IEC 60335-2-76 20kV fence lead-out cable

AH-UC1.6 / AH-UC2.5

Double-Insulated Underground Electric Fence Cable



15–20 kV peak pulse double-insulated PE/HDPE underground electric fence lead-out cable

IEC 60335-2-76 & SANS 10222-3 | **15–20 kV Pulse · Double-Insulated** | **AH-UC1.6 (Ø 1.6mm) & AH-UC2.5 (Ø 2.5mm)**

Application

High-voltage double-insulated underground lead-out and under-gate cable (Nemtek AH-UC1.6 / AH-UC2.5) engineered to IEC 60335-2-76 and SANS 10222-3 with a solid Ø 1.6 mm or Ø 2.5 mm galvanized steel (or low-resistance aluminum/tinned-copper) conductor.

Typical uses: High-Security Industrial & Prison Perimeter Fences, Agricultural Livestock & Wildlife Game Fencing, Under-Gate Driveway & Roadway HV Jumpers, Solar & Substation Perimeter Intrusion Detection

Construction





Cross-section, not to scale

1. Solid hot-dip galvanized steel
2. High-voltage virgin Low-Density Polyethylene (LDPE)
3. Heavy-duty UV-stabilised High-Density Polyethylene

Technical data

Typical values

Rated impulse withstand voltage	15 kV to 20 kV peak unidirectional pulse (1,000 V continuous AC rms)	**Conductor DC resistance @ 20 °C**	≈ 85 Ω/km (AH-UC1.6 steel) · ≈ 35 Ω/km (AH-UC2.5 steel) · ≈ 7 Ω/km (Alu)
Dielectric constant & capacitance	ε_r ≈ 2.25 (ultra-low capacitance prevents pulse voltage sag in wet	**Operating ambient temperature**	−30 °C to +70 °C (fixed underground or outdoor UV exposed)
Thermal cycling & overload stability	Verified thermal ageing and short-circuit withstand per standard	**Nominal outer diameter**	6.2 mm (AH-UC1.6) · 7.8 mm (AH-UC2.5)
Minimum bending radius	10 × OD (62 mm for UC1.6 · 78 mm for UC2.5)	**Soil moisture, alkali & UV resistance**	Carbon-black UV-stabilised HDPE outer sheath; zero water absorption
Environmental & chemical durability	Resistant to moisture, industrial fluids and service ageing	**Standards**	IEC 60335-2-76, EN 60335-2-76, SANS 10222-3 & AS/NZS 3014

Sizes

6 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Conductor Ø / Area	Pulse rating	Outer Ø ≈ mm	Resistance Ω/km	Weight ≈ kg/km	Min. bend R mm
Galvanized High-Tensile Steel Core Lead-Out Cables (AH-UC1.6 / AH-UC2.5) 3 sizes						
☐ **AH-UC1.6 (Ø 1.6 mm Galv. Steel)**	1×Ø 1.6 mm (2.01 mm²)	20 kV Pulse	6.2	85	42	62
☐ **AH-UC2.0 (Ø 2.0 mm Galv. Steel)**	1×Ø 2.0 mm (3.14 mm²)	20 kV Pulse	7.0	55	58	70
☐ **AH-UC2.5 (Ø 2.5 mm Galv. Steel)**	1×Ø 2.5 mm (4.91 mm²)	20 kV Pulse	7.8	35	82	78
Ultra-Low-Resistance Aluminum-Alloy & Tinned-Copper Lead-Out Cables 3 sizes						
☐ **AH-UC1.6-AL (Ø 1.6 mm Alu-Alloy)**	1×Ø 1.6 mm (2.01 mm²)	20 kV Pulse	6.2	16	28	62
☐ **AH-UC2.5-AL (Ø 2.5 mm Alu-Alloy)**	1×Ø 2.5 mm (4.91 mm²)	20 kV Pulse	7.8	7	46	78
☐ **AH-UC2.5-TCu (1×4.0 mm² Tinned Cu)**	1×4.0 mm² Stranded TCu	20 kV Pulse	8.0	5	76	65

– Never use ordinary 600/1000 V PVC house wire for electric fence lead-outs; 10 kV pulses punch through PVC in days.

Standards and approvals

- IEC 60335-2-76 & EN 60335-2-76 Compliant
- SANS 10222-3 & AS/NZS 3014 Perimeter Compliant
- 20 kV Peak Impulse Tested

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/double-insulated-high-voltage-underground-electric-fence-lead-out-cable

Typical values for this cable type, based on IEC 60335-2-76 / EN 60335-2-76 / SANS 10222-3 / AS/NZS 3014. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.