ZN-CB-13 round-steel-wire armoured mine shaft control cable

# YKGSYFoyn

## 0.6/1 kV SWA Mine Shaft Control & Signalling Cable

**ZN-CB-13:2002 / EMAG · 0.6/1 kV · Round steel wire armoured mine shaft control cable**



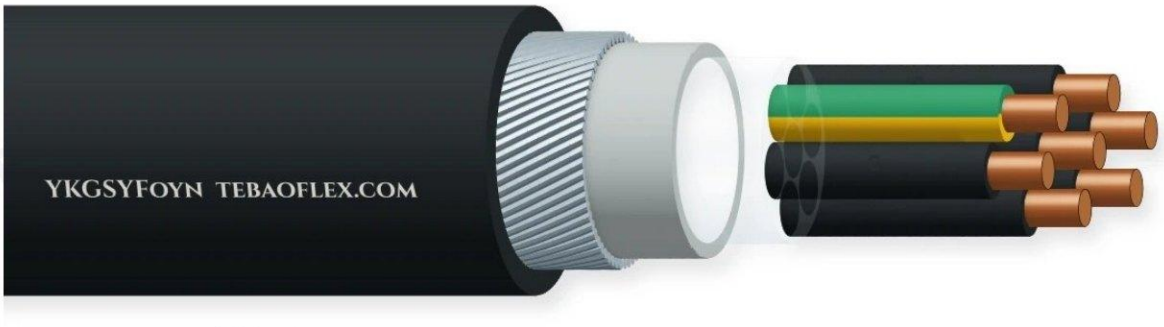

ZN-CB-13:2002 / EMAG | 0.6/1 kV + Round SWA (Fo) | Vertical Shaft & >45° Dip

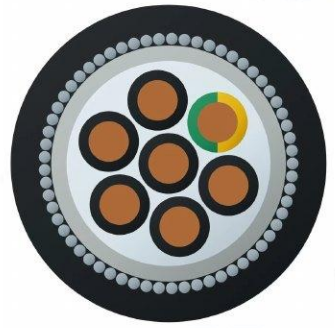
## Application

YKGSYFoyn 0.6/1 kV round galvanized steel wire armoured (Fo) underground mining control and shaft signalling cable per ZN-CB-13:2002 for vertical shafts and >45° roadways, with numbered black PVC cores, Green/Yellow PE core and Cat. C FR-PVC sheath.

**Typical uses:** Underground Coal & Hard-Rock Mining, Open-Cast Excavators, Draglines & Shovels, Vertical Mine Shafts, Hoists & Boreholes, Tunneling, Mineral Processing & Slurry Plants

## Construction



Cross-section, not to scale

1. Conductors (6×2.5+2.5 mm²)
2. PVC Core Insulation (Y)
3. Inner Bedding Sheath (Y)
4. Round Steel Wire Armour (Fo)
5. Flame-Retardant Outer Sheath (yn)

## Technical data

Typical values

| | | | |
|---|---|---|---|
| **Rated voltage / transmission duty** | 0.6/1 kV (ZN-CB-13:2002 / PN-EN 60228 / IEC 60332-3-24) | **Core / conductor construction** | Conductors (6×2.5+2.5 mm²) — PN-EN 60228 Class 1 solid bare copper (or Class 5 in YKGSLYFoyn) |
| **Primary dielectric / buffering** | PVC Core Insulation (Y) — Numbered black PVC control cores (1–6) + outer green/yellow PE core | **Continuous operating temperature** | -30 to +70 °C (mining & industrial service) |
| **Short-circuit / peak thermal rating** | Verified thermal stability per ZN-CB-13:2002 / PN-EN 60228 / IEC 60332-3-24 | **Storage & transport temperature** | −40...+80 °C on export wooden/steel drum |
| **Outer protection / armouring** | Flame-Retardant Outer Sheath (yn) — High-oxygen-index (LOI ≥ 29%) Cat. C flame-retardant mining PVC jacket | **Minimum bending radius** | 12 × OD |
| **Crush, impact & abrasion duty** | Heavy-duty mining rock-cut, impact and tensile protection per ZN-CB-13:2002 / PN-EN 60228 / IEC 60332-3-24 | **Flame retardancy & mine fire safety** | Self-extinguishing / flame-retardant mining jacket per ZN-CB-13:2002 / PN-EN 60228 / IEC 60332-3-24 |
| **Mine water, oil & chemical resistance** | Resistant to acidic mine water, hydraulic oils and abrasion per ZN-CB-13:2002 / PN-EN 60228 / IEC 60332-3-24 | **RoHS & REACH compliance** | RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant |
| **Standards** | ZN-CB-13:2002 / PN-EN 60228 / IEC 60332-3-24 | | |

## Sizes

3 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 | Net weight ≈ kg/km | Tensile rating kN ≈ | Min. bend R mm |
|---|---|---|---|---|---|---|
| **YKGSYFoyn Construction Schedule (-30 to +70 °C)** 3 sizes | | | | | | |
| ☐ YKGSYFoyn 6×2.5 + 2.5 mm² (0.6/1 kV) | 6 × 2.5 mm² + 1 × 2.5 żo | Class 1 Cu + Round SWA | 19.8 | 790 | 11.5 | 240 |
| ☐ YKGSYFoyn 12×2.5 + 2.5 mm² (0.6/1 kV) | 12 × 2.5 mm² + 1 × 2.5 żo | Class 1 Cu + Round SWA | 24.6 | 1,240 | 16.5 | 295 |
| ☐ YKGSYFoyn 24×1.5 + 1.5 mm² (0.6/1 kV) | 24 × 1.5 mm² + 1 × 1.5 żo | Class 1 Cu + Round SWA | 27.4 | 1,490 | 19.0 | 330 |

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per ZN-CB-13:2002 / PN-EN 60228 / IEC 60332-3-24.

## Electrical, optical & thermal parameters

3 sizes

| Configuration | Max. DC $R_{20}$ / Atten. Ω/km or dB/km | Rating / Impedance | Operating temp. |
|---|---|---|---|
| 6 × 2.5 mm² + 1 × 2.5 żo | 7.41 | 0.6/1 kV · ≤90° vertical shaft | -30 to +70 °C |
| 12 × 2.5 mm² + 1 × 2.5 żo | 7.41 | 0.6/1 kV · ≤90° vertical shaft | -30 to +70 °C |
| 24 × 1.5 mm² + 1 × 1.5 żo | 12.10 | 0.6/1 kV · ≤90° vertical shaft | -30 to +70 °C |

– Every production length undergoes routine conductor DC resistance, high-voltage Spark/AC dielectric or OTDR continuity and dimensional verification.

## Standards and approvals

- ZN-CB-13 / EMAG 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/ykgsyfoyn-0-6-1kv-round-steel-wire-armoured-mine-shaft-control-signalling-cable**

Typical values for this cable type, based on ZN-CB-13:2002 / PN-EN 60228 / IEC 60332-3-24. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.