

TIGER® BRAND

# SURFACE MINING CABLES



**Nexans**  
AmerCable





36-503	Type SHD-GC 2kV • CPE Jacket	2-3
36-502	Type SHD-GC 2kV • TPU Jacket	4-5
<hr/>		
36-515	Type SHD-GC 5kV • CPE Jacket	6-7
36-514	Type SHD-GC 5kV • TPU Jacket	8-9
<hr/>		
36-517	Type SHD-GC 8kV • CPE Jacket	10-11
36-518	Type SHD-GC 8kV • TPU Jacket	12-13
<hr/>		
36-519	Type SHD-GC 15kV • CPE Jacket	14-15
36-521	Type SHD-GC 15kV • TPU Jacket	16-17
<hr/>		
36-525	Type SHD-GC 25kV • CPE Jacket	18-19
36-526	Type SHD-GC 25kV • TPU Jacket	20-21
<hr/>		
36-432	Type W (Round) 4/C 2kV	22-23
<hr/>		
36-442	Type G-GC (Round) 3/C 2kV	24-25
<hr/>		
36-129	Drilling Mast Cables	26-27
<hr/>		
37-119	DLO 2kV	28-29
<hr/>		
36-501	Type VFD 2kV	30-31
<hr/>		
	Tiger Stripes	32-33
<hr/>		
	Jacket Materials & Color Options	34
<hr/>		
	Safety, Training and Education	35
<hr/>		
	Cable Assemblies	36-37



Tiger® Brand is a registered trademark of AmerCable Incorporated

Nexans AmerCable believes the information presented throughout this catalog to be reliable and current. All information is subject to change without notice. The information listed is approximate, and is presented only as a guide for product selection. We make no claims or warranties for the suitability of any product for any particular application.

© 2019, AmerCable Incorporated

# COMMITTED TO SAFER, MORE PRODUCTIVE MINING



*Since the electrification of mines, our company's core business has been powering mine equipment.*

Surface or underground – Nexans AmerCable has a cable productivity solution for you. Our innovatively engineered and manufactured Tiger® Brand cable line is designed for your toughest conditions. As the leading global producer of mining cables, 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

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

## OPERATING EXCELLENCE

- Best at On-Time delivery
- Strategically located inventories throughout the major mining regions
- AmerCable is an ISO-9001 certified manufacturer

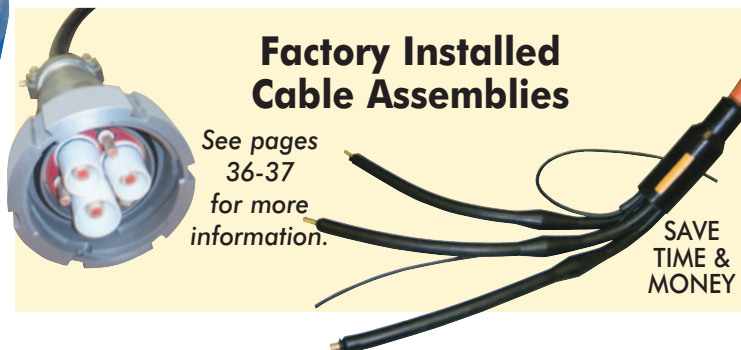


## HANDS-ON FIELD SUPPORT

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 pages  
36-37  
for more  
information.



36-503

# TYPE SHD-GC MOLD-CURED CPE JACKET • 2000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper  
with yellow polypropylene insulation

## Ground Wires

Flexible tinned copper

## Insulation

90°C ethylene-propylene  
rubber (EPR)

## Separator Tape

## Jacket<sup>1</sup>

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

## Tape

Non-conducting

## Insulation Shielding

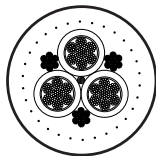
Tinned copper  
and color coded  
nylon braid

**Pure  
Integral Fill  
for greater  
torsion  
resistance**

See Page 34 for jacket  
color options.

Also available with  
Extra-Tough Thermoplastic  
Polyurethane (TPU) jacket  
for extremely abrasive  
environments! See page 4.

See Page 32-33 for  
Tiger Stripe options



Round-shaped  
cross-section

## 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 metal-  
lic shielding are required. Recommended maxi-  
mum 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 Mining Cable meets or exceeds ICEA  
Standards S-75-381/NEMA WC-58,  
ASTM B-172 and B-33.

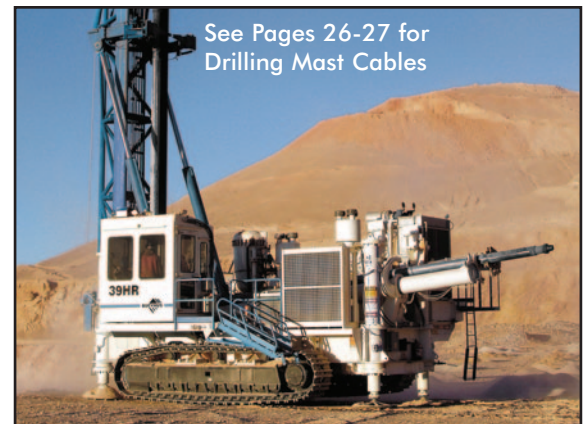


Photo courtesy CAT

## 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 25kV  
SHD-GC meets FT4 requirements
- RETIE

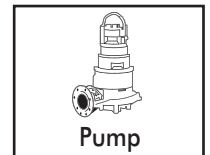
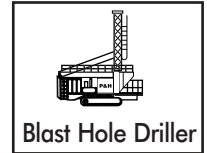
Tiger® Brand is a registered trademark of AmerCable Incorporated



## 36-503 • TYPE SHD-GC 3/C • CPE JACKET • 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



<sup>1</sup> Jacket – CPE jacket. Black CPE is standard.  
Colored CPE available upon request.  
See page 34 for color options.

<sup>2</sup> 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

## AWG/Metric Cross Reference

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



Photo courtesy P&H





36-502

# TYPE SHD-GC TPU JACKET • 2000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper  
with yellow polypropylene  
insulation

## Ground Wires

Flexible tinned copper

## Insulation

90°C ethylene-propylene  
rubber (EPR)

## Separator Tape

## Jacket<sup>1</sup>

Thermoplastic Polyurethane  
(TPU) Jacket.  
Cable identification via  
permanent marking.

## Tape

Non-conducting

## Insulation Shielding

Tinned copper  
and color coded  
nylon braid

## Fillers

## Assembly

Taped core

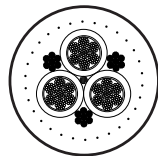
**Rubber  
Filler and  
Tape Core**

**See Page 34 for TPU  
jacket color options.**

**Also available with  
mold-cured thermosetting  
Chlorinated Polyethylene  
(CPE) jacket.  
See page 2.**

## Application Note:

TPU may not be appropriate  
for non-mining applications.



Round-shaped  
cross-section

## 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 metal-  
lic shielding are required. Recommended maxi-  
mum 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 Mining Cable meets or exceeds ICEA  
Standards S-75-381/NEMA WC-58,  
ASTM B-172 and B-33.

**See Pages 26-27  
for Drilling Mast  
Cables**



## 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 25kV

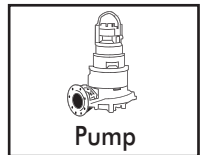
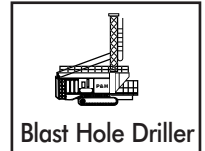
Tiger® Brand is a registered trademark of AmerCable Incorporated



## 36-502 • TYPE SHD-GC 3/C • TPU JACKET • 2000 VOLTS

36-502-	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	1069	93
004	4	259	70	8	133	155	1.40	1295	122
002	2	259	70	6	133	170	1.59	1778	159
001	1	259	80	5	133	190	1.76	2163	184
010	1/0	266	80	4	259	190	1.86	2508	211
020	2/0	323	80	3	259	205	2.00	3001	243
030	3/0	418	80	2	259	205	2.13	3470	279
040	4/0	532	80	1	259	220	2.31	4192	321
250	250	627	95	1/0	266	220	2.51	5213	355
350	350	888	95	2/0	323	235	2.81	6824	435
500	500	1221	95	4/0	532	265	3.19	9014	536

Primary Usage Recommendation



<sup>1</sup> Jacket – Standard jacket is black.

See page 34 for color options

<sup>2</sup> 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

## AWG/Metric Cross Reference

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



Photo courtesy CAT





36-515

# TYPE SHD-GC 3/C MOLD-CURED CPE JACKET • 5000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

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

## Jacket<sup>1</sup>

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

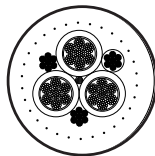
## Assembly

Taped core



See Page 34 for jacket  
color options.

Also available with  
Extra-Tough Thermoplastic  
Polyurethane (TPU) jacket  
for extremely abrasive  
environments! See page 8.



Round-shaped  
cross-section

See Page 32-33 for  
Tiger Stripe options

## 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 25kV  
SHD-GC meets FT4 requirements
- RETIE

## APPLICATION

Heavy duty portable power cable for use in circuits not exceeding 5,000 volts. Designed for applications such as shovels, dredges and drills. Recommended maximum continuous conductor temperature in 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 Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



Tiger® Brand is a registered trademark of AmerCable Incorporated



## 36-515 • TYPE SHD-GC 3/C • CPE JACKET • 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



<sup>1</sup> Jacket – CPE jacket. Black CPE is standard.  
Colored CPE available upon request.  
See page 34 for color options.

<sup>2</sup> Ground Check Conductor – 8 AWG (minimum  
133 strand 7x19) ground check conductor on 6 AWG  
through 4/0 AWG cable.

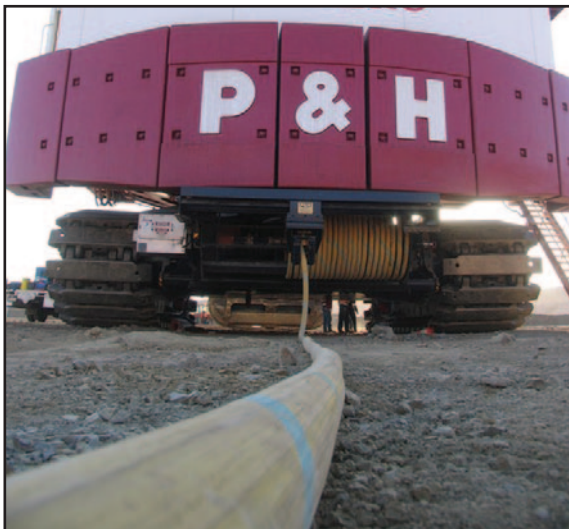
6 AWG (minimum 133 strand 7x19) ground check  
conductor on 250 kcmil and larger cable.

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

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

## AWG/Metric Cross Reference

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





36-514

# TYPE SHD-GC 3/C TPU JACKET • 5000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

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

## Jacket<sup>1</sup>

Thermoplastic Polyurethane (TPU) Jacket.  
Cable identification via permanent marking.

## Tape

Non-conducting

## Insulation Shielding

Tinned copper and color coded nylon braid

## Fillers

## Assembly

Taped core

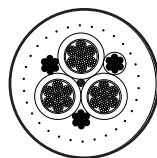
**Rubber Filler and Tape Core**

**Black jacket standard.**  
**See Page 34 for TPU jacket color options.**

Also available with mold-cured thermosetting Chlorinated Polyethylene (CPE) jacket.  
See page 6.

## Application Note:

TPU may not be appropriate for non-mining applications.



Round-shaped cross-section

## APPLICATION

Heavy duty portable power cable for use in circuits not exceeding 5,000 volts. Designed for applications such as shovels, dredges and drills. Recommended maximum continuous conductor temperature in 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 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.
- 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 25kV

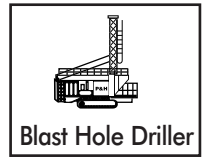
Tiger® Brand is a registered trademark of AmerCable Incorporated



## 36-514 • TYPE SHD-GC 3/C • TPU JACKET • 5000 VOLTS

36-514-	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	1342	93
004	4	259	110	8	133	185	1.68	1629	122
002	2	259	110	6	133	205	1.87	2228	159
001	1	259	110	5	133	205	1.95	2447	184
010	1/0	266	110	4	259	220	2.08	2760	211
020	2/0	323	110	3	259	220	2.20	3238	243
030	3/0	418	110	2	259	235	2.36	3792	279
040	4/0	532	110	1	259	235	2.50	4548	321
250	250	627	120	1/0	266	250	2.69	5427	355
350	350	888	120	2/0	323	265	2.95	7070	435
500	500	1221	120	4/0	532	280	3.31	9407	536

Primary Usage  
Recommendation



<sup>1</sup> Jacket – Standard jacket is black.

See page 34 for TPU jacket color options.

<sup>2</sup> 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

## AWG/Metric Cross Reference

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



Photo courtesy CAT





36-517

# TYPE SHD-GC 3/C MOLD-CURED CPE JACKET • 8000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper with  
yellow polypropylene insulation

## Strand Shield

Semi-conducting layer

## Ground Wires

Flexible tinned copper

## Insulation

90°C ethylene-propylene  
rubber (EPR)

## Insulation Shielding

Semi-conducting tape

## Jacket<sup>1</sup>

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

## Insulation Shielding

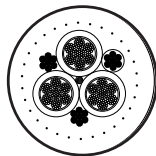
Tinned copper  
and color coded  
nylon braid

## Assembly

Taped core

See Page 34 for jacket  
color options.

Also available with  
Extra-Tough Thermoplastic  
Polyurethane (TPU) jacket  
for extremely abrasive  
environments! See page 12.



Round-shaped  
cross-section

See Page 32-33 for  
Tiger Stripe options

## APPLICATION

Heavy duty high voltage portable power cable  
for use in circuits not exceeding the rated  
voltage. These cables are used for heavy mobile  
equipment such as drag lines, shovels, dredges,  
drills and for power feeders. Recommended  
maximum continuous conductor temperature in  
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 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.
- 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 MTO  
Type SHD-GC, SHD-BGC up to 25kV  
SHD-GC meets FT4 requirements

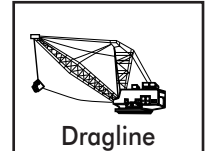
Tiger® Brand is a registered trademark of AmerCable Incorporated



## 36-517 • TYPE SHD-GC • CPE JACKET • 8000 VOLTS

36-517-	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 <sup>2</sup>				
004	4	259	150	8	133	205	1.94	2180	122
002	2	259	150	6	133	220	2.12	2830	159
001	1	259	150	5	133	220	2.21	3350	184
010	1/0	266	150	4	259	220	2.32	3590	211
020	2/0	323	150	3	259	235	2.46	4190	243
030	3/0	418	150	2	259	250	2.62	5075	279
040	4/0	532	150	1	259	250	2.75	5660	321
250	250	627	150	1/0	266	250	2.89	6740	355
350	350	888	150	2/0	323	280	3.20	8460	435
500	500	1221	150	4/0			3.56	10700	536

Primary Usage  
Recommendation



<sup>1</sup> Jacket – CPE jacket. Black CPE is standard.  
Colored CPE available upon request.  
See page 34 for color options.

<sup>2</sup> Ground Check Conductor – 8 AWG (minimum  
133 strand 7x19) ground check conductor on 4 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

## AWG/Metric Cross Reference

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





36-518

# TYPE SHD-GC 3/C TPU JACKET • 8000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper with  
yellow polypropylene insulation

## Strand Shield

Semi-conducting layer

## Ground Wires

Flexible tinned copper

## Insulation

90°C ethylene-propylene  
rubber (EPR)

## Insulation Shielding

Semi-conducting tape

## Jacket<sup>1</sup>

Thermoplastic Polyurethane  
(TPU) Jacket.  
Cable identification via  
permanent marking.

## Insulation Shielding

Tinned copper  
and color coded  
nylon braid

## Fillers

## Assembly

Taped core

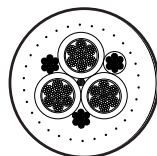
**Rubber  
Filler and  
Tape Core**

**Black jacket standard.**  
**See Page 34 for TPU**  
**jacket color options.**

Also available with  
mold-cured thermosetting  
Chlorinated Polyethylene  
(CPE) jacket.  
See page 10.

## Application Note:

TPU may not be appropriate  
for non-mining applications.



Round-shaped  
cross-section

## APPLICATION

Heavy duty high voltage portable power cable for  
use in circuits not exceeding the rated  
voltage. These cables are used for heavy mobile  
equipment such as drag lines, shovels, dredges,  
drills and for power feeders. Recommended maxi-  
mum continuous  
conductor temperature in 90°C. Suitable for shal-  
low 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 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.
- 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 MTO  
Type SHD-GC, SHD-BGC up to 25kV

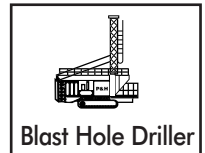
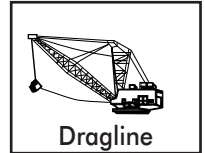
Tiger® Brand is a registered trademark of AmerCable Incorporated



## 36-518 • TYPE SHD-GC • TPU JACKET • 8000 VOLTS

36-518-	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 <sup>2</sup>				
004	4	259	150	8	133	205	1.94	2019	122
002	2	259	150	6	133	220	2.12	2603	159
001	1	259	150	5	133	220	2.21	2913	184
010	1/0	266	150	4	259	220	2.32	3351	211
020	2/0	323	150	3	259	235	2.46	3946	243
030	3/0	418	150	2	259	250	2.62	4582	279
040	4/0	532	150	1	259	250	2.75	5321	321
250	250	627	150	1/0	266	250	2.89	6101	355
350	350	888	150	2/0	323	280	3.20	7696	435
500	500	1221	150	4/0			3.56	10199	536

Primary Usage Recommendation



<sup>1</sup> Jacket – Standard jacket is black.

See page 34 for TPU jacket color options.

<sup>2</sup> Ground Check Conductor – 8 AWG (minimum 133 strand 7x19) ground check conductor on 4 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

## AWG/Metric Cross Reference

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



Photo courtesy P&H





36-519

# TYPE SHD-GC 3/C MOLD-CURED CPE JACKET • 15000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper with  
yellow polypropylene insulation

## Strand Shield

Semi-conducting layer

## Ground Wires

Flexible tinned copper

## Insulation

90°C ethylene-propylene  
rubber (EPR)

## Insulation Shielding

Semi-conducting tape

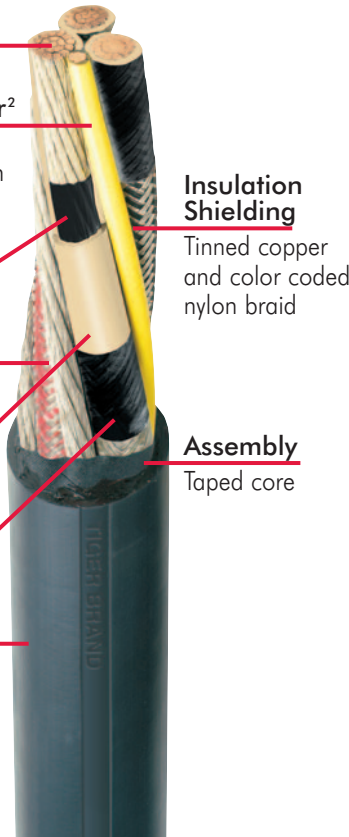
## Jacket<sup>1</sup>

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

**See Page 34 for jacket  
color options.**

**Also available with  
Extra-Tough Thermoplastic  
Polyurethane (TPU) jacket  
for extremely abrasive  
environments! See page 16.**

**See Page 32-33 for  
Tiger Stripe options**

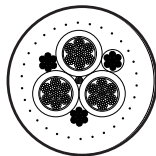


## Insulation Shielding

Tinned copper  
and color coded  
nylon braid

## Assembly

Taped core



Round-shaped  
cross-section

## APPLICATION

Heavy duty high voltage portable power cable for  
use in circuits not exceeding the rated voltage.  
These cables are used for heavy mobile equipment  
such as drag lines, shovels, dredges, drills and  
for power feeders. Recommended maximum  
continuous conductor temperature in 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 Mining Cable meets or exceeds  
ICEA Standards S-75-381/NEMA WC-58,  
ASTM B-172 and B-33.



Photo courtesy CAT

## RATINGS & APPROVALS

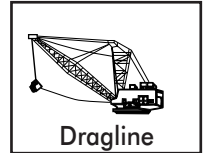
- Mine Safety & Health Administration 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Insulated Cable Engineers Association S-75-381/NEMA WC-58.  
Design standard for mining cables.
- Canadian Standards Association C22.2 No. 96  
File 82346, FT1, FT5, -50°C  
CSA Phase Color ID available on MTO  
Type SHD-GC, SHD-BGC up to 25kV  
SHD-GC meets FT4 requirements

Tiger® Brand is a registered trademark of AmerCable Incorporated

## 36-519 • TYPE SHD-GC 3/C • CPE JACKET • 15000 VOLTS

36-519-	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	259	210	6	133	235	2.41	3500	164
001	1	259	210	5	133	235	2.52	4080	187
010	1/0	266	210	4	259	250	2.64	4610	215
020	2/0	323	210	3	259	250	2.73	4890	246
030	3/0	418	210	2	259	265	2.90	5589	283
040	4/0	532	210	1	259	265	3.05	6820	325
250	250	627	210	1/0	266	265	3.15	6960	359
350	350	888	210	2/0	323	280	3.40	9128	437
500	500	1221	210	4/0	532	280	3.68	11020	534

Primary Usage  
Recommendation



<sup>1</sup> Jacket – CPE jacket. Black CPE is standard.  
Colored CPE available upon request.  
See page 34 for color options.

<sup>2</sup> Ground Check Conductor – 8 AWG (minimum  
133 strand 7x19) ground check conductor on  
4 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

## AWG/Metric Cross Reference

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



Photo courtesy P&H







36-521

# TYPE SHD-GC 3/C TPU JACKET • 15000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper with  
yellow polypropylene insulation

## Strand Shield

Semi-conducting layer

## Ground Wires

Flexible tinned copper

## Insulation

90°C ethylene-propylene  
rubber (EPR)

## Insulation Shielding

Semi-conducting tape

## Jacket<sup>1</sup>

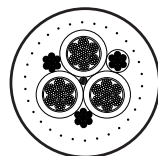
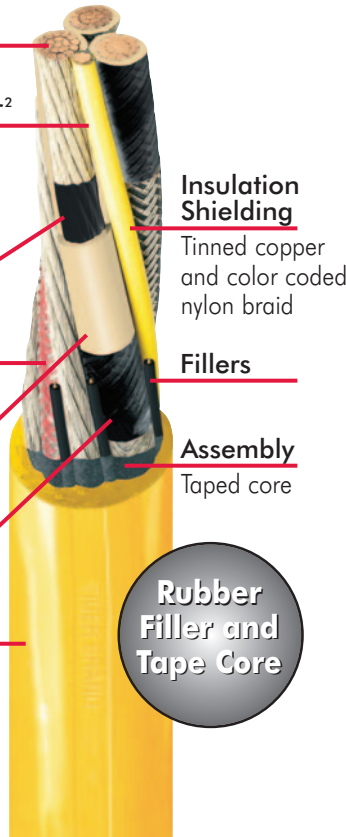
Thermoplastic Polyurethane  
(TPU) Jacket.  
Cable identification via  
permanent marking.

**Black jacket standard.**  
**See Page 34 for jacket**  
**color options.**

Also available with  
mold-cured thermosetting  
Chlorinated Polyethylene  
(CPE) jacket.  
See page 14.

## Application Note:

TPU may not be appropriate  
for non-mining applications.



Round-shaped  
cross-section

## APPLICATION

Heavy duty high voltage portable power cable for use  
in circuits not exceeding the rated voltage. These cables  
are used for heavy mobile equipment such  
as drag lines, shovels, dredges, drills and for power  
feeders. Recommended maximum continuous  
conductor temperature in 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 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.
- 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 MTO  
Type SHD-GC, SHD-BGC up to 25kV

Tiger® Brand is a registered trademark of AmerCable Incorporated

## 36-521 • TYPE SHD-GC 3/C • TPU JACKET • 15000 VOLTS

36-521-	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	259	210	6	133	235	2.41	3145	164
001	1	259	210	5	133	235	2.52	3567	187
010	1/0	266	210	4	259	250	2.64	3976	215
020	2/0	323	210	3	259	255	2.73	4526	246
030	3/0	418	210	2	259	265	2.90	5231	283
040	4/0	532	210	1	259	265	3.05	6033	325
250	250	627	210	1/0	266	265	3.15	6602	359
350	350	888	210	2/0	323	280	3.40	8306	437
500	500	1221	210	4/0	532	280	3.68	10497	534

Primary Usage Recommendation



<sup>1</sup> Jacket – Standard jacket is black.

See page 30 for TPU jacket color options.

<sup>2</sup> Ground Check Conductor – 8 AWG (minimum

133 strand 7x19) ground check conductor on

4 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

## AWG/Metric Cross Reference

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





36-525

# TYPE SHD-GC 3/C MOLD-CURED CPE JACKET • 25000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper with yellow polypropylene insulation

## Strand Shield

Semi-conducting layer

## Ground Wires

Flexible tinned copper

## Insulation Shielding

Semi-conducting rubber and semi-conductive tape

## Insulation Shielding

Tinned copper and color coded nylon braid

## Insulation

90°C ethylene-propylene rubber (EPR)

## Assembly

Taped core

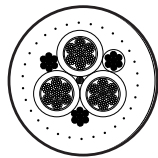
## Jacket<sup>1</sup>

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

**See Page 34 for jacket color options.**

**Also available with Extra-Tough Thermoplastic Polyurethane (TPU) jacket for extremely abrasive environments! See page 20.**

**See Page 32-33 for Tiger Stripe options**



Round-shaped cross-section

## APPLICATION

Heavy duty high voltage portable power cable for use in circuits not exceeding the rated voltage. These cables are used for heavy mobile equipment such as drag lines, shovels, dredges, and for power feeders. Recommended maximum continuous conductor temperature in 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 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.
- 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 MTO  
Type SHD-GC, SHD-BGC up to 25kV  
SHD-GC meets FT4 requirements

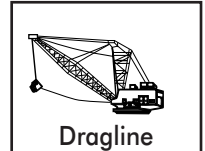
Tiger® Brand is a registered trademark of AmerCable Incorporated



## 36-525 • TYPE SHD-GC 3/C • CPE JACKET • 25000 VOLTS

36-525-	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				
001	1	259	260	5	133	265	2.95	5320	191
010	1/0	266	260	4	259	265	3.05	5840	218
020	2/0	323	260	3	259	280	3.20	6550	249
030	3/0	418	260	2	259	280	3.33	6670	286
040	4/0	532	260	1	259	295	3.50	8350	327
250	250	627	260	1/0	266	295	3.54	8085	360
350	350	888	260	2/0	323	295	3.85	10040	439

Primary Usage  
Recommendation



<sup>1</sup> Jacket – CPE jacket. Black CPE is standard.  
Colored CPE available upon request.  
See page 34 for color options.

<sup>2</sup> Ground Check Conductor – 8 AWG (minimum  
133 strand 7x19) ground check conductor on  
4 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

## AWG/Metric Cross Reference

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





36-526

# TYPE SHD-GC 3/C TPU JACKET • 25000 VOLTS

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper with yellow polypropylene insulation

## Strand Shield

Semi-conducting layer

## Insulation

90°C ethylene-propylene rubber (EPR)

## Ground Wires

Flexible tinned copper

## Insulation Shielding

Semi-conducting rubber and semi-conductive tape

## Jacket<sup>1</sup>

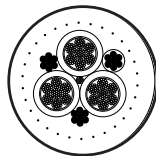
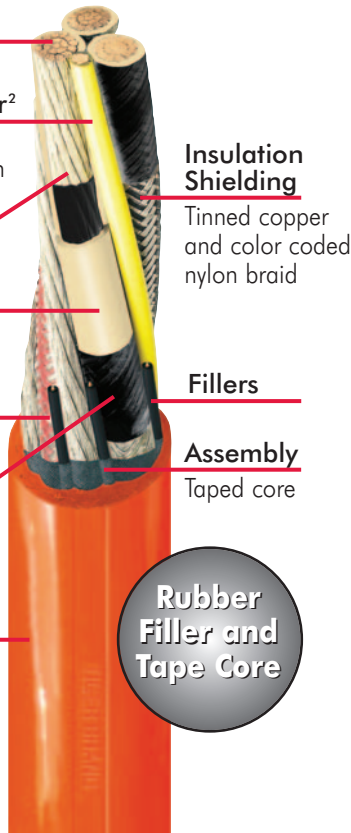
Thermoplastic Polyurethane (TPU) Jacket.  
Cable identification via permanent marking.

**Black jacket standard.**  
**See Page 34 for jacket color options.**

Also available with mold-cured thermosetting Chlorinated Polyethylene (CPE) jacket.  
**See page 18.**

## Application Note:

TPU may not be appropriate for non-mining applications.



Round-shaped cross-section

## APPLICATION

Heavy duty high voltage portable power cable for use in circuits not exceeding the rated voltage. These cables are used for heavy mobile equipment such as drag lines, shovels, dredges, and for power feeders. Recommended maximum continuous conductor temperature in 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 Mining Cable meets or exceeds ICEA Standards S-75-381/NEMA WC-58, ASTM B-172 and B-33.



## RATINGS & APPROVALS

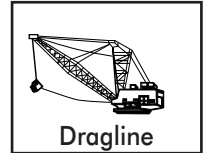
- Mine Safety & Health Administration 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Insulated Cable Engineers Association S-75-381/NEMA WC-58. Design standard for mining cables.
- Canadian Standards Association C22.2 No. 96  
File 82346, FT1, FT5, -50°C  
CSA Phase Color ID available on MTO  
Type SHD-GC, SHD-BGC up to 25kV

Tiger® Brand is a registered trademark of AmerCable Incorporated

## 36-526 • TYPE SHD-GC 3/C • TPU JACKET • 25000 VOLTS

36-526-	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				
001	1	259	260	5	133	265	2.95	4410	191
010	1/0	266	260	4	259	265	3.05	4866	218
020	2/0	323	260	3	259	280	3.20	5560	249
030	3/0	418	260	2	259	280	3.33	6192	286
040	4/0	532	260	1	259	295	3.50	7110	327
250	250	627	260	1/0	266	295	3.54	7692	360
350	350	888	260	2/0	323	295	3.85	9608	439

Primary Usage Recommendation



<sup>1</sup> Jacket – Standard jacket is black.

See page 34 for TPU jacket color options.

<sup>2</sup> Ground Check Conductor – 8 AWG (minimum

133 strand 7x19) ground check conductor on

4 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

## AWG/Metric Cross Reference

AWG/ kcmil Size	Area of AWG/kcmil in mm <sup>2</sup>	Nearest Standard Metric Cond. mm <sup>2</sup>
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)

## Jacket<sup>1</sup>

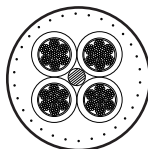
Reinforced mold-cured thermosetting Chlorinated Polyethylene (CPE) Jacket. Cable identification via permanent marking.

**See Page 34 for jacket color options.**

**See Page 32-33 for Tiger Stripe options**



**Pure  
Integral Fill  
for greater  
torsion  
resistance**



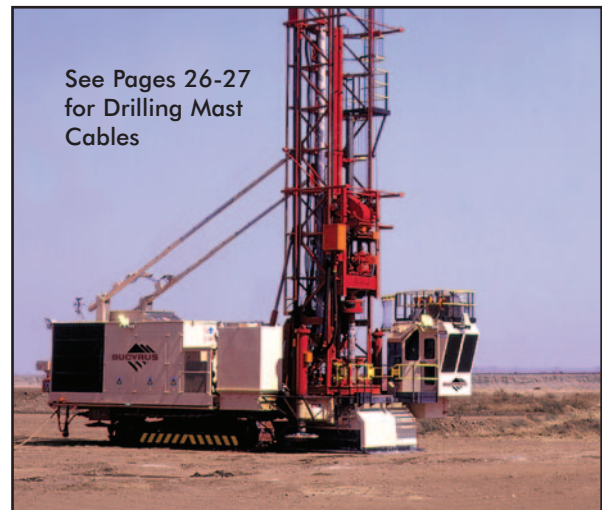
Round-shaped cross-section

## APPLICATION

Especially suitable for use with mobile mining equipment such as continuous miners, drills, cutters, loading machines, AC shuttle cars and pumps. 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

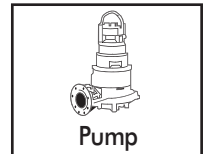
- Mine Safety & Health Administration 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Insulated Cable Engineers Association S-75-381/NEMA WC-58. Design standard for mining cables.
- Canadian Standards Association C22.2 No. 96  
File 82346, FT1, FT5, -50°C  
CSA Phase Color ID available on  
Type W, G, G-GC, 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 <sup>1</sup> 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

Primary Usage Recommendation



<sup>1</sup> Jacket – Black CPE is standard. Colored 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

## AWG/Metric Cross Reference

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

## 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.<sup>1</sup>

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

<sup>1</sup> Table reproduced from standards publication ICEA-S-75-381/NEMA WC-58



36-442

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

## Conductors

Flexible tinned copper

## Ground Check Conductor<sup>2</sup>

Flexible tinned copper  
with yellow polypropylene  
insulation

## Insulation

90°C ethylene-propylene  
rubber (EPR)

## Ground Wires

Flexible tinned copper

## Jacket<sup>1</sup>

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

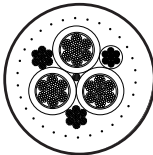
**See Page 34 for jacket  
color options.**

**See Page 32-33 for  
Tiger Stripe options**



**Separator Tape**  
Non-conductive

**Pure  
Integral Fill**  
for greater  
torsion  
resistance



Round-shaped  
cross-section

## 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.



See Pages 26-27  
for Drilling Mast  
Cables

## 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, -40°C  
CSA Phase Color ID available on  
Type W, G, G-GC, G-BGC up to 25kV
- RETIE

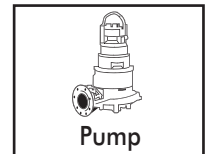
Tiger® Brand is a registered trademark of AmerCable Incorporated



## 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

Primary Usage Recommendation



<sup>1</sup> Jacket – Black CPE is standard. Colored CPE jackets available upon request.

<sup>2</sup> 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

### 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.<sup>1</sup>

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

<sup>1</sup> Table reproduced from standards publication ICEA-S-75-381/NEMA WC-58

### AWG/Metric Cross Reference

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





36-129

# DRILLING MAST CABLE TWO CONDUCTOR • 600-2000 VOLTS

## Conductors

Flexible tinned copper

## Ground Wire

Flexible tinned copper

## Control Group

Configuration to be specified by user

## Tape

Non-conducting

## Insulation

Ethylene-propylene rubber (EPR)

## Reinforcement

Polypropylene reinforcing braid provides long flex life

## Jacket

Reinforced mold-cured thermosetting rubber. Cable identification via permanent marking.

**Pure  
Integral Fill  
for greater  
torsion  
resistance**

## APPLICATION

Tiger® Brand 600-2,000 Volt two conductor drilling mast cables are recommended for installations where long flex life, great flexibility and durability are desired. Applications include power and control for drill masts and other DC applications.

## FEATURES

- Suitable for continuous operating temperatures of 90°C
- Suitable for use on drills, festoons, suspended loops and power tracks
- Heavy duty jacket offers excellent protection against abrasion, impact, heat, oil flame, ozone, alkali and acids.
- Extremely flexible stranding used for increased flexibility and ease of installation

## RATINGS & APPROVALS

- 90°C Temperature Rating
- ASTM B-33: Standard Specification for Tinned Soft or Annealed Copper Wire for Electrical Purposes
- Materials meet or exceed ICEA S-75-381/NEMA WC-58, ASTM B-172 and CSA Standard C22.2 #96



Tiger® Brand is a registered trademark of AmerCable Incorporated

## 36-129 • DRILLING MAST CABLE • TWO CONDUCTOR • 600-2000 VOLTS

Part No. 36-129-	Size AWG/ kcmil	Minimum Wires per Conductor	Nominal Insulation Thickness in.	Nominal Outside Diameter in.	Approx. Weight lbs. per 1,000 ft.	*Ampacity 90°C
010	1/0	266	0.080	1.52	1780	217
020	2/0	323	0.080	1.65	2425	250
030	3/0	418	0.080	1.77	2872	286
040	4/0	532	0.080	1.92	3478	328
250	250	627	0.095	2.10	4155	363
350	350	888	0.095	2.36	5483	436
500	500	1221	0.095	2.70	7249	524

Primary Usage  
Recommendation



\*Ampacity – is calculated with a 90°C conductor temperature and 40°C ambient air

• Cable diameters and weights are subject to +/-5% manufacturing tolerance







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

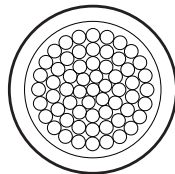
Ethylene-Propylene  
rubber (EPR)

## Jacket

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



**See Page 34  
for jacket  
color options.**



Round-shaped  
cross-section

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

## 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	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	37	0.045	0.015	0.257	58	55
204	8	168	0.055	0.030	0.349	77	80
205	6	61	0.055	0.030	0.365	124	105
207	4	133	0.055	0.030	0.460	203	140
209	2	259	0.055	0.030	0.534	265	190
210	1	224	0.065	0.045	0.623	415	220
211	1/0	266	0.065	0.045	0.668	489	260
212	2/0	323	0.065	0.045	0.689	562	300
213	3/0	418	0.065	0.045	0.771	757	350
214	4/0	532	0.065	0.045	0.822	894	405
215	262	646	0.075	0.065	0.957	1091	467
216	313	777	0.075	0.065	1.008	1245	522
217	373	925	0.075	0.065	1.074	1486	591
218	444	1110	0.075	0.065	1.143	1749	652
219	535	1332	0.090	0.065	1.257	2099	728
220	646	1591	0.090	0.065	1.361	2464	815
221	777	1924	0.090	0.065	1.439	2899	904
222	929	2318	0.090	0.065	1.685	3501	1005
223	1111	2745	0.130	0.065	1.850	4166	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

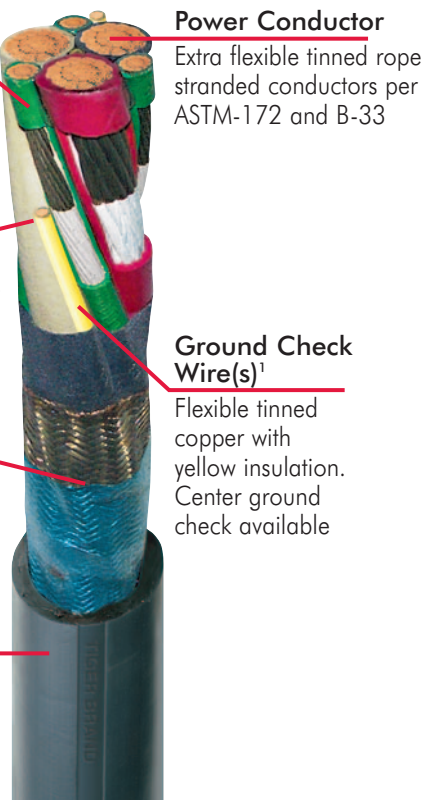
Type II EPR suitable for continuous operation at 90°C. Ozone resistant.

## 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.



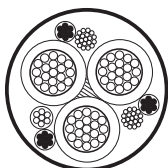
## Power Conductor

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

## Ground Check Wire(s)<sup>1</sup>

Flexible tinned copper with yellow insulation. Center ground check available

See Page 34 for CPE jacket color options.



Round-shaped cross-section

## 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; and 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 184-MSHA.
- Pennsylvania Department of Environmental Protection P-184.
- Canadian Standards Association C22.2 No. 96 File 82346. CSA Phase Color ID available on MTO

## 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

Part No. 36-501	Power Conductor Size AWG/kcmil	Grounding Conductors Size AWG	Nominal Jacket Thickness in.	Nominal Diameter in.	Approx. Weight lbs./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	0.235	2.68	7840	435
500	500	1/0	0.265	3.03	9730	536

<sup>1</sup> 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

• Cable diameters are subject to a +/- 5% manufacturing tolerance



# OTHER AVAILABLE AMERCABLE VFD CABLE CONSTRUCTIONS



**37-102VFD**  
Standard  
Type VFD  
Power Cable

- 2kV
- Rated 110°C
- Gexol® Insulated



**37-103VFD**  
Low Smoke  
Halogen-Free  
Type VFD  
Power Cable

- 2kV
- Rated 110°C
- Gexol® Insulated



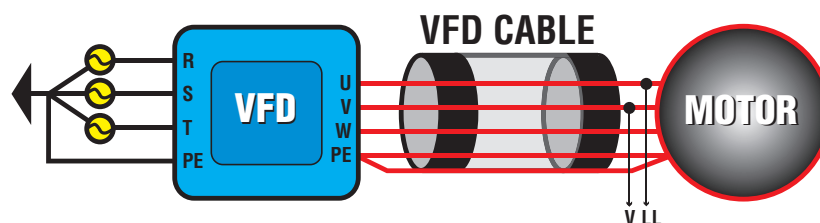
**37-102CIRVFD**  
CIR Type VFD  
Power Cable

- 2kV
- Rated 110°C
- Gexol® Insulated
- Crush & Impact resistant without external armoring



**37-108VFD**  
Flexible  
Type TC-ER  
VFD  
Power Cable

- 600V
- Rated 90°C





## 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.



**Black**  
(standard)



**Blue**



**Green**



**Orange**



**Yellow**



**Red**



In addition to reducing run-overs, many customers now deploy our Tiger Stripes Reflective cables beside pit roads to help guide their hauler drivers at night.

### **BOTTOM LINE SAVINGS**

Based on increased productivity and longer cable service life, we estimate Tiger Stripes – Reflective saves our average open pit customers at least \$1 million annually.

# TIGER STRIPES – STANDARD

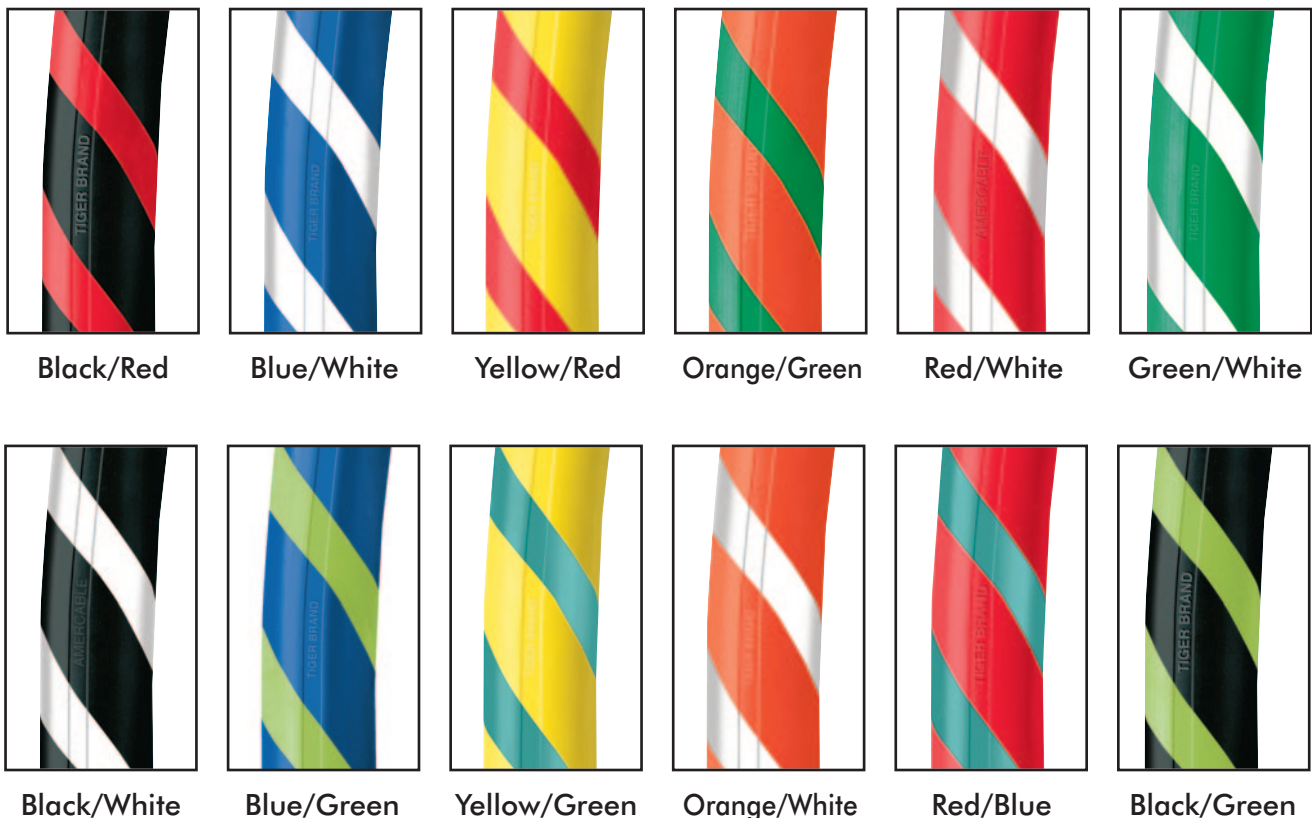


Nexans AmerCable's standard **Tiger Stripes** provide an additional 21 color combinations for easier visual circuit identification.

Stripes are vulcanized into the jacket and are available on contrasting jacket colors in white, red, green and blue.

Tiger Stripes are available on Nexans AmerCable round CPE jacketed cables only.

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



Safety  
through easier  
circuit  
identification

Assign to specific  
equipment to  
make visual  
inventory simpler

Available only  
on round CPE  
jacketed cables





# JACKET MATERIALS & COLOR OPTIONS

## 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.

## TPU JACKETS

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

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

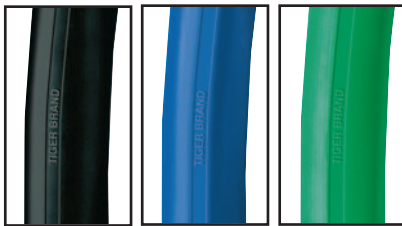
**5X** more abrasion resistance

**2X** more tear resistance

**2X** more tensile strength

**Up to  
8% Less  
Jacket  
Weight**

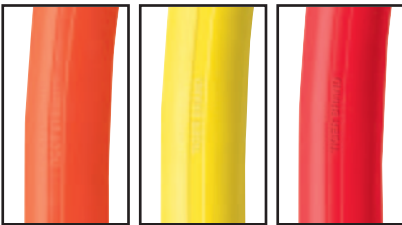
Standard jacket color – black. See color options below.



**Black**  
(standard)

**Blue**

**Green**



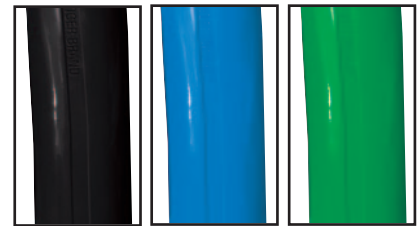
**Orange**

**Yellow**

**Red**

Nexans AmerCable's CPE and TPU colored jackets experience no loss of physical properties compared to the standard black jacket.

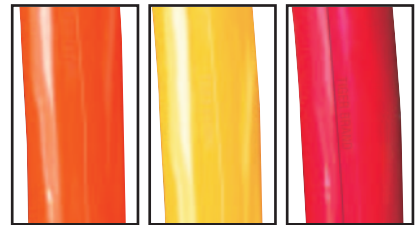
These brightly colored cables **can** improve mine safety by providing easy circuit identification.



**Black**  
(standard)

**Blue**

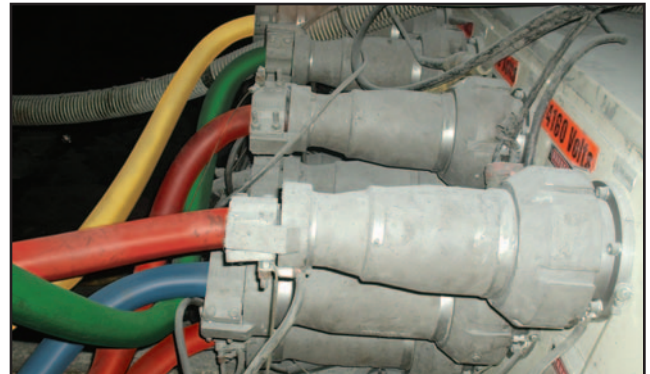
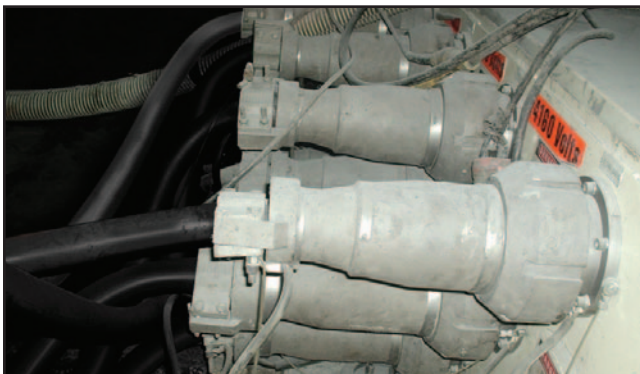
**Green**



**Orange**

**Yellow**

**Red**



Tiger® Brand is a registered trademark of AmerCable Incorporated.

# SAFETY, TRAINING AND 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

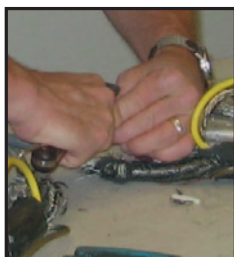
Safety and maximized cable productivity are Nexans AmerCable's top priorities for our customers. Surface or underground – 24/7 – all shifts – Nexans AmerCable's mine-experienced field reps are ready to provide on-site cable evaluation, safe handling training and innovative productivity solutions.



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

## 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.







# FACTORY INSTALLED CABLE ASSEMBLIES

Factory Installed Cable Assemblies from Nexans AmerCable are professionally assembled in our El Dorado, Arkansas manufacturing facility or at our Western Service Center in Tooele, Utah. 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 are a reliable way to lower your overall cable connectivity costs through enhanced reliability, reduced handling and lower installation time.



## Applications

- Surface Mining
- Underground Mining
- Tunneling
- Dredges
- Reeling

## Constructions

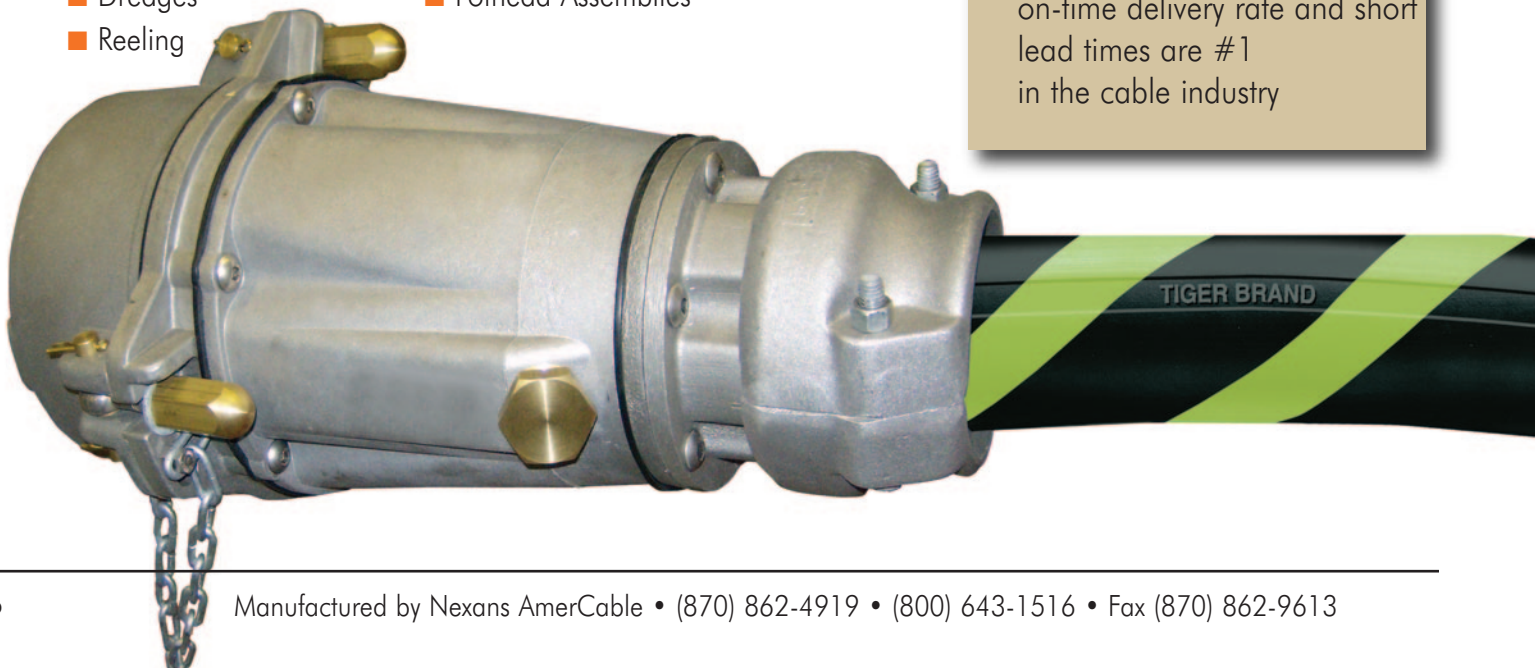
- 2 – 25kV
- Stress Cones & fill
- ID Labeling
- Pothead Assemblies

## Why Use

**FACTORY  
INSTALLED**

## Cable Assemblies?

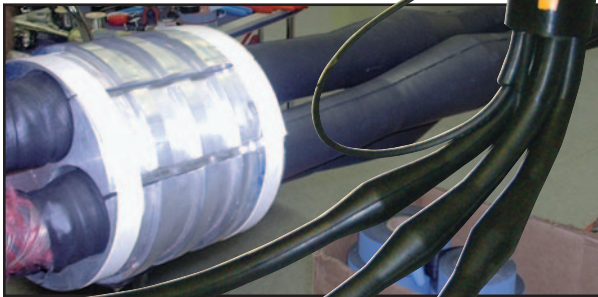
- Your cable assembly, built to your exact specifications, arrives ready for immediate use
- Reduced prep, handling and installation time
- No need to maintain expensive connector inventory
- Professionally assembled
- Factory electrical testing before shipping
- Nexans AmerCable's on-time delivery rate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





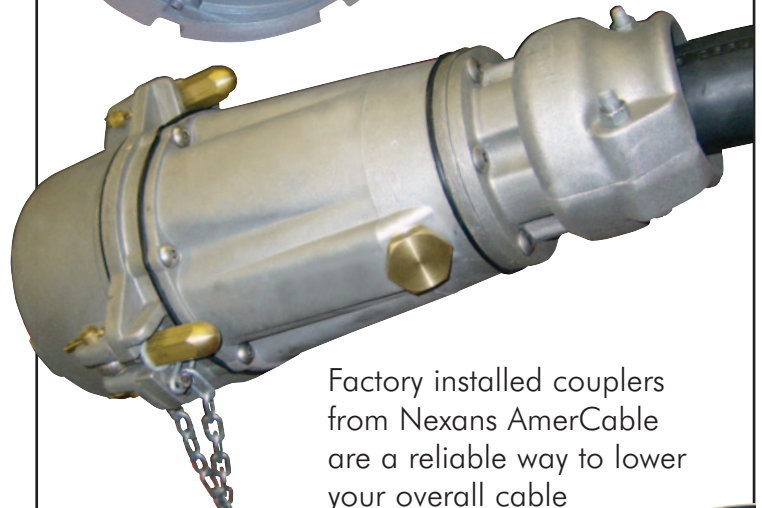
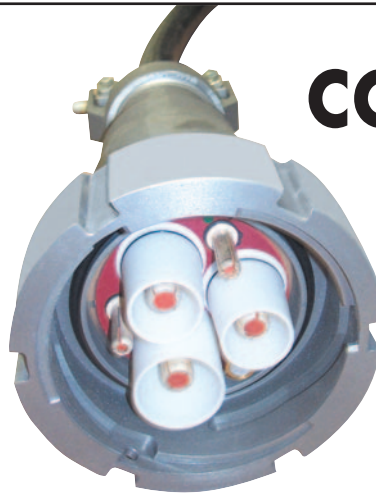
## MOLDED POTHEADS

(up to 25kV)



## COUPLERS

Nexans AmerCable will install the couplers you specify and deliver your trailing cable ready for immediate deployment.



Factory installed couplers from Nexans AmerCable are a reliable way to lower your overall cable connectivity costs.



TIGER® BRAND

# SURFACE MINING CABLES

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

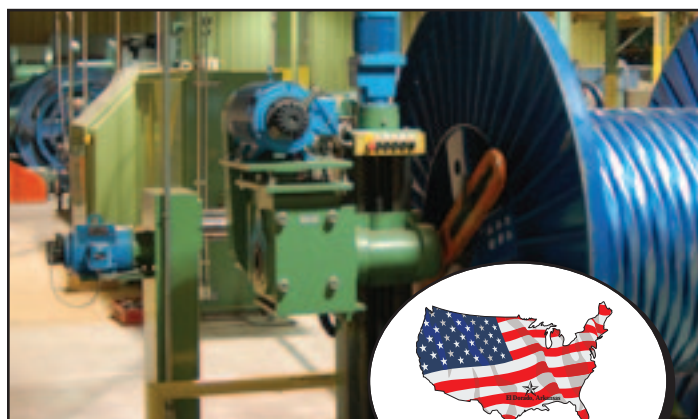


**Nexans AmerCable** is an ISO 9001 certified cable manufacturer that combines leading-edge technology, proven manufacturing techniques and high-quality service to deliver the finest mining cable products available.

**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



## Nexans AmerCable

350 Bailey Road - El Dorado, Arkansas USA  
(870) 862-4919 • (800) 643-1516 • Fax (870) 862-9613  
e-mail: [mining@nexansamercable.com](mailto:mining@nexansamercable.com)  
[www.nexansamercable.com](http://www.nexansamercable.com)

© 2018, AmerCable Incorporated 1\_19

CLICK HERE TO  
FOLLOW US!

