

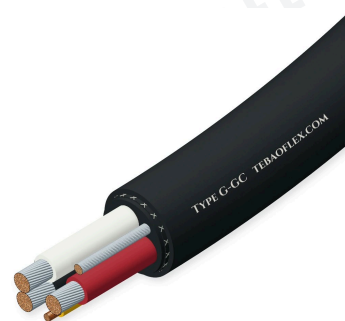


Mining trailing &amp; reeling cables

# Type G-GC

## 2 kV Portable Mining Power Cable

Three power cores, two split grounds and one yellow ground-check pilot to 2,000 V



ICEA S-75-381 / NEMA WC 58

2,000 V · 3P+2G+1GC

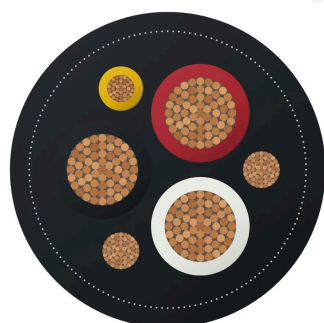
MSHA Flame

### Application

Heavy-duty round portable power and trailing cable to ICEA S-75-381 / NEMA WC 58 for continuous miners, loaders, drills, pumps and mobile substations requiring continuous ground-check continuity monitoring up to 2 kV.

**Typical uses:** Continuous miners & loaders, Roof bolters & drills, Mine dewatering pumps, Portable crushers & screens, Mobile power centres, Quarry & tunnel plant

### Construction



Cross-section, not to scale

|   |                          |                                             |
|---|--------------------------|---------------------------------------------|
| 1 | Phase conductors (3)     | ASTM B172 / ASTM B33                        |
| 2 | Separator tape           |                                             |
| 3 | Phase insulation         | ICEA S-75-381 Part 3                        |
| 4 | Grounding conductors (2) | Combined area $\geq$ 50 % of one phase core |
| 5 | Ground-check pilot (1)   |                                             |
| 6 | Reinforcing binder       |                                             |
| 7 | Outer jacket             | ICEA S-75-381 / MSHA                        |

## Technical data

Typical values

|                            |                                                                                                                  |                                 |                                                                                               |
|----------------------------|------------------------------------------------------------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------------------------------|
| Rated voltage              | 2,000 V (phase-to-phase)                                                                                         | Ampacity range                  | 59 to 487 A (90 °C conductor, 40 °C ambient in free air)                                      |
| Grounding conductors       | Two symmetrically split green-insulated or bare tinned copper grounds (≥ 50 % of one phase conductor total area) | Ground-check pilot              | One yellow-insulated tinned copper pilot (10, 8 or 6 AWG) for fail-safe continuity monitoring |
| Shielding                  | Unshielded (specify Type SHD-GC when metallic phase shielding is required)                                       | Max. continuous conductor temp. | +90 °C (dry / wet)                                                                            |
| Min. operating temperature | -40 °C                                                                                                           | Emergency overload temperature  | +130 °C                                                                                       |
| Short-circuit temperature  | +250 °C                                                                                                          | Min. bending radius             | 6 × OD (≤ 2.0 in / 50.8 mm OD); 8 × OD (> 2.0 in OD)                                          |
| Phase conductor stranding  | Rope-lay stranded annealed tinned copper (133 to 1,221 strands)                                                  | Jacket reinforcement            | Two-layer extra-heavy-duty CPE jacket with integral reinforcing cord                          |
| Flame retardance           | MSHA 30 CFR Part 7 flame test; CSA FT4                                                                           | Oil, abrasion & impact          | Heavy-duty CPE resists cutting, rock impact, oil, grease, acids and alkalis                   |
| Water & sunlight           | 90 °C wet/dry rated; UV and weather resistant black jacket                                                       | Standards                       | ICEA S-75-381 / NEMA WC 58                                                                    |

## Sizes

12 standard constructions

Tick the sizes you need and send this page to [info@tebaoflex.com](mailto:info@tebaoflex.com) or WhatsApp +86 185 9591 3361.

| Power cores<br>3 × AWG/kcmil                       | Phase<br>strands | Grounds (2)<br>AWG (strands) | Pilot (GC)<br>AWG | Insulation<br>mils | Insulation<br>mm | Nominal OD<br>in | Nominal OD<br>mm | Weight ≈<br>lb/ft | Mass ≈<br>kg/km | Ampacity<br>A (40 °C) |
|----------------------------------------------------|------------------|------------------------------|-------------------|--------------------|------------------|------------------|------------------|-------------------|-----------------|-----------------------|
| <input type="checkbox"/> Type G-GC · 3 × 8 AWG     | 133              | 2 × 10 (49)                  | 10                | 60                 | 1.52             | 0.97             | 24.6             | 600               | 893             | 59                    |
| <input type="checkbox"/> Type G-GC · 3 × 6 AWG     | 259              | 2 × 10 (49)                  | 10                | 60                 | 1.52             | 1.05             | 26.7             | 750               | 1,116           | 79                    |
| <input type="checkbox"/> Type G-GC · 3 × 4 AWG     | 259              | 2 × 8 (133)                  | 10                | 60                 | 1.52             | 1.19             | 30.2             | 1,070             | 1,592           | 104                   |
| <input type="checkbox"/> Type G-GC · 3 × 2 AWG     | 259              | 2 × 7 (133)                  | 10                | 60                 | 1.52             | 1.34             | 34.0             | 1,480             | 2,202           | 138                   |
| <input type="checkbox"/> Type G-GC · 3 × 1 AWG     | 259              | 2 × 6 (133)                  | 8                 | 80                 | 2.03             | 1.51             | 38.4             | 1,890             | 2,813           | 161                   |
| <input type="checkbox"/> Type G-GC · 3 × 1/0 AWG   | 266              | 2 × 5 (133)                  | 8                 | 80                 | 2.03             | 1.65             | 41.9             | 2,340             | 3,482           | 186                   |
| <input type="checkbox"/> Type G-GC · 3 × 2/0 AWG   | 323              | 2 × 4 (259)                  | 8                 | 80                 | 2.03             | 1.75             | 44.5             | 2,750             | 4,092           | 215                   |
| <input type="checkbox"/> Type G-GC · 3 × 3/0 AWG   | 418              | 2 × 2 (259)                  | 8                 | 80                 | 2.03             | 1.89             | 48.0             | 3,377             | 5,026           | 249                   |
| <input type="checkbox"/> Type G-GC · 3 × 4/0 AWG   | 532              | 2 × 2 (259)                  | 8                 | 80                 | 2.03             | 2.04             | 51.8             | 3,980             | 5,923           | 287                   |
| <input type="checkbox"/> Type G-GC · 3 × 250 kcmil | 627              | 2 × 2 (259)                  | 6                 | 95                 | 2.41             | 2.39             | 60.7             | 5,000             | 7,441           | 320                   |
| <input type="checkbox"/> Type G-GC · 3 × 350 kcmil | 888              | 2 × 1/0 (266)                | 6                 | 95                 | 2.41             | 2.68             | 68.1             | 6,750             | 10,046          | 394                   |
| <input type="checkbox"/> Type G-GC · 3 × 500 kcmil | 1,221            | 2 × 2/0 (323)                | 6                 | 95                 | 2.41             | 3.03             | 77.0             | 8,900             | 13,245          | 487                   |

- Ampacity based on 90 °C conductor temperature at 40 °C ambient in free air (single cable) per ICEA S-75-381.

- 3 × 3 AWG (between 4 AWG and 2 AWG) is also available on request.

## Standards and approvals

### Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

### Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/type-g-gc-cable-icea-nema-msha



Typical values for this cable type, based on ICEA S-75-381 / NEMA WC 58. Values for your order are confirmed in the quotation. Subject to change without notice.  
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.