

ELAND[®]
CABLES

EV AUTOMOTIVE

ELECTRIC VEHICLES FROM GRID TO WHEEL





E-Mobility

The increase in choice, availability and affordability of Electric vehicles (EVs) means mass adoption is now a reality and the charging infrastructure network is growing to support it.

As a leading voice in the EV charging cable industry, Eland Cables work from Grid-to-Wheel, with notable expertise in the power grid and charge point installation cables.

Working alongside major chargepoint manufacturers, fuel 'supermajors', and engineering contractors, we are actively developing solutions that meet the fast changing and technologically evolving EV industry, as well as supporting practical installations and site transformations based on existing legacy infrastructure.

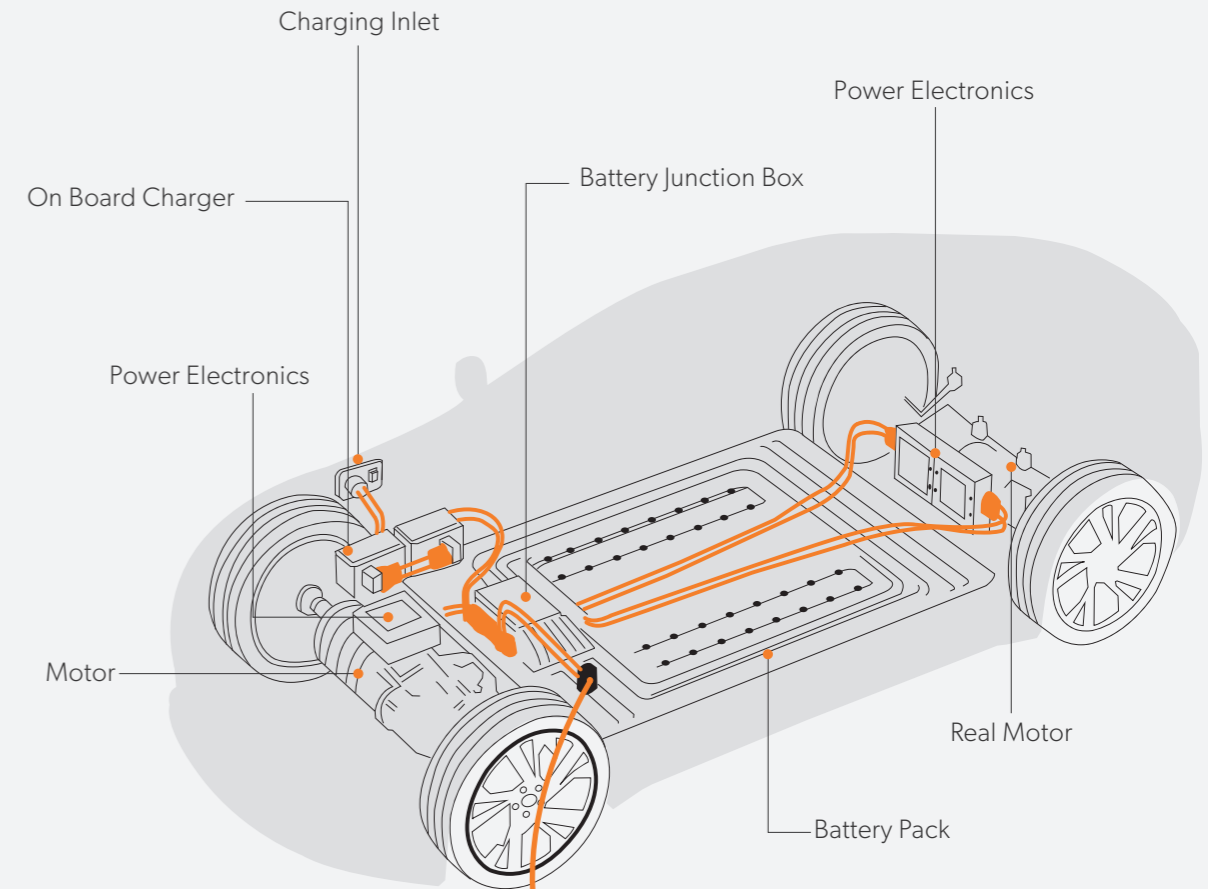
Our wider charging solutions cover installations for:

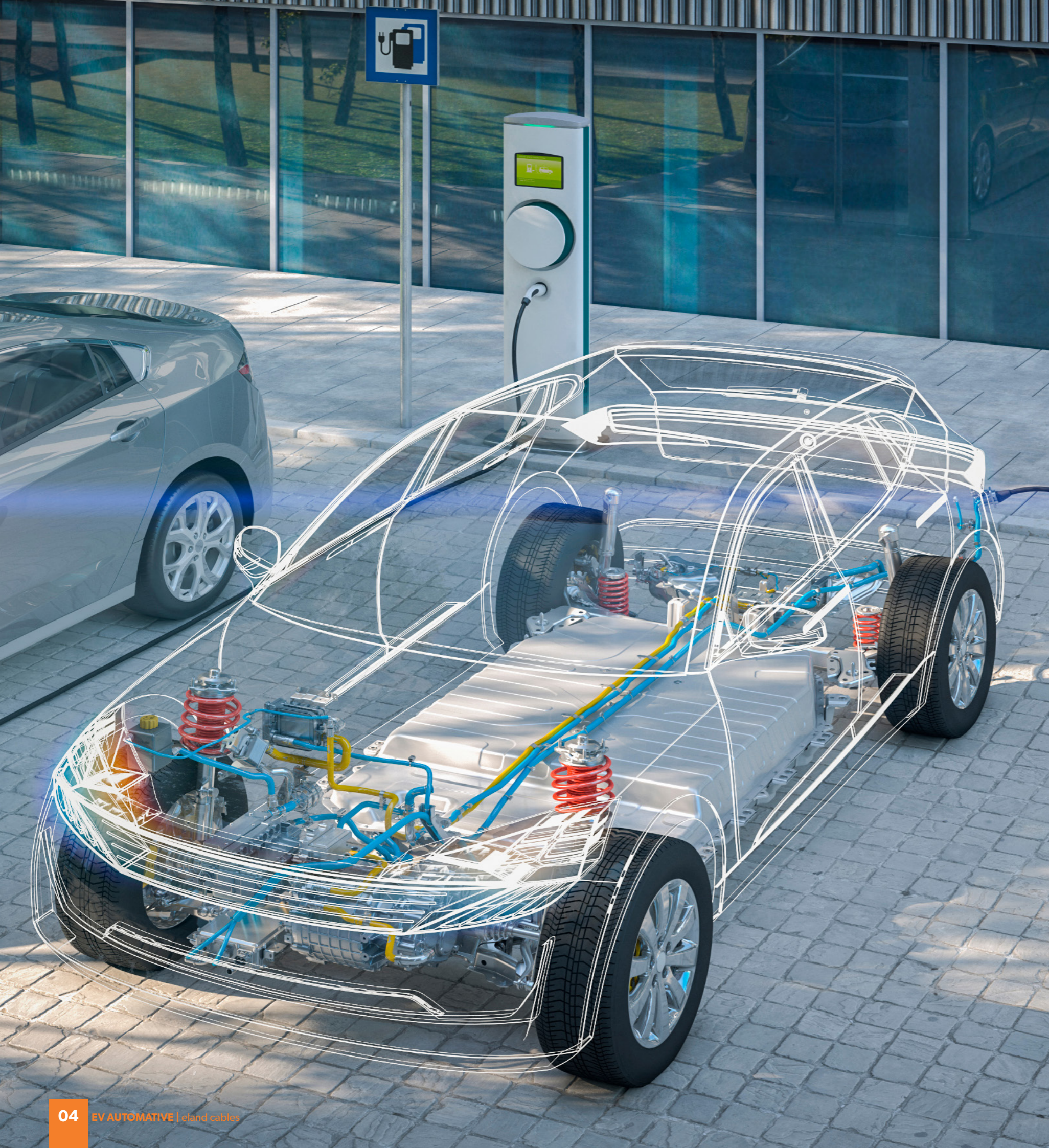
Mode 1 Charging: Domestic single phase installations attached to property for trickle charge feeds.

Mode 2 & 3 Charging: Single phase and Three-phase charging for commercial and light industrial chargepoints such as workplaces and on-street parking.

Mode 4 Charging: - Rapid charge units designed to carry higher currents to fast charge batteries is essential for wider social mobility. The 350kW ultra-rapid chargepoint network is fast spreading across the UK and Europe, designed to recharge electric vehicles in under 20 minutes.

Charging innovations: Based on SAE J2954 standard, to include wireless charging pads and coupled coils embedded into the road infrastructure and connected to the grid network.





It starts with the cable but there's much more to it. We adapt to the specific designs and the country regulatory requirements.

One size does not fit all.

Our portfolio covers applications across low and medium voltage power, manufactured to British, European and international standards.

We can support your project with cables that are:

 **ENHANCED FLEXIBILITY**

Routing the cable can often be challenging, especially if the conductors are Class 2 stranded or worse if they're also armoured. We offer flexible Class 5 conductor cable alternatives for a simpler installation.

 **CPR COMPLIANT**

Some installations, particularly Mode 1 to 3 may require power connecting to a building's internal fuse board. Where this is the case, the Construction Products Regulation applies, with different countries requiring different minimum Euroclassifications for cables. Our expert knowledge of the Regulation can help you navigate compliance.

 **THIRD-PARTY ACCREDITED**

Independent third-party certification marks provide valuable assurance of quality for specifiers. This includes the BSI Kitemark on individual cables or for project-wide testing.

TRUSTED TO CONNECT

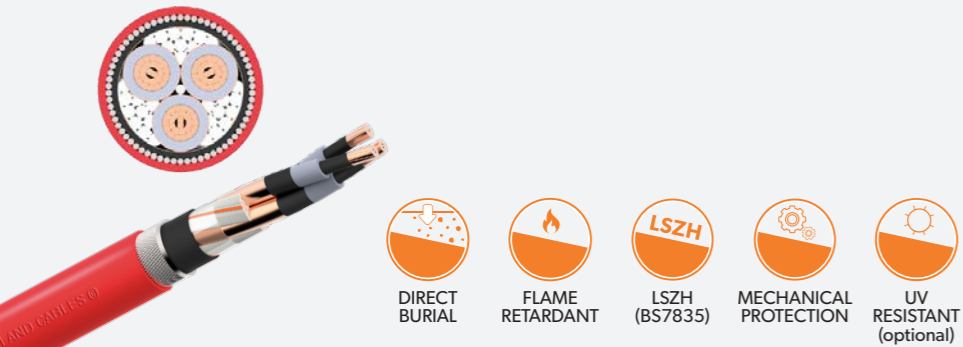
Please see our website for the wider portfolio and technical specifications, or speak to one of our team about the cables needed for your specific project and application.

Creating the grid network **POWER DISTRIBUTION**



UK DNO-APPROVED and BS7870-4.10 - 11kV & 33kV

G81-manufacturer cable conforming to UK Distribution Network Operator requirements. Medium Voltage 11kV (single core, triplex and 3-core) and 33kV single core cables. Suitable for installation in sealed ducts. Non-DNO specific and LV Waveform cables also available..



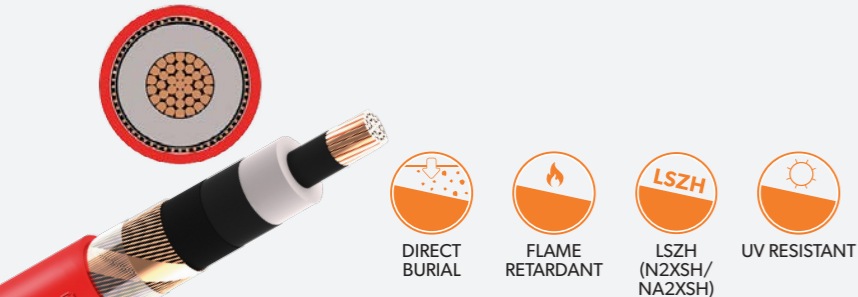
BS 6622 (PVC) and BS 7835 (LSZH) - 6.6kV to 33kV

Single core AWA or multi core SWA armoured Medium Voltage power cable suitable with Class 2 stranded copper conductors (aluminium also available). Suitable for direct burial. CPR Compliant



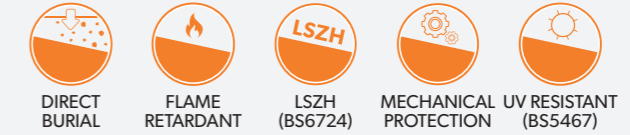
N2XS2Y / NA2XS2Y (MDPE) IEC 60502-2 - 6kV to 30kV

Single core and three-core unarmoured Medium Voltage power distribution cable for external installation. Available with optional longitudinal and/or radial waterblocking protection.



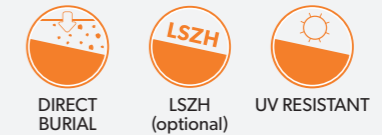
N2XS2Y / NA2XS2Y (PVC) and N2XSH / NA2XSH (LSZH) IEC 60502-2 - 6kV to 30kV

Single core and three-core unarmoured Medium Voltage power distribution cable for internal/external installation. CPR Compliant.



BS5467 (PVC) AND BS6724 (LSZH) - 0.6/1kV to 1.9/3.3kV

Low voltage AWA and SWA armoured power cables. Class 2 stranded copper cores with single core to 1000mm² and multi-core to 400 mm². Also available with aluminium conductors. BASEC Approved. Suitable for direct burial. CPR Compliant.



BS7870 PART 3 (COPPER/ALUMINIUM) (PVC/LSZH) - 0.6/1KV

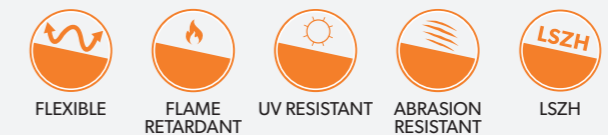
Available as concentric or split concentric cable and with copper or aluminium conductors for connection from the distribution main. Suitable for direct burial.

Powering and Monitoring **CHARGEPOINT CONNECTION**



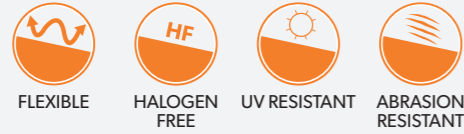
EV PROINSTALL CAT6A LSZH - 0.6/1kV (MODE 1&2)

Chargepoint cable connecting mains board to charging unit. Composite power and data combined with F/FTP screened Cat6a data pairs for CT monitoring for net billing. CPR Compliant. BSI Kitemark tested.



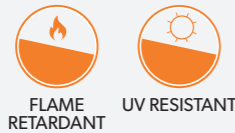
EV DC CHARGE - 0.6/1KV AC | 1.8/1.8KV DC (MODE 3&4)

Enhanced DC Power rating for high-powered charging stations. Flexible conductors suitable for installations with possibility of water immersion (AD7). G16 quality HEPR insulation with low corrosive gas emission and low fire propagation properties. CPR Compliant. BSI Kitemark tested.



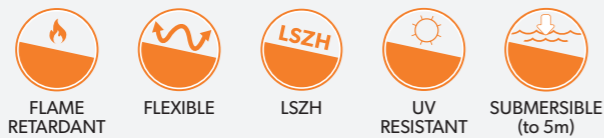
EV MODE 4 CHARGING CABLE - 1.5kV DC (Mode 4)

Class 6 flexible power cable with enhanced DC Power rating suitable for high power rapid charge public and commercial electric vehicle charging stations. Suitable for installations with possibility of water immersion (AD7). G16 quality HEPR insulation with low corrosive gas emission and low fire propagation properties. CPR Compliant.



NYJ-J/O - IEC 60502-1 - 0.6/1kV

PVC Insulated and Sheathed Copper cable commonly used for EV Chargepoint installation alongside LV SWA cable and Coil End Lead. Suitable for internal and external installations including in concrete. Available with/without Green/Yellow core. CPR Compliant.



H07RN-F AD8 (RUBBER) - 450/750V

Heavy-duty EPR insulated flexible rubber cable for trailing power applications under moderate mechanical and thermal stresses suitable for submersion in water to 5m. CPR Compliant.



8723 ALTERNATIVE PE (DUCT GRADE)

Data Transmission cable for CT flow monitoring, suitable for installation externally and in cable ducts.

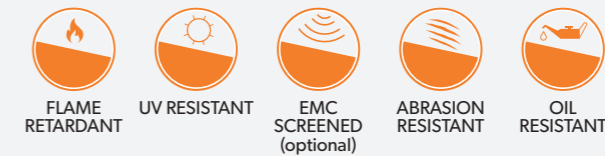
From Grid to Wheel UNIT TO CAR CONNECTION



H05BZ5-F / H07BZ5-F EV CONNECTION - 300/500V (Mode 1, 2, 3)

Robust flexible multicore PUR sheathed cable compatible with EN standard electric vehicle AC charging modes 1 (single phase - domestic), 2 and 3 (single/three phase - commercial/ public) installations. Suitable for trailing EV plug connections to vehicle.

In-Car Connections VEHICLE BATTERY STORAGE



FHLR and FHLR2GC2G POWERTRAIN

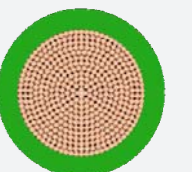
Abrasion resistant Battery cable for use in road vehicles offering resistance to pressure at high and low temperatures, ozone, UV and weathering, motor oil, fuels and hydrolysis.

In-Car Connections AUTOMOTIVE WIRING



NSHXAFÖ - 1.8/3.3kV

Highly-flexible rubber cable for public transport technologies including trains, in underground rolling stock coaches, and on trams and buses. Offers protection against short circuits, is oil resistant, and LSZH materials.



FL STANDARD / FLR THIN / FLU ULTRA THIN WALL

Single core cables with standard or reduced insulation thickness for low tension automotive wiring including starting, charging, lighting, signalling and panel circuits. Available in a range of materials.



TRUSTED AS EXPERTS

Technical experts and Industry specialists combine to work with you.

Our project support services are focused on adding value to your project, delivered by an experienced team. We work in partnership with consultants and electrical contractors to carry out a build that's run against agreed project milestones.

By working with experts in their field you have access to the information you need to keep the project on-track.



TECHNICAL SUPPORT

Our technical experts are on hand at every stage, from specification to completion, to provide answers to your cable questions. With strong manufacturing backgrounds they now sit on national standards bodies and committees and can advise on the suitability of a cable across matters of construction, electrical design and compliance.



INDUSTRY BEST PRACTICE

Specialists give guidance based on their real-world experience of projects, with guidance ranging from installation challenges to future-proof solutions.



PROACTIVE PROJECT MANAGEMENT

Our dedicated project team use all their experience to ensure your project runs smoothly, providing the support, flexibility and reactive approach that makes us the partner of choice on large-scale multi-phase builds.



TRUSTED TO PERFORM

Quality and Compliance are key to minimising unplanned maintenance and downtime.

Our high quality, high performance cables face the strictest quality assurance processes, backed by cable testing in a world-class UK laboratory. We take our responsibilities as cable experts seriously and do all we can to ensure only quality, compliant products are available in the marketplace, including offering compliance testing on third-party cables.

It means you can have total trust that your cables and accessories meet the highest standards.



INDUSTRY-LEADING QUALITY ASSURANCE

Rigorous quality checks ensure our cables are in optimum condition to be despatched to you. From audits of our manufacturing partner sites to the inbound goods testing and pre-export checks, we tightly control the cables and accessories we supply.



TESTING IN THE CABLE LAB®

Our on-site ISO/IEC 17025 and IECCE CBTL accredited laboratory tests cables, providing consistent, impartial results to determine quality and compliance. Extensive capabilities include vertical flame testing, tensile & elongation, properties after ageing, and UV Weathering.



BSI KITEMARK™ TESTING

Described by BSI as 'a new benchmark in cable compliance' this in-depth testing certifies the performance safety standards of the cable. Takes specific manufacturing runs across core and size configurations for a globally-recognised third-party mark of quality.



"As the first company to achieve the BSI Cable Testing Verification Kitemark, Eland Cables sets a new benchmark in cable compliance. The rigorous and extensive testing programme they undertake in their UKAS laboratory, under our ongoing surveillance, tests the cables to British and international standards for key safety criteria and by certifying their cables against the scheme, Eland Cables can demonstrate that its cables meet the highest standards."

bsi.

TRUSTED TO DELIVER

Logistics that reflect your order and your site is a key part of customer service

Our project support services are focused on adding value to your project, delivered by an experienced team.

We work in partnership with consultants and electrical contractors to carry out a build run against agreed project milestones.

You need to work with a team who takes responsibility; that can be flexible, and who understand that getting the right cable to the right place at the right time is paramount to success. You need to work with experts in their field so that you have access to the information you need to keep the project on-track.



DEDICATED TRANSPORT TEAM

We'll deliver your cables where and when you need them. Phased and planned just-in-time deliveries can be supplemented by ad-hoc requirements.



FORS SILVER ACCREDITED FLEET

Our modern Euro6 fleet of articulated and rigid trucks, and specialist unloading vehicles, are FORS Silver accredited. Our Transport Compliance team and JAAPT accredited driver school ensure our drivers remain up-to-date with all certifications, and our maintenance workshop keeps our vehicles in prime condition.



SITE ACCESS AND FULL TRACEABILITY

Our drivers can complete site access training where needed. They are connected and in constant contact with our transport team, allowing up-to-the-minute location tracking for site ETAs and instant PODs.



GREEN ROUTES, BIOFUELS & EVS

With EVs and HGVs running on biofuels making deliveries using green route planning, our logistics are a key part of our sustainable operations commitment.





TRUSTED FROM END-TO-END

Quality means seamless installation with accessories

It's essential that your cable accessories are sized correctly - it can have a significant impact on the time and ability to terminate the installation. We manufacture the cables to stringent tolerances so that accompanying accessories are matched accordingly.

Quality matters with cable accessories too so our portfolio is subject to the same rigorous QA procedures as our cables. Our premium brand accessories deliver the assurance of electrical integrity from start to finish.



CABLE GLANDS

Our nylon, brass and nickel-plated glands provide high quality connections. Includes glands for braided, armoured and EMC screened cables. Rated IP68 and IP69K.



CABLE CLEATS

Support your infrastructure with our premium range of cleats, available in stainless steel or LSZH for public or enclosed spaces. Trefoil and Quad formation cleats also supplied.



CABLE LUGS

Create secure terminations with our copper lugs. Long palm and dual hole fixings available to suit the installation needs. Cable terminations (cord end terminals) also supplied.

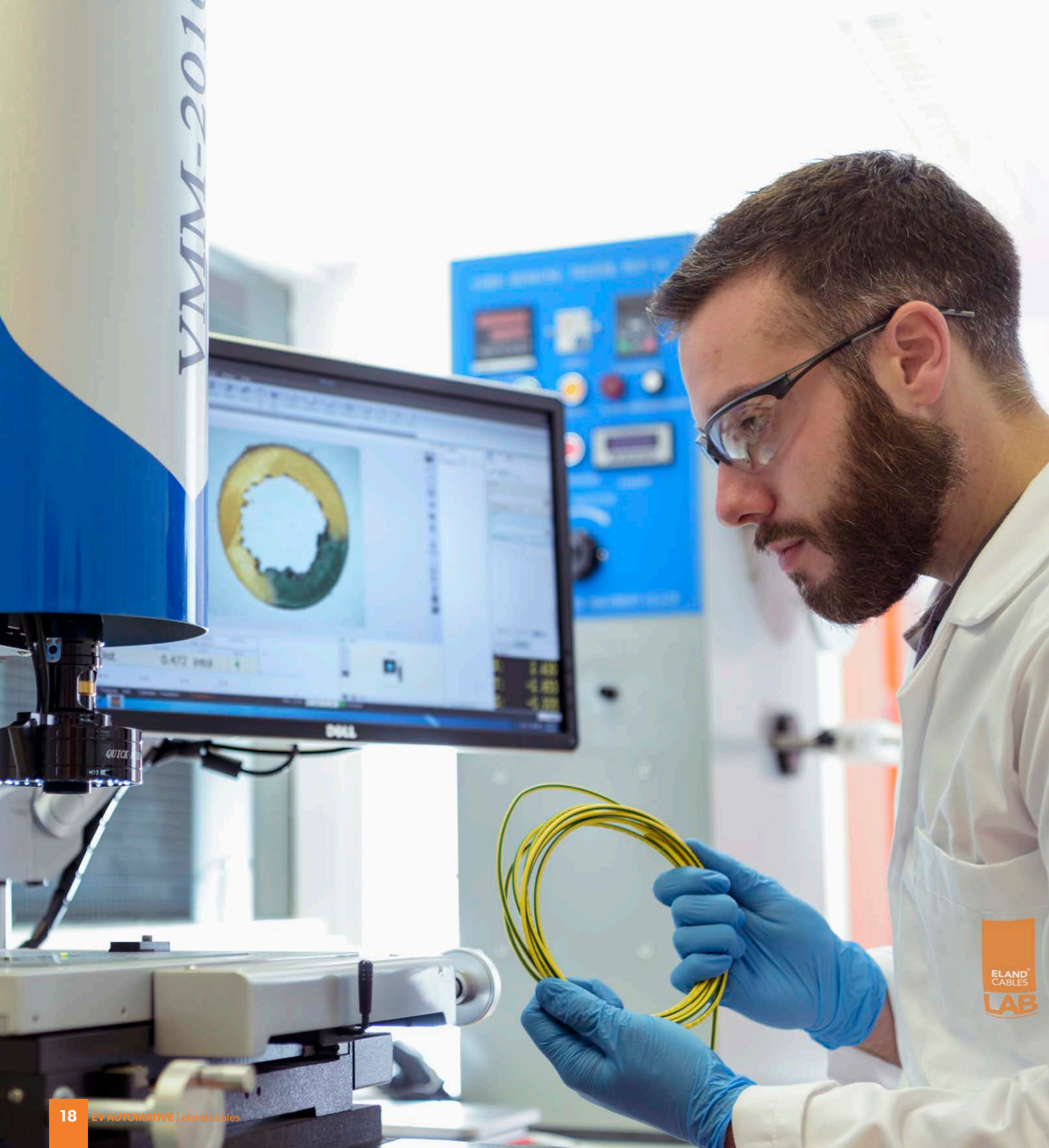


CABLE ASSEMBLIES

Designed against specific installation plans, pre-cut lengths of cable complete with chosen connector or termination can be supplied when large quantities of the same construction are required.



Other cable accessories also available. Accessories can be tailored to meet specific installation demands. Please speak to the team for more information.



TRUSTED TO FIND A CUSTOM SOLUTION

For when you need something different

Sometimes an off-the-shelf cable isn't right. We can design, manufacture and test a cable that works for your installation.

Whether it's adapting an existing cable or designing from scratch to your unique specification, we can provide the cable that works for you. Designed by our technical experts to relevant standards, it is manufactured then tested in The Cable Lab®.

It might be you need additional water-blocking properties, an extra layer of screening, or mechanical protection from armour; re-sheathing or over-sheathing can adapt a cable to the installation environment; or you may need to design a composite cable running power and data to fit the installation space available.

Geo-specific cable approvals and certifications are sometimes required for installation compliance. Where required, we can support submissions for third-party certifications and regulatory compliance as needed.

Whatever the requirements, we'll supply the new cable meeting your precise needs with speed and efficiency.



TRUSTED TO CARE

Making green commitments that benefit everyone

We must all consider our impact on the environment. We're on a journey to Net-Zero, making positive changes that minimise our carbon emissions.

Amongst the changes there are solar panels installed at our operations sites, generating as much electricity as we consume annually. Our fleet of HGVs use biofuels and we have EVs too. All our packaging is recyclable or biodegradable; we can collect empty drums to reuse or recycle; and we can even recycle your legacy and waste cables at our recycling facility. We're supporting carbon-reduction initiatives throughout our supply chain.

We've committed to the Science Based Targets Initiative, we are signatories to the United Nations Global Compact Sustainable Development Goals, and we hold Silver Medal status with Ecovadis.

Our customers understand that Quality is key to being Green: The right specification to match the system and environment, with quality verified, can extend the cable lifespan.

It's all part of our wider ESG commitments that focus on Sustainable Operations - talk to our team for more information about how our efforts benefit your project.





TRUSTED FOR COMPLETE CABLE SOLUTIONS

We're the cable supply partner the major projects work with.

The 'Eland Experience' is a combination of quality products, expert technical support, and services that add value without adding to your workload.

Our solutions are built around a collaborative approach with a team that's always available, whenever you need them. For each project we ensure quality, compliance and full traceability, meeting strict development timelines to bring systems online and projects to fruition.

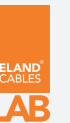
We're the cable supplier the industry trusts.

Project references available upon request.

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When the market is evolving so rapidly you need to adapt to the demands without sacrificing quality and compliance. It's a journey we're experienced in supporting our customers on, and one that underlines how important our blend of technical cable expertise and practical, best-practice industry experience can be.”

Ivan Cleere, Head of Technical/QA



**ELAND[®]
CABLES**



Supporting projects globally
www.elandcables.com

UK Sales
tel: 020 7241 8787
sales@elandcables.com

International Sales
tel: +44 (0)20 7241 8740
international@elandcables.com

Projects
tel: +44 (0)20 7241 8518
projects@elandcables.com

Technical Support
tel: +44 (0)20 7241 8500
technical@elandcables.com

Eland Cables Ltd, 120 Highgate Studios, 53-79 Highgate Road, London NW5 1TL, United Kingdom

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