CSA C22.2 No. 131 self-supporting vertical mineshaft SIA cable

Vertical Mineshaft SIA

5 kV Self-Supporting Borehole Cable

CSA C22.2 No. 131 / UL 1569 · 600 V–5 kV · Self-supporting SIA borehole drop cable

CSA C22.2 No. 131 | 5 kV RW90 XLPE | Ribbed Anti-Slip SIA



Application

Vertical Mineshaft SIA 5 kV self-supporting borehole and vertical mine shaft feeder cable per CSA C22.2 No. 131 and UL 1569, combining copper-tape-shielded RW90 XLPE phases, internal steel support messengers, galvanized SIA armour and FT4 jacket.

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. 5 kV Phase Conductors (3×2/0 AWG)
2. Internal Steel Support Messengers
3. Ribbed Anti-Slip Inner Jacket
4. Steel Interlocked Armour (SIA)
5. FT4 Low-Temp Outer Jacket

Technical data

Typical values

Rated voltage / transmission duty	5 kV (CSA C22.2 No. 131 / CSA C68.10 / UL 1569)	**Core / conductor construction**	5 kV Phase Conductors (3×2/0 AWG) — Stranded bare copper + semicon screens + 90 °C RW90 XLPE + copper tape shield
Primary dielectric / buffering	Internal Steel Support Messengers — Individually PVC-jacketed high-tensile galvanized steel support cables	**Continuous operating temperature**	-40 to +90 °C (mining & industrial service)
Short-circuit / peak thermal rating	Verified thermal stability per CSA C22.2 No. 131 / CSA C68.10 / UL 1569	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	FT4 Low-Temp Outer Jacket — Sunlight-, oil- and -40 °C cold-impact resistant FT4 FR-PVC jacket	**Minimum bending radius**	12 × OD
Crush, impact & abrasion duty	Heavy-duty mining rock-cut, impact and tensile protection per CSA C22.2 No. 131 / CSA C68.10 / UL 1569	**Flame retardancy & mine fire safety**	Self-extinguishing / flame-retardant mining jacket per CSA C22.2 No. 131 / CSA C68.10 / UL 1569
Mine water, oil & chemical resistance	Resistant to acidic mine water, hydraulic oils and abrasion per CSA C22.2 No. 131 / CSA C68.10 / UL 1569	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	CSA C22.2 No. 131 / CSA C68.10 / UL 1569		

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
Vertical Mineshaft SIA Construction Schedule (-40 to +90 °C) 3 sizes						
☐ **Vertical Mineshaft SIA 5 kV 3×2/0 AWG**	3 × 2/0 AWG + 3 Steel Messengers	Class B Cu + Galvanized Steel	56.4	5,420	85.0	675
☐ **Vertical Mineshaft SIA 5 kV 3×4/0 AWG**	3 × 4/0 AWG + 3 Steel Messengers	Class B Cu + Galvanized Steel	63.8	7,180	115.0	765
☐ **Vertical Mineshaft SIA 5 kV 3×350 kcmil**	3 × 350 kcmil + 3 Steel Messengers	Class B Cu + Galvanized Steel	74.2	10,450	160.0	890

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per CSA C22.2 No. 131 / CSA C68.10 / UL 1569.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 2/0 AWG + 3 Steel Messengers	0.26	5 kV 100%/133% (215 A)	-40 to +90 °C
3 × 4/0 AWG + 3 Steel Messengers	0.16	5 kV 100%/133% (285 A)	-40 to +90 °C
3 × 350 kcmil + 3 Steel Messengers	0.10	5 kV 100%/133% (395 A)	-40 to +90 °C

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

Standards and approvals

- CSA C22.2 #131 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/vertical-mineshaft-sia-5kv-self-supporting-steel-interlocked-armour-drop-cable

Typical values for this cable type, based on CSA C22.2 No. 131 / CSA C68.10 / UL 1569. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.