ICEA S-75-381 Type SH single-conductor shielded MV cable

Type SH

5–35 kV MSHA Single-Conductor Shielded Power Cable

ICEA S-75-381 / NEMA WC 58 · 5–35 kV · Single-conductor shielded MV portable power cable



ICEA S-75-381 / MSHA | 5–35 kV Single-Core | ≥60% SnCu/Nylon Braid

Application

Type SH 5 kV to 35 kV MSHA-approved single-conductor shielded medium-voltage portable power cable per ICEA S-75-381 for mobile mine substations and draglines, with Class K tinned copper, 90 °C EPR insulation, braid shield 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. Flexible Conductor (1/C 4/0 AWG)
2. Conductor Stress Shield (ESS)
3. MV Primary Insulation (90 °C EPR)
4. Insulation Screen & Composite Braid
5. Separator Tape & EHD CPE Jacket

Technical data

Typical values

Rated voltage / transmission duty	15 kV (ICEA S-75-381 / NEMA WC 58 / MSHA)	**Core / conductor construction**	Flexible Conductor (1/C 4/0 AWG) — Rope-lay stranded annealed tinned copper (ASTM B33 / B172 Class K)
Primary dielectric / buffering	Conductor Stress Shield (ESS) — Semiconductive tape + extruded thermosetting semiconductive layer	**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	Separator Tape & EHD CPE Jacket — Reinforcing separator tape + two-layer extra-heavy-duty black 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 SH Construction Schedule (-40 to +90 °C) 3 sizes						
☐ **Type SH 15 kV 1/C 2/0 AWG (100% EPR)**	1 × 2/0 AWG (15 kV Shielded)	329-wire Class K SnCu	31.8	1,490	13.4	255
☐ **Type SH 15 kV 1/C 4/0 AWG (100% EPR)**	1 × 4/0 AWG (15 kV Shielded)	532-wire Class K SnCu	35.1	1,980	21.3	280
☐ **Type SH 15 kV 1/C 350 kcmil (100% EPR)**	1 × 350 kcmil (15 kV Shielded)	882-wire Class K SnCu	40.4	2,910	35.3	325

– 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.
1 × 2/0 AWG (15 kV Shielded)	0.27	15 kV (300 A single free air)	-40 to +90 °C
1 × 4/0 AWG (15 kV Shielded)	0.17	15 kV (400 A single free air)	-40 to +90 °C
1 × 350 kcmil (15 kV Shielded)	0.10	15 kV (550 A single free air)	-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-sh-5-35kv-icea-msha-single-conductor-shielded-mv-portable-power-cable

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.