

TIGER® BRAND

VFD MINING CABLES



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



See Page 30 for jacket color options.

APPLICATION

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

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

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

RATINGS & APPROVALS

- 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
- 90°C Temperature Rating
- Tiger® Brand Mining Cable materials meet or exceed ICEA Standard S-75-381/NEMA WC-58.

| 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 |