power connection cable series

EV Power + Cat5e Hybrid

EV Charge-Point Power and Cat5e Hybrid Installation Cable

0.6/1 kV XLPE power (3G4 to 5G10 mm²) + screened Cat.5e EV charger hybrid cable



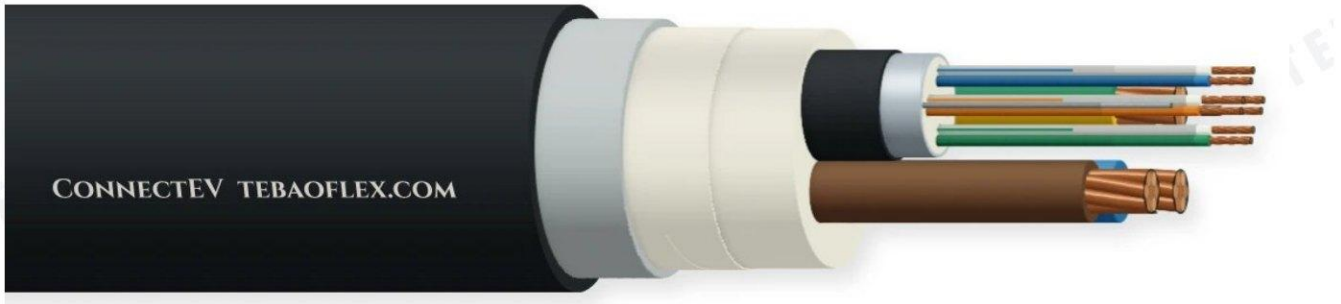
- 0.6/1 kV Power + Screened Cat5e
- 7.4 kW (1P) & 22 kW (3P) EV
- Single-Cable Wallbox Pull

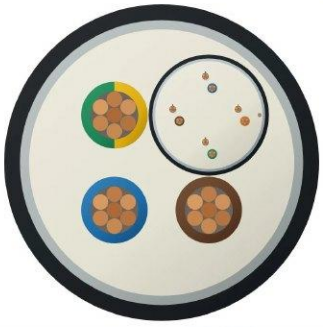
Application

ConnectEV EV Charge-Point Power & Cat.5e Hybrid Installation Cable (0.6/1 kV) engineered for BS 7671 Section 722 domestic and commercial electric vehicle wallbox installations—combining 90 °C XLPE-insulated single-phase (3G4.0, 3G6.0,.

Typical uses: 7.4 kW Single-Phase Domestic EV Wallbox Installations, 11 kW & 22 kW Three-Phase Workplace EV Chargers, Dynamic Load Management (CT Clamp / Solar Diverter), OCPP Hardwired Ethernet & RS-485 Smart Metering, Covered Multi-Storey Car Park Surface Trunking

Construction





Cross-section, not to scale

1. 3G or 5G Annealed copper power conductors (4.0 to 16 mm²)
2. 90 °C GP8 Cross-Linked Polyethylene (XLPE) power insulation
3. Integrated Screened Cat.5e F/UTP (4×2×24 AWG) data sub-cable
4. Al/PET foil screen over Cat.5e sub-cable (100 % coverage)
5. UV-stabilized Low-Smoke Zero-Halogen (LSZH) outer sheath

Technical data

Typical values

Power voltage rating	0.6 / 1 kV AC (power cores) · 300/500 V isolation on Cat.5e jacket	**Cat.5e data performance**	100 MHz bandwidth · 100 Ω ± 15 Ω impedance · 1000BASE-T / RS-485 / CT
Power DC resistance @ 20 °C	4.61 Ω/km (4.0) · 3.08 Ω/km (6.0) · 1.83 Ω/km (10.0) · 1.15 Ω/km (16.0)	**Clipped direct ampacity**	42 A (3G4.0) · 54 A (3G6.0) · 75 A (3G10) · 47 A (5G6.0) · 65 A (5G10)
Max. power conductor temp.	+90 °C continuous (+250 °C short-circuit)	**Operating ambient range**	-20 °C to +70 °C (fixed) · 0 °C to +50 °C (installation)
EV continuous load factor	Sized for 1.0 continuous demand factor per BS 7671 Section 722	**Circular outer profile**	Smooth circular cross-section seals in standard M20 / M25 IP68 glands
Min. bend radius	8 × overall cable OD	**Install time saving**	Cuts clip/conduit installation labour by ~45 % vs dual-cable runs
Fire & CPR performance	BS EN 60332-1-2 · CPR Euroclass Dca / Cca-s1,d1,a1	**Low smoke & zero halogen**	BS EN 61034-2 (≥ 60 % light) & BS EN 60754-1 (< 0.5 % HCl)
Outdoor UV stability	UV-stabilized outer sheath for external building walls	**Standards**	BS 7671 Amendment 2 (Section 722 & Reg 528.1) · BS 6724 design

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	Power cores + Data sub-cable	Outer Ø ≈ mm	Weight ≈ kg/km	Clipped A	Max 32A run (≤5% ΔV) m
Single-Phase 7.4 kW (3G + Cat.5e) 3 sizes					
☐ ConnectEV 3G4.0 + Cat5e	3 × 4.0 mm² XLPE + Cat.5e F/UTP	14.2	265	42	32
☐ ConnectEV 3G6.0 + Cat5e	3 × 6.0 mm² XLPE + Cat.5e F/UTP	15.6	345	54	48
☐ ConnectEV 3G10.0 + Cat5e	3 × 10.0 mm² XLPE + Cat.5e F/UTP	18.2	510	75	80
Three-Phase 11 / 22 kW (5G + Cat.5e) 3 sizes					
☐ ConnectEV 5G4.0 + Cat5e	5 × 4.0 mm² XLPE + Cat.5e F/UTP	16.5	385	36	64
☐ ConnectEV 5G6.0 + Cat5e	5 × 6.0 mm² XLPE + Cat.5e F/UTP	18.4	515	47	96
☐ ConnectEV 5G10.0 + Cat5e	5 × 10.0 mm² XLPE + Cat.5e F/UTP	21.8	780	65	160

– One twisted pair in the Cat.5e can wire the CT clamp / solar diverter while the remaining pairs wire RS-485 Modbus or 100BASE-TX Ethernet.

Standards and approvals

- BS 7671 Reg 528.1 & Sec. 722
- BS 6724 LSZH Design
- CE, UKCA & CPR Compliant

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/ev-charge-point-power-and-cat5e-hybrid-installation-cable

Typical values for this cable type, based on BS 7671 Amendment 2 (Section 722) / BS 6724 / BS 8436 / EN 50288-2-1. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.