ICEA S-75-381 Type SHD-PCG longwall trailing cable

Type SHD-PCG

2 kV / 5 kV Shielded Longwall Mining Cable

ICEA S-75-381 / NEMA WC 58 · 2 kV / 5 kV · Shielded longwall shearer trailing cable



ICEA S-75-381 / MSHA | 2 kV / 5 kV + 3/C PCG | Longwall Shearer Duty

Application

Type SHD-PCG 2000 V and 5000 V MSHA-approved shielded longwall mining trailing cable per ICEA S-75-381, combining 3 braid-shielded 90 °C EPR phases, a 3-core pilot/control group (PCG), central bare tinned copper ground and EHD CPE 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. Power Conductors (3×2/0 AWG)
2. Power Core Insulation & Shield
3. Control Group (3×8 AWG PCG)
4. Central Ground Conductor (1×2 AWG)
5. Integral Fill & Reinforced CPE Jacket

Technical data

Typical values

Rated voltage / transmission duty	2/5 kV (ICEA S-75-381 / NEMA WC 58 / MSHA)	**Core / conductor construction**	Power Conductors (3×2/0 AWG) — Flexible rope-lay tinned copper (323 wires) + non-conducting separator tape
Primary dielectric / buffering	Power Core Insulation & Shield — 90 °C EPR dielectric + tinned copper & Black/White/Red nylon braid shield	**Continuous operating temperature**	-40 to +90 °C (mining & industrial service)
Short-circuit / peak thermal rating	Verified thermal stability per ICEA S-75-381 / NEMA WC 58 / MSHA	**Storage & transport temperature**	−40…+80 °C on export wooden/steel drum
Outer protection / armouring	Integral Fill & Reinforced CPE Jacket — Pure integral rubber fill + reinforcing braid + mold-cured EHD CPE jacket	**Minimum bending radius**	8 × OD
Crush, impact & abrasion duty	Heavy-duty mining rock-cut, impact and tensile protection per ICEA S-75-381 / NEMA WC 58 / MSHA	**Flame retardancy & mine fire safety**	Self-extinguishing / flame-retardant mining jacket per ICEA S-75-381 / NEMA WC 58 / MSHA
Mine water, oil & chemical resistance	Resistant to acidic mine water, hydraulic oils and abrasion per ICEA S-75-381 / NEMA WC 58 / MSHA	**RoHS & REACH compliance**	RoHS 2 (2011/65/EU + 2015/863) & REACH SVHC compliant
Standards	ICEA S-75-381 / NEMA WC 58 / MSHA		

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
Type SHD-PCG Construction Schedule (-40 to +90 °C) 3 sizes						
☐ Type SHD-PCG 2 kV 3×2/0 + 3×8(PCG) + 1×2(G)	3×2/0 AWG + 3×8 (PCG) + 1×2 (G)	323-wire tinned Cu	53.6	4,680	40.2	430
☐ Type SHD-PCG 2 kV 3×4/0 + 3×8(PCG) + 1×1/0(G)	3×4/0 AWG + 3×8 (PCG) + 1×1/0 (G)	532-wire tinned Cu	61.2	6,640	64.0	490
☐ Type SHD-PCG 5 kV 3×2/0 + 3×8(PCG) + 1×2(G)	3×2/0 AWG + 3×8 (PCG) + 1×2 (G) 5kV	323-wire tinned Cu	62.5	5,890	40.2	500

– Custom core cross-sections, pair/fibre counts, armour grades and factory drum lengths available per ICEA S-75-381 / NEMA WC 58 / MSHA.

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 + 3×8 (PCG) + 1×2 (G) 2kV	0.27	2000 V (243 A) + 600 V PCG	-40 to +90 °C
3×4/0 AWG + 3×8 (PCG) + 1×1/0 (G) 2kV	0.17	2000 V (321 A) + 600 V PCG	-40 to +90 °C
3×2/0 AWG + 3×8 (PCG) + 1×2 (G) 5kV	0.27	5000 V (243 A) + 600 V PCG	-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

- 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/type-shd-pcg-2-5kv-msha-shielded-longwall-mining-trailing-cable-with-control-group

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