MV SWA mining power cable

# CHKCYDY

## 3.6/6 kV Concentric-Conductor SWA Mining Cable

**PN-G-91006 / IEC 60502-2 · 3.6/6 kV · −30…+90 °C armoured underground mining power cable**

3.6/6 kV Mining | Concentric Cu + SWA | PN-G-91006



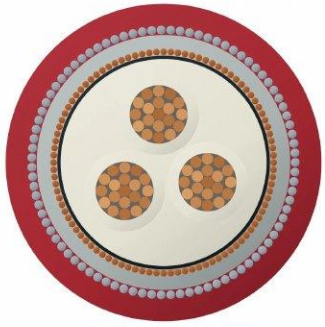

## Application

CHKCYDY 3.6/6 kV underground mining medium-voltage power cable built to PN-G-91006 with Class 2 copper phase conductors, HEPR insulation, overall concentric copper earth/screen, galvanized steel wire armour and red flame-retardant PVC jacket.

**Typical uses:** Underground Hard-Rock & Coal Mining Networks, Mine Shaft & Inclined Drift MV Power Feeders, Tunnelling & Subterranean Excavation Infrastructure, Mineral Processing & Heavy Pit Substations

## Construction



Cross-section, not to scale

| | | |
|---|---|---|
| 1 | Phase Conductors (3x50 mm²) | PN-G-91006 / IEC 60502-2 |
| 2 | HEPR Insulation & Rubber Filler | PN-G-91006 / IEC 60502-2 |
| 3 | Semiconductive Tape & Concentric Cu | PN-G-91006 / IEC 60502-2 |
| 4 | Separation Sheath & Steel Armour | PN-G-91006 / IEC 60502-2 |
| 5 | Outer Sheath (3.6/6 kV Red) | PN-G-91006 / IEC 60502-2 |

## Technical data

Typical values

| | | | |
|---|---|---|---|
| **Rated voltage / transmission duty** | 3.6/6 (7.2) kV (PN-G-91006 / IEC 60502-2) | **Core / conductor construction** | Phase Conductors (3x50 mm²) — Class 2 circular stranded plain annealed copper conductors for underground mining medium-voltage feeders |
| **Primary dielectric / insulation** | HEPR Insulation & Rubber Filler — Natural-coloured high-modulus ethylene propylene rubber (HEPR) core insulation with extruded rubber interstitial filling | **Continuous operating temperature** | −30…+90 °C (rated operating envelope) |
| **Storage & transport temperature** | −40…+80 °C on export drum or reel | **Outer protection / sheath** | Outer Sheath (3.6/6 kV Red) — Heavy-duty red ST2 flame-retardant polyvinyl chloride (PVC) outer sheath for 3.6/6 kV underground mine galleries |
| **Minimum bending radius** | 12–15 × OD | **Structural layer count** | 5 concentric functional layers |
| **Environmental & chemical resistance** | Industrial moisture, oils and mechanical wear per PN-G-91006 / IEC 60502-2 | **RoHS & REACH compliance** | RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant |
| **Standards** | PN-G-91006 / IEC 60502-2 | | |

## Sizes

5 standard constructions

**Tick the sizes you need** and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

| Order designation | Configuration | Core / stranding | Outer Ø ≈ mm | Weight ≈ kg/km | Tensile load kN ≈ | Min. bend R mm |
|---|---|---|---|---|---|---|
| **CHKCYDY Construction Schedule (−30…+90 °C)** 5 sizes | | | | | | |
| ☐ **CHKCYDY 3×35/16 mm² 3.6/6 kV** | **3×35 + 16 mm²** | **Class 2 Cu + concentric Cu + SWA** | **41.2** | **3,180** | **45.0** | **500** |
| ☐ **CHKCYDY 3×50/16 mm² 3.6/6 kV** | **3×50 + 16 mm²** | **Class 2 Cu + concentric Cu + SWA** | **44.5** | **3,790** | **56.0** | **535** |
| ☐ **CHKCYDY 3×70/25 mm² 3.6/6 kV** | **3×70 + 25 mm²** | **Class 2 Cu + concentric Cu + SWA** | **48.2** | **4,680** | **72.0** | **580** |
| ☐ **CHKCYDY 3×95/25 mm² 3.6/6 kV** | **3×95 + 25 mm²** | **Class 2 Cu + concentric Cu + SWA** | **52.0** | **5,690** | **90.0** | **625** |
| ☐ **CHKCYDY 3×120/35 mm² 3.6/6 kV** | **3×120 + 35 mm²** | **Class 2 Cu + concentric Cu + SWA** | **55.6** | **6,740** | **108.0** | **670** |

– Custom core counts, cross-sections, sheath colours and factory-tested cut lengths available per PN-G-91006 / IEC 60502-2.

## Electrical, optical & thermal parameters

5 sizes

| Configuration | Max. DC $R_{20}$ / Atten. Ω/km or dB/km | Rating / Capacity | Operating temp. |
|---|---|---|---|
| **3×35 + 16 mm²** | **0.52** | **3.6/6 kV / 160 A** | **−30…+90 °C** |
| **3×50 + 16 mm²** | **0.39** | **3.6/6 kV / 195 A** | **−30…+90 °C** |
| **3×70 + 25 mm²** | **0.27** | **3.6/6 kV / 240 A** | **−30…+90 °C** |
| **3×95 + 25 mm²** | **0.19** | **3.6/6 kV / 290 A** | **−30…+90 °C** |
| **3×120 + 35 mm²** | **0.15** | **3.6/6 kV / 335 A** | **−30…+90 °C** |

– Every production length undergoes routine conductor DC resistance, high-voltage dielectric and dimensional verification.

## Standards and approvals

- PN-G-91006 Compliant
- EN 10204 3.1 Factory Test Certificate
- CE, RoHS 2 (2011/65/EU) & REACH

## 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/chkcydy-3-6-6kv-concentric-conductor-swa-mining-power-cable**

Typical values for this cable type, based on PN-G-91006 / IEC 60502-2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.