SANS 1507 SWA underground mining power cable

SANS 1507 SWA

0.6/1 kV Armoured Mining Power Cable

SANS 1507-3 / SANS 1507-4 · 0.6/1 kV · Galvanized steel wire armoured mining power cable



SANS 1507-3 / -4 | 0.6/1 kV XLPE | Galvanized SWA / ECC

Application

SANS 1507 SWA 0.6/1 kV underground mining and industrial feeder cable per SANS 1507-3/4, comprising Class 2 copper conductors, 90 °C XLPE insulation, PVC bedding, galvanized round steel wire armour (SWA/ECC) and red-striped 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. Phase Conductors (4×70 mm²)
2. Core Insulation (XLPE / PVC)
3. Extruded PVC Bedding
4. Round Steel Wire Armour / ECC (SWA)
5. Red-Striped Flame-Retardant Sheath

Technical data

Typical values

Rated voltage / transmission duty	0.6/1 kV (SANS 1507-3 / SANS 1507-4 / IEC 60502-1)	**Core / conductor construction**	Phase Conductors (4×70 mm²) — SANS 1411-1 / IEC 60228 Class 2 stranded annealed plain copper
Primary dielectric / buffering	Core Insulation (XLPE / PVC) — 90 °C XLPE insulation color-coded Red, Yellow, Blue & Black per SANS 1507	**Continuous operating temperature**	-15 to +90 °C (mining & industrial service)
Short-circuit / peak thermal rating	Verified thermal stability per SANS 1507-3 / SANS 1507-4 / IEC 60502-1	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Red-Striped Flame-Retardant Sheath — Black UV-stabilized FR-PVC outer jacket with longitudinal red stripes	**Minimum bending radius**	12 × OD
Crush, impact & abrasion duty	Heavy-duty mining rock-cut, impact and tensile protection per SANS 1507-3 / SANS 1507-4 / IEC 60502-1	**Flame retardancy & mine fire safety**	Self-extinguishing / flame-retardant mining jacket per SANS 1507-3 / SANS 1507-4 / IEC 60502-1
Mine water, oil & chemical resistance	Resistant to acidic mine water, hydraulic oils and abrasion per SANS 1507-3 / SANS 1507-4 / IEC 60502-1	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	SANS 1507-3 / SANS 1507-4 / IEC 60502-1		

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
SANS 1507 SWA Construction Schedule (-15 to +90 °C) 3 sizes						
☐ **SANS 1507 SWA 4×35 mm²**	4 × 35 mm² + SWA ECC	Class 2 plain Cu	29.8	2,180	28.0	360
☐ **SANS 1507 SWA 4×70 mm²**	4 × 70 mm² + SWA ECC	Class 2 plain Cu	38.4	3,890	48.0	460
☐ **SANS 1507 SWA 4×120 mm²**	4 × 120 mm² + SWA ECC	Class 2 plain Cu	47.6	6,240	72.0	570

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per SANS 1507-3 / SANS 1507-4 / IEC 60502-1.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
4 × 35 mm² + SWA ECC	0.52	0.6/1 kV (158 A)	-15 to +90 °C
4 × 70 mm² + SWA ECC	0.27	0.6/1 kV (238 A)	-15 to +90 °C
4 × 120 mm² + SWA ECC	0.15	0.6/1 kV (330 A)	-15 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

- ✓ SANS 1507 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/sans-1507-swa-0-6-1kv-armoured-underground-mining-power-cable

Typical values for this cable type, based on SANS 1507-3 / SANS 1507-4 / IEC 60502-1. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.