DIN VDE 0250-813 anti-torsion MV mining reeling cable

R-(N)TSCGEWTOEUS

6/10 kV Anti-Torsion MV Reeling Cable

DIN VDE 0250-813 · 3.6/6–18/30 kV · Anti-torsion medium-voltage mining reeling cable



DIN VDE 0250-813 | 3.6/6–18/30 kV EPR | 30 N/mm² Anti-Torsion

Application

R-(N)TSCGEWTOEUS 6/10 kV heavy-duty medium-voltage reeling cable per DIN VDE 0250-813 for open-cast excavators, stacker-reclaimers and draglines, with Class 5 tinned copper phases, 3GI3 EPR insulation, 3 split earths, anti-torsion braid and 5GM5 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 (3×50 mm²)
2. Triple-Extruded MV Dielectric
3. Bare Split Earth Conductors (3×25/3)
4. GM1b Inner Sheath & Polyester Braid
5. Outer Sheath (5GM5 Red CR)

Technical data

Typical values

Rated voltage / transmission duty	6/10 kV (DIN VDE 0250-813 / DIN VDE 0295)
Primary dielectric / buffering	Triple-Extruded MV Dielectric — Inner semicon + 3GI3 EPR primary insulation + outer semicon screen (CGE)
Short-circuit / peak thermal rating	Verified thermal stability per DIN VDE 0250-813 / DIN VDE 0295
Outer protection / armouring	Outer Sheath (5GM5 Red CR) — Heavy-duty red polychloroprene rubber jacket (DIN VDE 0207-21)
Crush, impact & abrasion duty	Heavy-duty mining rock-cut, impact and tensile protection per DIN VDE 0250-813 / DIN VDE 0295
Mine water, oil & chemical resistance	Resistant to acidic mine water, hydraulic oils and abrasion per DIN VDE 0250-813 / DIN VDE 0295
Standards	DIN VDE 0250-813 / DIN VDE 0295

Core / conductor construction	Phase Conductors (3×50 mm²) — DIN VDE 0295 Class 5 flexible tinned copper conductors
Continuous operating temperature	-25 to +80 °C (mining & industrial service)
Storage & transport temperature	−40…+80 °C on export wooden/steel drum
Minimum bending radius	10 × OD
Flame retardancy & mine fire safety	Self-extinguishing / flame-retardant mining jacket per DIN VDE 0250-813 / DIN VDE 0295
RoHS & REACH compliance	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant

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
R-(N)TSCGEWTOEUS Construction Schedule (-25 to +80 °C) 3 sizes						
☐ R-(N)TSCGEWTOEUS 3×35 + 3×25/3 6/10 kV	3 × 35 mm² + 3 × 25/3 mm² (E)	Class 5 tinned Cu	44.8	2,890	3.1	450
☐ R-(N)TSCGEWTOEUS 3×50 + 3×25/3 6/10 kV	3 × 50 mm² + 3 × 25/3 mm² (E)	Class 5 tinned Cu	48.2	3,540	4.5	485
☐ R-(N)TSCGEWTOEUS 3×95 + 3×50/3 6/10 kV	3 × 95 mm² + 3 × 50/3 mm² (E)	Class 5 tinned Cu	58.6	5,620	8.6	590

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per DIN VDE 0250-813 / DIN VDE 0295.

Electrical, optical & thermal parameters

3 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Impedance	Operating temp.
3 × 35 mm² + 3 × 25/3 mm² (6/10 kV)	0.56	6/10 kV (169 A)	-25 to +80 °C
3 × 50 mm² + 3 × 25/3 mm² (6/10 kV)	0.39	6/10 kV (206 A)	-25 to +80 °C
3 × 95 mm² + 3 × 50/3 mm² (6/10 kV)	0.21	6/10 kV (308 A)	-25 to +80 °C

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

Standards and approvals

- VDE 0250-813 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/r-n-tscgewtoeus-6-10kv-anti-torsion-medium-voltage-mining-reeling-cable

Typical values for this cable type, based on DIN VDE 0250-813 / DIN VDE 0295. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.