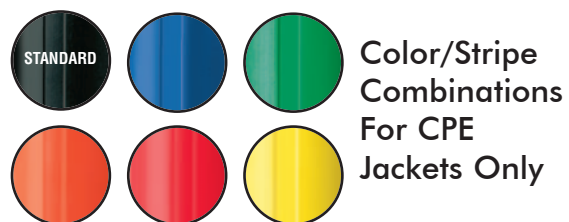
¹ Jacket – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request.

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

CPE JACKET COLORS





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

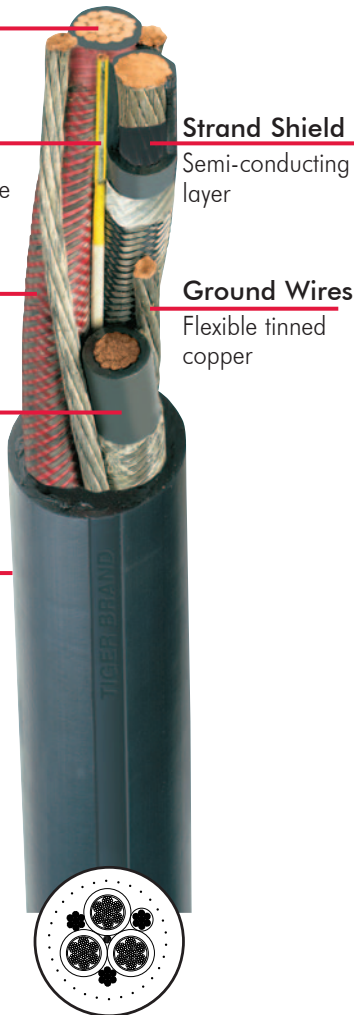
Tinned copper and color-coded nylon braid

Insulation

90°C ethylene-propylene rubber (EPR)

Jacket¹

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



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-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-	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

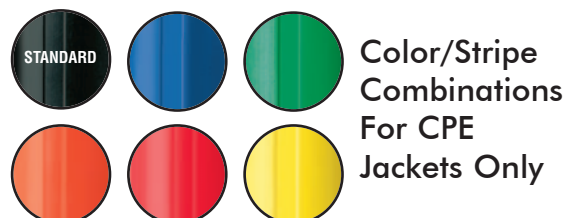
¹ Jacket – Extra-Heavy-Duty (EHD) black CPE is standard. Colored EHD CPE jackets available upon request.

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

CPE JACKET COLORS



Color/Stripe Combinations For CPE Jackets Only

Tiger® Brand is a registered trademark of AmerCable Incorporated.

LONGWALL SIGNAL CABLE 2- 9 CONDUCTORS • 50 VOLTS

Power Conductors

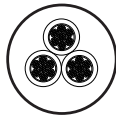
Extra flexible stranded per ASTM B-174

Insulation

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

Jacket

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



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	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
202-012	12	2	0.160	0.526	0.148
203-012	12	3	0.160	0.555	0.177
204-012	12	4	0.160	0.596	0.213
205-012	12	5	0.160	0.642	0.254
206-012	12	6	0.160	0.690	0.297
207-012	12	7	0.160	0.690	0.316
208-012	12	8	0.160	0.770	0.388
209-012	12	9	0.160	0.815	0.426
202-010	10	2	0.180	0.570	0.186
203-010	10	3	0.180	0.598	0.226
204-010	10	4	0.180	0.645	0.276
205-010	10	5	0.180	0.696	0.331
206-010	10	6	0.180	0.750	0.391
207-010	10	7	0.180	0.750	0.462
208-010	10	8	0.180	0.835	0.519
209-010	10	9	0.180	0.875	0.626



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

Tolerances – ± 5% of nominal outside diameter



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

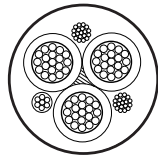
Taped core

Jacket¹

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



**Available
in 25kV &
35kV**



CPE JACKET COLORS



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.

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

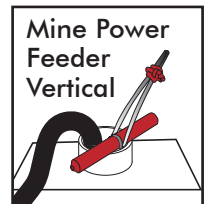
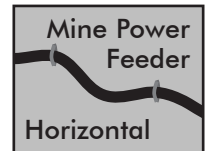


Cable may be suspended vertically by using a messenger and special mechanical connectors.

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



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





36-605/606

TYPE MP-GC 3/C

MINE POWER FEEDER • MOLD-CURED CPE JACKET
25000-35000 VOLTS • 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

Available with two grounds and ground check or three ground configuration per CSA.

Insulation Shielding

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

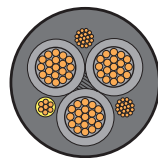
Assembly

Taped core

Jacket¹

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

See Page 30 for jacket color options.



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 CSA "LR 82346" and MSHA "P-7K-184096" (for black jacket).

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, up to 25kV, and ASTM B-8 and B-33.

*133% insulation level available on request



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

RATINGS & APPROVALS

- Canadian Standards Association C22.2 #96.1, File LR82346, FT5, -35°C
Type MP-GC, MPF up to 35kV.
- Mine Safety & Health Administration up to 35kV.
- Pennsylvania Department of Environmental Protection.
- Insulated Cable Engineers Association S-75-381 up to 25kV.

25000 VOLTS • 36-605 • TYPE MP-GC 3/C
• EP-CPE JACKET • 100% INSULATION LEVEL

36-605-	Power Conductors			Grounding Conductors		Jacket Thickness mm	Ground Check Conductor Size AWG ²	Nominal Outside Dimensions mm	Approx. Weight kg's per km	Ampacity* 30°C Ambient Temp
	Size AWG	Minimum No. of Wires per Conductor	Insulation Thickness mm	Size AWG	Minimum No. of Wires per Conductor					
001CSA	1	18	6.60	5	7	3.6	8	61.5	5302	210
010CSA	1/0	18	6.60	4	7	3.6	8	63.7	5918	240
020CSA	2/0	18	6.60	3	7	4.3	8	66.1	6688	274
030CSA	3/0	18	6.60	2	7	4.3	8	68.9	7704	315
040CSA	4/0	18	6.60	1	19	4.3	8	73.5	8881	360
250CSA	250	35	6.60	1/0	19	4.3	8	76.0	9814	396
350CSA	350	35	6.60	2/0	19	4.3	8	81.7	12262	482
500CSA	500	35	6.60	3/0	19	4.3	8	88.8	15369	590

¹ Jacket – CPE jacket. Black is standard. Colored CPE jackets available upon request. See page 13.

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

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

² Larger GC conductor sizes available upon request.

35000 VOLTS • 36-606 • TYPE MP-GC 3/C
• EP-CPE JACKET • 100% INSULATION LEVEL

36-606-	Power Conductors			Grounding Conductors		Jacket Thickness mm	Ground Check Conductor Size AWG ²	Nominal Outside Dimensions mm	Approx. Weight kg's per km	Ampacity* 30°C Ambient Temp
	Size AWG	Minimum No. of Wires per Conductor	Insulation Thickness mm	Size AWG	Minimum No. of Wires per Conductor					
010CSA	1/0	18	8.76	4	7	4.3	8	73.4	7452	240
020CSA	2/0	18	8.76	3	7	4.3	8	76.3	8256	274
030CSA	3/0	18	8.76	2	7	4.3	8	78.9	9223	315
040CSA	4/0	18	8.76	1	19	4.3	8	81.9	10312	360
250CSA	250	35	8.76	1/0	19	4.3	8	84.7	11289	396
350CSA	350	35	8.76	2/0	19	5.1	8	91.8	14173	482
500CSA	500	35	8.76	3/0	19	5.1	8	98.9	17818	590

¹ Jacket – CPE jacket. Black is standard. Colored CPE jackets available upon request. See page 13.

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

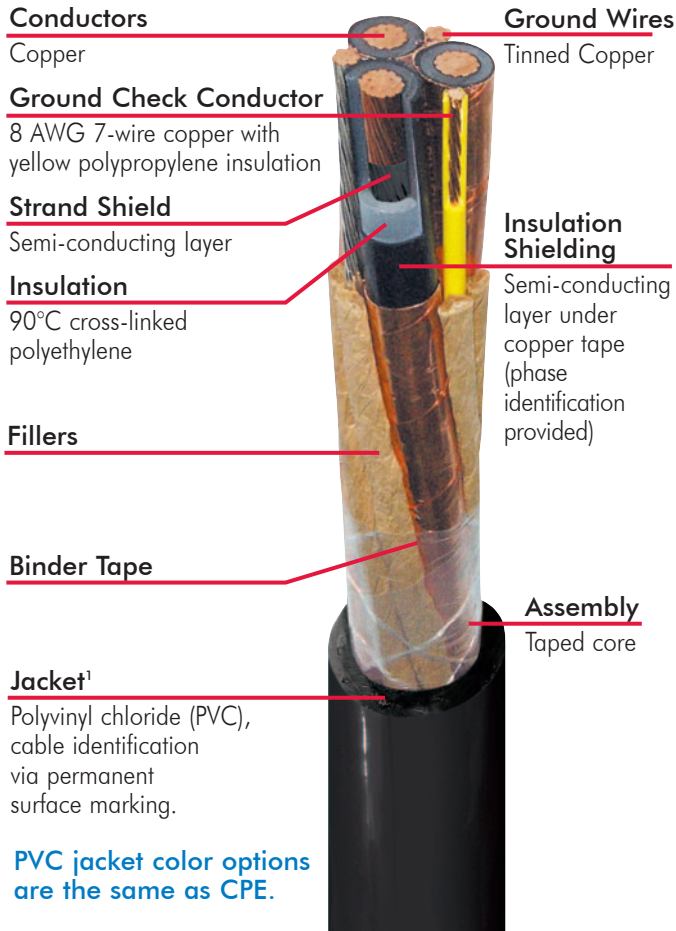
Tolerances – + 8%/-5% of nominal outside diameter

² Larger GC conductor sizes available upon request.

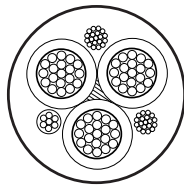


36-621/622/624

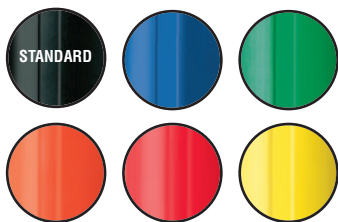
TYPE MP-GC 3/C MINE POWER FEEDER PVC JACKET • 100% LEVEL (GROUNDED)



**Available
in 25kV**



PVC JACKET COLORS



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.

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

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





36-625/615/616

TYPE MP-GC 3/C

MINE POWER FEEDER • 100% LEVEL* (GROUNDED)

25000 VOLTS - XLP INSULATION / PVC JACKET

35000 VOLTS - EPR INSULATION / PVC JACKET

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 to 25000 V.

90°C ethylene propylene rubber (EPR) to 35000 V.

Fillers

Binder Tape

Jacket¹

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

Standard jacket is black. PVC jacket color options are the same as CPE. See Page 30.

Ground Wires

Tinned Copper

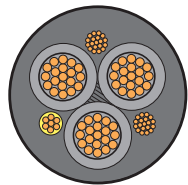
Available with two grounds and ground check or three ground configuration per CSA.

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 CSA "LR 82346" and MSHA "P-07-KA13008" markings.

Tiger® Brand Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, up to 25kV, and ASTM B-8 and B-33.

*** 133% insulation level available on request**



Tiger® Brand is a registered trademark of AmerCable Incorporated.

RATINGS & APPROVALS

- Canadian Standards Association C22.2 #96.1, File LR 82346
XLP-PVC Jacket - FT5, -35°C
EPR-PVC Jacket - FT4, FT5 -35°C
Type MP-GC, MPF up to 35kV.
- Mine Safety & Health Administration up to 25kV.
- Pennsylvania Department of Environmental Protection.
- Insulated Cable Engineers Association S-75-381 up to 25kV.

25000 VOLTS • 36-625 • XLP-PVC JACKET
• TYPE MP-GC 3/C • 100% LEVEL (GROUNDED)

36-625-	Power Conductors			Grounding Conductors		Jacket Thickness mm	Ground Check Conductor Size AWG	Nominal Outside Dimensions mm	Approx. Weight kg's per km	Ampacity* 30°C Ambient Temp
	Size AWG	Minimum No. of Wires per Conductor	Insulation Thickness mm	Size AWG	Minimum No. of Wires per Conductor					
001CSA	1	18	6.60	5	7	3.6	8	61.5	4586	210
010CSA	1/0	18	6.60	4	7	3.6	8	63.7	4853	240
020CSA	2/0	18	6.60	3	7	4.3	8	66.1	5744	274
030CSA	3/0	18	6.60	2	7	4.3	8	68.9	6674	315
040CSA	4/0	18	6.60	1	19	4.3	8	73.5	7760	360
250CSA	250	35	6.60	1/0	19	4.3	8	76.0	8438	396
350CSA	350	35	6.60	2/0	19	4.3	8	81.7	10893	482
500CSA	500	35	6.60	3/0	19	4.3	8	88.8	13642	590

¹ Jacket – PVC jacket. Black is standard. Colored PVC jackets available upon request.

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

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

25000 VOLTS • 36-615 • EP-PVC JACKET
• TYPE MP-GC 3/C • 100% LEVEL (GROUNDED)

36-615-	Power Conductors			Grounding Conductors		Jacket Thickness mm	Ground Check Conductor Size AWG	Nominal Outside Dimensions mm	Approx. Weight kg's per km	Ampacity* 30°C Ambient Temp
	Size AWG	Minimum No. of Wires per Conductor	Insulation Thickness mm	Size AWG	Minimum No. of Wires per Conductor					
001CSA	1	18	6.60	5	7	3.6	8	61.5	4673	210
010CSA	1/0	18	6.60	4	7	3.6	8	63.7	5256	240
020CSA	2/0	18	6.60	3	7	4.3	8	66.1	6025	274
030CSA	3/0	18	6.60	2	7	4.3	8	68.9	6894	315
040CSA	4/0	18	6.60	1	19	4.3	8	73.5	8026	360
250CSA	250	35	6.60	1/0	19	4.3	8	76.0	8925	396
350CSA	350	35	6.60	2/0	19	4.3	8	81.7	11315	482
500CSA	500	35	6.60	3/0	19	4.3	8	88.8	14055	590

¹ Jacket – PVC jacket. Black is standard. Colored PVC jackets available upon request.

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

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

35000 VOLTS • 36-616 • EP-PVC JACKET
• TYPE MP-GC 3/C • 100% LEVEL (GROUNDED)

36-616-	Power Conductors			Grounding Conductors		Jacket Thickness mm	Ground Check Conductor Size AWG	Nominal Outside Dimensions mm	Approx. Weight kg's per km	Ampacity* 30°C Ambient Temp
	Size AWG	Minimum No. of Wires per Conductor	Insulation Thickness mm	Size AWG	Minimum No. of Wires per Conductor					
010CSA	1/0	18	8.76	4	7	4.3	8	73.4	6486	240
020CSA	2/0	18	8.76	3	7	4.3	8	76.3	7221	274
030CSA	3/0	18	8.76	2	7	4.3	8	78.9	8077	315
040CSA	4/0	18	8.76	1	19	4.3	8	81.9	9196	360
250CSA	250	18	8.76	1/0	19	4.3	8	84.7	10107	396
350CSA	350	18	8.76	2/0	19	5.1	8	91.8	12785	482
500CSA	500	18	8.76	3/0	19	5.1	8	98.9	15976	590

¹ Jacket – PVC jacket. Black is standard. Colored PVC jackets available upon request.

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

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



36-202-118

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)

Jacket

Thermoplastic
Polyurethane
(TPU)



ALSO AVAILABLE WITH CRUSH & IMPACT RESISTANT (CIR®) JACKET (No External Armor)

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

RATINGS & APPROVALS

- 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	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

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

APPLICATION

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

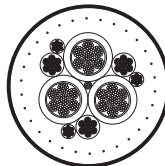
Cable carries "P-184-MSHA" marking indicating acceptance as flame resistant by the Pennsylvania Department of Environmental Protection and the Mine Safety and Health Administration.

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

See Page 30 for jacket color options.



Round-shaped cross-section

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	435
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 AND EDUCATION

Safety and maximized cable productivity are Nexans AmerCable's top priorities for our customers. Our highly experienced field engineers are available 24/7 for on-site evaluation and productivity solutions. They also conduct education and training sessions that address safety, splicing and cable handling practices.



No other cable manufacturer offers this high level of value and solutions!

MINE-CABLE SAFE

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.



"By implementing our Mine-Cable Safe recommendations, one of our customers enjoyed additional year-over-year earnings of \$450,000 through increased shovel uptime."



CABLE ASSEMBLIES



FACTORY INSTALLED

- Your cable assembly, built to your exact specifications, arrives ready for immediate use.
- Reduced prep, handling and installation time.
- No need to maintain expensive connector inventory.
- Professionally assembled.
- Factory electrical testing before shipping.
- Nexans AmerCable's on-time delivery rate and short lead times are #1 in the cable industry



CONSTRUCTIONS

- 2 – 25kV
- Stress Cones & fill
- ID Labeling
- Pothead Assemblies (up to 25kV)



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

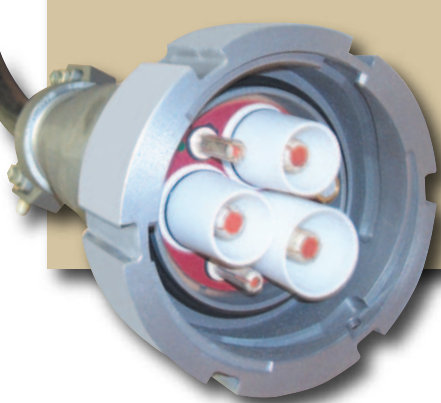
Ambient Temp. Degrees C	Multiplying Correction Factors
10	1.26
20	1.18
30	1.10
40	1.00
50	0.90

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





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.

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

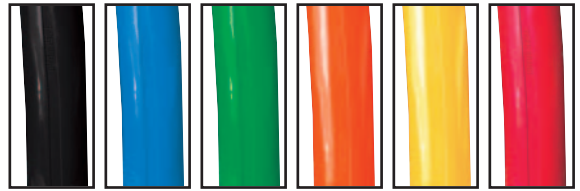
2X more tensile strength

Up to
8% Less
Jacket
Weight

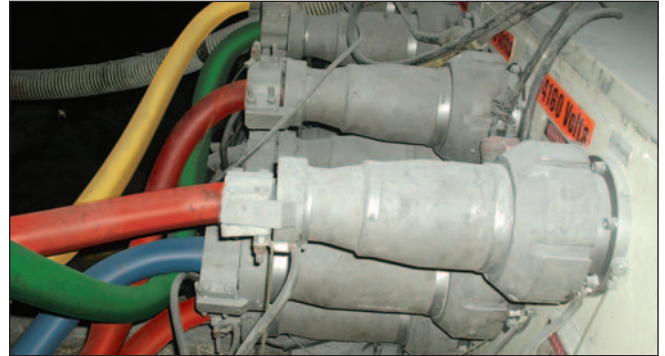
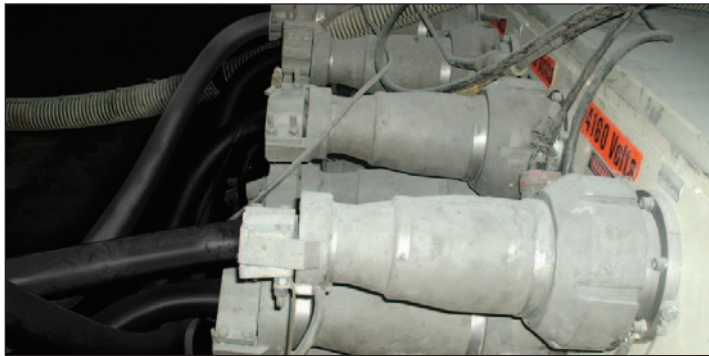


Black (standard) Blue Green Orange Yellow Red

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



Black (standard) Blue Green Orange Yellow Red



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

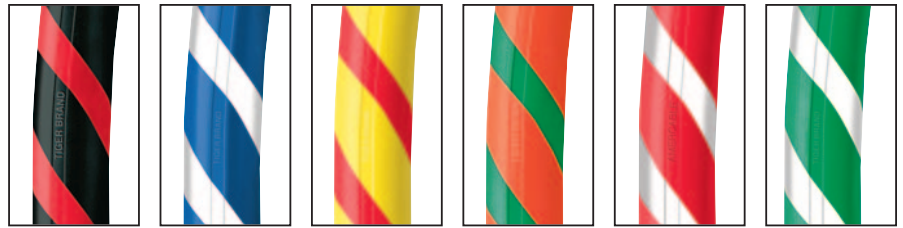


TIGER STRIPES – STANDARD

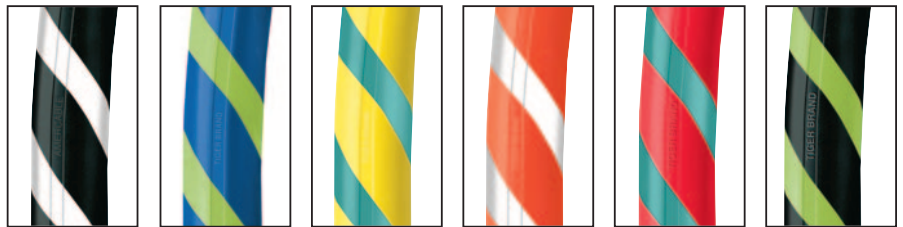


Nexans AmerCable’s standard **Tiger Stripes** provide additional color combinations by vulcanizing a contrasting colored stripe into the jacket of our round CPE cables.

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



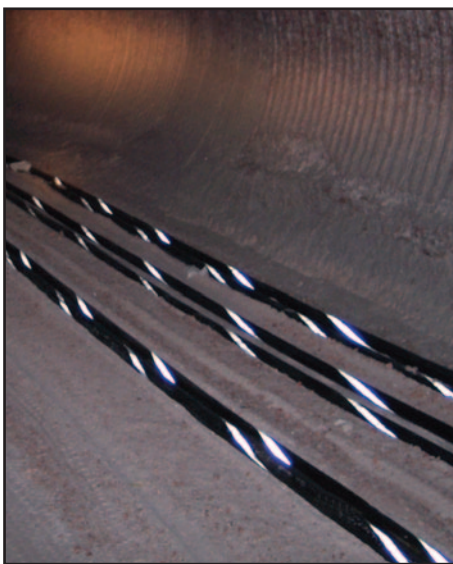
Black/Red Blue/White Yellow/Red Orange/Green Red/White Green/White



Black/White Blue/Green Yellow/Green Orange/White Red/Blue Black/Green

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

TIGER STRIPES – REFLECTIVE



Black (standard) Blue Green Orange Yellow Red

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

TIGER® BRAND

UNDERGROUND MINING CABLES

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

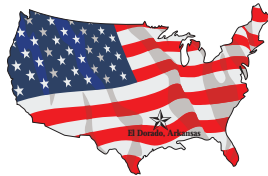


Nexans AmerCable is an ISO 9001 certified cable manufacturer that combines leading-edge technology, proven manufacturing techniques and high-quality service to deliver the finest mining cable products available.

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

Nexans AmerCable

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