LED-illuminated TPU mining trailing cable

SHD-GC LED

8–15 kV Illuminated TPU Mining Trailing Cable

ICEA S-75-381 / NEMA WC 58 · 8–15 kV · −40…+90 °C LED-lit optical-clarity TPU shovel cable



8–15 kV SHD-GC | Integrated Red LEDs | ICEA S-75-381

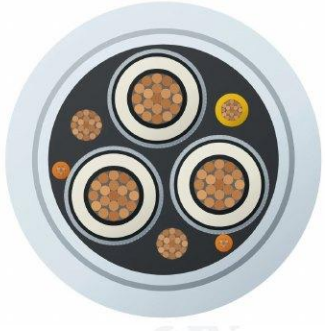
Application

SHD-GC LED 8–15 kV LED-illuminated mining trailing cable combining three tinned copper MV EPR phase cores with copper braid shields, two grounds, one yellow XLPE ground-check core, internal red LED emitters every 1.2 m and a transparent TPU jacket.

Typical uses: Open-Pit Electric Rope Shovels & Hydraulic Excavators, Walking Draglines, Pit Drills & Mobile Crushers, Night-Shift Haul-Road Crossings & Pit Substations, High-Altitude Copper, Gold, Iron & Coal Surface Mines

Construction





Cross-section, not to scale

1	MV Phase Cores (3xTinned Cu)	ICEA S-75-381 / NEMA WC 58
2	Ground & Ground-Check Cores	ICEA S-75-381 / NEMA WC 58
3	Helical LED Illuminating Units	ICEA S-75-381 / NEMA WC 58
4	Transparent Bedding & Braid	ICEA S-75-381 / NEMA WC 58
5	Transparent TPU Outer Jacket	ICEA S-75-381 / NEMA WC 58

Technical data

Typical values

Rated voltage / transmission duty	8–15 kV (ICEA S-75-381 / NEMA WC 58)	**Core / conductor construction**	MV Phase Cores (3xTinned Cu) — Flexible rope-lay stranded tinned copper phase conductors with semiconductive screen, 8–15 kV EPR insulation, semicon, and tinned copper braid shield
Primary dielectric / insulation	Ground & Ground-Check Cores — Two uninsulated stranded tinned copper grounding conductors and one yellow XLPE-insulated ground-check pilot conductor in the interstices	**Continuous operating temperature**	−40…+90 °C (rated operating envelope)
Storage & transport temperature	−40…+80 °C on export drum or reel	**Outer protection / sheath**	Transparent TPU Outer Jacket — Optical-clarity heavy-duty transparent thermoplastic polyurethane (TPU) outer jacket resistant to run-over, rock cut, and oil
Minimum bending radius	6–8 × OD	**Structural layer count**	5 concentric functional layers
Environmental & chemical resistance	Industrial moisture, oils and mechanical wear per ICEA S-75-381 / NEMA WC 58	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ICEA S-75-381 / NEMA WC 58		

Sizes

4 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
SHD-GC LED Construction Schedule (−40…+90 °C) 4 sizes							
☐	**SHD-GC LED 8 kV 3×2 AWG + 2×8 + 1×8 GC**	3×2 AWG + 2×8 + 1×8 GC (8 kV)	Rope-lay tinned Cu + Cu braid + LED	52.8	3,950	28.0	320
☐	**SHD-GC LED 8 kV 3×1/0 AWG + 2×6 + 1×8 GC**	3×1/0 AWG + 2×6 + 1×8 GC (8 kV)	Rope-lay tinned Cu + Cu braid + LED	58.4	5,120	38.0	355
☐	**SHD-GC LED 15 kV 3×2 AWG + 2×8 + 1×8 GC**	3×2 AWG + 2×8 + 1×8 GC (15 kV)	Rope-lay tinned Cu + Cu braid + LED	60.2	4,680	30.0	365
☐	**SHD-GC LED 15 kV 3×2/0 AWG + 2×5 + 1×8 GC**	3×2/0 AWG + 2×5 + 1×8 GC (15 kV)	Rope-lay tinned Cu + Cu braid + LED	68.5	6,890	46.0	415

– Custom core counts, cross-sections, sheath colours and factory-tested cut lengths available per ICEA S-75-381 / NEMA WC 58.

Electrical, optical & thermal parameters

4 sizes

Configuration	Max. DC R_{20} / Atten. Ω/km or dB/km	Rating / Capacity	Operating temp.
3×2 AWG (8 kV SHD-GC LED)	**0.53**	**8 kV / 159 A + LED visual safety**	**−40…+90 °C**
3×1/0 AWG (8 kV SHD-GC LED)	**0.34**	**8 kV / 211 A + LED visual safety**	**−40…+90 °C**
3×2 AWG (15 kV SHD-GC LED)	**0.53**	**15 kV / 164 A + LED visual safety**	**−40…+90 °C**
3×2/0 AWG (15 kV SHD-GC LED)	**0.27**	**15 kV / 243 A + LED visual safety**	**−40…+90 °C**

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

Standards and approvals

- ICEA S-75-381 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/shd-gc-led-8-15kv-illuminated-tpu-mining-trailing-cable

Typical values for this cable type, based on ICEA S-75-381 / NEMA WC 58. Values for your order are confirmed in the quotation. Subject to change without notice.
Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.