Screened XLFE 1,500 V DC EV traction cable

ISO 19642-9 XLFE Shielded

ISO 19642-9 Screened XLFE Automotive High-Voltage Cable

ISO 19642 / LV 216-2 −70 to +200 °C screened XLFE 1,000 V AC / 1,500 V DC EV power cable



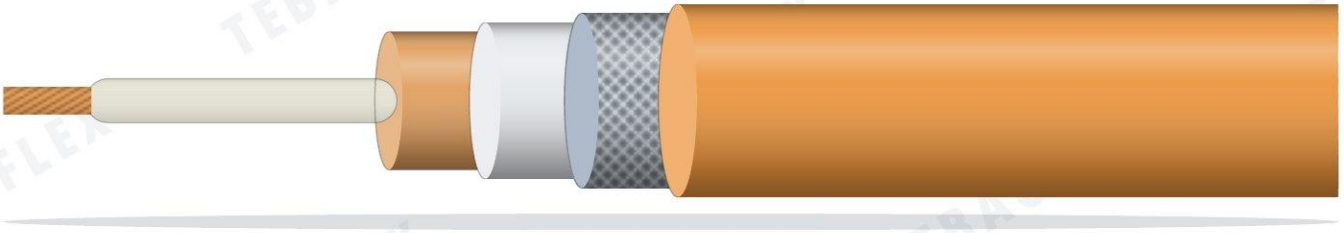
ISO 19642 / LV 216 | **1,000 V AC / 1,500 V DC** | **−70 to +200 °C XLFE**

Application

Extra-flexible electron-beam cross-linked fluoropolymer elastomer (XLFE) shielded high-voltage EV traction cable (ISO 19642-9 Screened XLFE) rated 1,000 V AC / 1,500 V DC from −70 °C to +200 °C with 100 % foil plus ≥ 85 % tinned copper braid EMC screening.

Typical uses: Battery Electric Vehicles (800 V / 1,000 V BEV), Heavy-Duty Electric Trucks, Buses & Mining Haulers, SiC Traction Inverter to E-Axle Motor Leads, DC Fast-Charge (CCS1 / CCS2 / MCS) Internal Bus, Aerospace & Marine Hybrid-Electric Propulsion

Construction





Cross-section, not to scale

1. Extra-flexible rope-lay tinned copper conductor
2. E-beam cross-linked XLFE dielectric
3. ≥ 85 % tinned copper braided shield
4. Safety Orange e-beam XLFE outer sheath

Technical data

Typical values

Rated voltage	600 V / 1,000 V AC rms · 1,500 V DC (ISO 19642 / SAE J1654)	**AC spark test voltage**	8.0 kV to 10.0 kV AC rms in-line
Dielectric withstand test	5.0 kV AC rms for 5 min	**Shielding effectiveness**	≥ 80 dB (150 kHz to 108 MHz CISPR 25 Class 5)
Volume resistivity	≥ 10^{14} Ω·cm at 20 °C	**Operating temperature range**	−70 °C to +200 °C (ISO 6722 Class F)
Short-term overload / solder heat	+300 °C pinch resistance without flow	**Cold-bend flexibility**	No cracking at −70 °C (4 h mandrel bend)
Size range	14 AWG to 4/0 AWG (2.5 mm² to 120 mm²)	**Min. bend radius**	3 × OD static · 5 × OD dynamic routing
Scrape abrasion & pinch	Exceeds ISO 19642-5 / SAE J1128 thin-wall requirements	**Automotive fluid resistance**	ISO 6722 gasoline, diesel, ATF, DOT4, glycol & battery acid
Flame retardancy	ISO 6722-1 self-extinguishing (< 5 s) · UL VW-1	**Ozone & UV stability**	Zero cracking after 192 h at 200 pphm ozone
Standards	ISO 19642-5 · ISO 19642-9 · LV 216-2 · SAE J1654		

Sizes

12 standard constructions

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

Order designation	AWG Metric mm²	Stranding N × mm	Max R @20°C mΩ/m	Core OD mm	Overall OD mm	Weight kg/km	Ampacity A (+85°C)
HV Auxiliary & Charger Sizes — 14 AWG to 4 AWG (2.5–25 mm²) 6 sizes							
☐ S200XL-SH-14AWG-2.5	14 AWG (2.5 mm²)	41 × 0.254	8.71	3.10	5.20	52	54
☐ S200XL-SH-12AWG-4.0	12 AWG (4.0 mm²)	65 × 0.254	5.48	3.65	5.85	72	72
☐ S200XL-SH-10AWG-6.0	10 AWG (6.0 mm²)	105 × 0.254	3.40	4.45	6.75	104	98
☐ S200XL-SH-8AWG-10	8 AWG (10 mm²)	133 × 0.287	2.10	5.60	8.10	156	138
☐ S200XL-SH-6AWG-16	6 AWG (16 mm²)	133 × 0.361	1.32	6.85	9.50	228	185
☐ S200XL-SH-4AWG-25	4 AWG (25 mm²)	133 × 0.455	0.83	8.40	11.30	342	245
HV Traction Battery & Inverter Sizes — 2 AWG to 4/0 AWG (35–120 mm²) 6 sizes							
☐ S200XL-SH-2AWG-35	2 AWG (35 mm²)	665 × 0.254	0.52	10.10	13.20	495	325
☐ S200XL-SH-1AWG-42	1 AWG (42 mm²)	817 × 0.254	0.43	11.15	14.40	598	370
☐ S200XL-SH-1/0AWG-50	1/0 AWG (50 mm²)	1045 × 0.254	0.34	12.30	15.80	745	430
☐ S200XL-SH-2/0AWG-70	2/0 AWG (70 mm²)	1330 × 0.254	0.27	13.80	17.50	935	505
☐ S200XL-SH-3/0AWG-95	3/0 AWG (95 mm²)	1672 × 0.254	0.21	15.40	19.30	1,165	585
☐ S200XL-SH-4/0AWG-120	4/0 AWG (120 mm²)	2109 × 0.254	0.17	17.20	21.40	1,455	680

– Continuous current ratings are shown for single cable in free air at +85 °C engine-bay ambient and +200 °C conductor temperature per ISO 19642.

Standards and approvals

- ISO 19642-5 / ISO 19642-9 & LV 216-2 Class F Compliant
- SAE J1654 High-Voltage & ISO 6722-1 200 °C Verified

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/screened-xlfe-automotive-high-voltage-cable

Typical values for this cable type, based on ISO 19642-5 / ISO 19642-9 / LV 216-2 / SAE J1654. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.