

### **DATA CENTRES**

COMPLETE CABLE SOLUTIONS FOR DEMANDING INDUSTRIES







It starts with the cable but there's much more to it. We tailor our solutions to the specific data centre design and the country regulatory requirements.

### One size and solution does not fit all.

Our portfolio covers data centre applications across low and medium voltage power, instrumentation, data, and control cables, manufactured to British, European and International standards.

We can support your project with cables that are:



### **LOW SMOKE ZERO HALOGEN**

Essential to protect sensitive equipment from toxic smoke and fumes in the event of fire. We can supply Low Smoke Zero Halogen cables across the range, including Medium Voltage cables.



### **CPR COMPLIANT**

With different countries setting different minimum Euroclasses, our expert knowledge of the Construction Products Regulation can help you navigate compliance.



### **EASY STRIP DESIGNS**

Speed of installation and ease of preparation save time and labour onsite. Cable constructions are designed for easy strippability.



### **UV TAILORED**

The intensity and damage of UV light differs geographically - the properties of the cable must be adapted to suit.



### **WATER RESISTANCE**

Water blocking measures should be tailored to and reflect the degree of resistance required in specific installations.



### THIRD-PARTY ACCREDITED

Independent third-party certification marks provide valuable assurance of quality for specifiers. This includes the BSI Kitemark on individual cables or as project-wide testing, as well as geo-specific approvals such as BASEC and KEMA.

### TRUSTED TO CONNECT

Please see our website for the wider portfolio and full technical specifications, or speak to our data centre technical and project management teams about the cables needed for your specific project.

### **Creating the infrastructure**

### **MEDIUM VOLTAGE - BRITISH STANDARD ARMOURED**

3.3/6.6kV | 6.35/11kV | 12.7/22kV | 19/33kV

















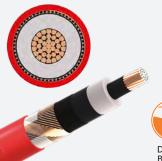
RESISTANT

### BS 6622 (PVC) and BS 7835 (LSZH)

Single core AWA or multi core SWA armoured cable suitable for direct burial. Normally supplied with Class 2 stranded copper conductors but Aluminium also available. Suitable for laying direct into the ground.

### **MEDIUM VOLTAGE - EUROPEAN STANDARD UNARMOURED**

6/10kV | 12/20kV | 18/30kV | 26/45kV















HV







INSTALLATION

N2XSY (PVC) and N2XSH (LSZH) (COPPER) NA2XSY (PVC) and NA2XSH (LSZH) (ALUMINIUM)

Single core XLPE insulated and PVC or LSZH sheathed power cable with copper wire screen suitable for outdoor static installation without heavy mechanical or tensile strain.

LSZH only: Optional waterblocking measures (longitudinal/radial) available to prevent water ingress.















INSTALLATION LOW IN DUCTS TEMPERATURE

### N2XS2Y (COPPER) and NA2XS2Y (ALUMINIUM)

Single core XLPE insulated and Medium Density Polyethylene (MDPE) sheathed cable with copper wire screen suitable for in-ground installation or in cable ducts with water present. Optional waterblocking measures (longitudinal/radial) available to prevent water ingress.

### **LOW VOLTAGE - BRITISH STANDARD ARMOURED** 0.6/1kV













INSTALLATION

#### **BS6724 (LSZH)**

Low voltage armoured power cables suitable for direct burial. Single core to 1000mm<sup>2</sup> and multicore to 400mm<sup>2</sup> with copper conductors supplied as standard. Also available with Aluminium conductors. BASEC Approved.

### **LOW VOLTAGE - EUROPEAN STANDARD UNARMOURED** 0.6/1kV













EASY STRIP INSTALLATION

### N2XH (COPPER) and NA2XH (ALUMINIUM) (LSZH)

Low voltage European power cable with Class 1 solid (to 10mm²) or Class 2 stranded conductor. Single core and multi core configurations, available with or without green/yellow earth core (-) or -O). Not suitable for direct burial.















FLEXIBLE





EASY STRIP INSTALLATION CONSTRUCTION IN DUCTS

#### N2XH FLEX ENHANCED (COPPER) (LSZH)

Custom designed by The Cable Lab® for our data centre projects, this halogen free cable offers enhanced flexibility and improved strippability to aid swift installation into compact and restricted spaces, saving time and effort. BSI Kitemark tested. KEMA Approved.









### N2XCH (COPPER) NA2XCH (ALUMINIUM) (LSZH)

Class 1 solid or Class 2 stranded conductors with copper wires and tape concentric conductor. Suitable for installation in plaster but not for direct burial without additional mechanical protection.

**DATA CENTRES** | eland cables www.elandcables.com

### **Powering the equipment**

### **LOW VOLTAGE FLEXIBLE - EUROPEAN HARMONISED**

450/750V













**H07ZZ-F (LSZH) (RUBBER)** 

Robust multi-core cable offering flexibility with LSZH rubber sheathing for applications under moderate amounts of stress. Used extensively throughout data centres to power server cabinets and UPS. BSI Kitemark tested.















UV RESISTANT





ABRASION

H07RN-F and H07RN8-F (RUBBER)

Heavy-duty EPR insulated flexible rubber cable for trailing power applications under moderate mechanical and thermal stresses. H07RN8-F suitable for permanent submersion in water to 10m.













FLEXIBLE

**RV-K (PVC)** 

Flexible low voltage power distribution cable with water-resistant PVC sheathing available as single core or multi-core. Suitable for installation outdoors and in ducts.













FLEXIBLE

Flexible power and control cable with green LSZH Polyolefin sheath. Designed for internal fixed installation but UV resistant for exposure to sunlight. Single core and multicore cable.

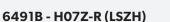
### **LOW VOLTAGE - EARTH**

450/750V









Single core LSZH cable used in fixed wiring protected installations. Available as standard in sizes up to 630mm<sup>2</sup> and in 11 insulation colours. BASEC Approved.

### **LOW VOLTAGE FLEXIBLE - PANEL WIRING**

300/500V / 450/750V







**FLEXIBLE** 

2491B - H07Z-K / H07Z-K (LSZH)

Single core LSZH cable used for power switchgear panels in applications where PVC 2491X or tri-rated are not suitable. Available in 11 insulation colours. BASEC Approved.

FLAME



#### **WORTH NOTING**

Our technical team can support cross-border standards comparisons to support specification standardisation and supply chain availability. This includes providing documentation to demonstrate IEC cable compliance against specific national standards.

Keen to learn more about cables and their applications for Data Centres across EMEA? Tailored training can support design and procurement decisions that aid compliance and onsite installation. Our CPD certified cable training courses include:

**Construction, Materials & Applications Medium Voltage Cables An introduction to CPR for Cables Sustainability in Electrical Cables** 



Speak to a member of the Projects team for more information.

**DATA CENTRES** | eland cables www.elandcables.com

### **INSTRUMENTATION**

300V (90V and 500V on request)













EN 50288-7

European standard instrumentation cables with LSZH sheathing. Options for collective screening and PiMF. Pairs, triples and quad formations. Other insulation and sheathing materials available.

### FIRE PERFORMANCE

300/500V



















### **STANDARD / ENHANCED GRADE**

Fire resistant cables for delivering power and auxiliary control in fire alarm systems, voice alarm systems, and emergency lighting systems covered under BS5839-1, BS5266 and BS8519. Also available with augmented fire resistance to maintain circuit integrity for up to 120 mins in building with phased evacuation.

### ARMOURED FIRE PERFORMANCE

0.6/1kV











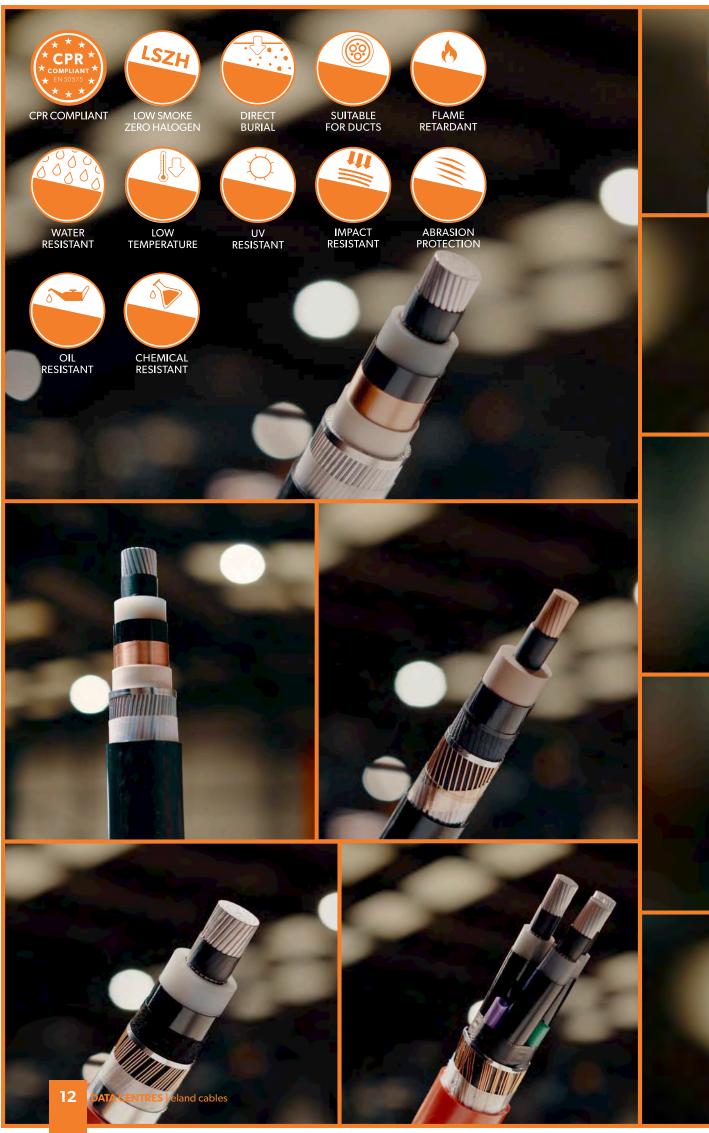




**BS 7846 F120 ARMOURED FIRE PERFORMANCE POWER** 

Steel wire armoured fire performance cable to BS7846 for applications requiring circuit integrity with resistance to fire, water jets, and mechanical shock to F2 and F30, F60 and F120.







## FOCUS ON MEDIUM VOLTAGE CABLES

### **Expertise brings confidence to MV installations**

Medium Voltage cables are key to the critical infrastructure. Delivering the performance required over the lifespan expected is essential – any return to site for unplanned maintenance, repair or replacement is costly financially, in time, and from an environmental standpoint.

### **SPECIFICATION IS THE STARTING POINT**

The right cable balances performance demands, installation design, and environmental challenges, be that being laid in water-logged buried ducts in ground subject to low temperatures or running internally in a building. Cable bend radius, armouring, tailored screen sizes, water-resistance and the varying methods of waterblocking should all be considered. Our team can help you identify the best-suited cable.

### **COMPLIANCE IS KEY**

With regulatory requirements and legislative compliance potentially differing between installations, does your Medium Voltage cable require CPR compliance? Would a third-party accreditation or quality mark provide assurances? Our team can design a white paper of compliant products.

### **TESTING IS IMPERATIVE**

Before your cable arrives onsite you want to know it's been tested intensively. Rigorous laboratory testing in our specialist MV facility verifies the cable's performance and compliance now and in the future using accelerated ageing techniques. Our dedicated mobile testing unit is also at your disposal should its services be required onsite.

### **ASSURANCE BRINGS CERTAINTIES**

With MV cables in particular, there is no one-size-fits-all solution. With your data centre relying on these cables to underpin the entirety of operations, complacency is not affordable. Issues do still occur – they're reported from major power distribution projects across all industries. It's why having access to experts from specification through to installation can be such an advantage.



"Uptime and reliability are the central pillars of any data centre. It's delivered through a cable network that can be relied upon to provide the sustainable operations you demand. Testing, compliance, and the precise specification truly matter."

Darren Clark, Eland Cables



### 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 & committees, can advise on the suitability of a cable across matters of construction, electrical design and compliance.



### **INDUSTRY BEST PRACTICE**

Data Centre specialists with industry and regulatory technical qualifications, give guidance based on their real-world experience of hyperscale 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, underpinned by cable testing in a laboratory globally recognised for its testing capabilities.

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.

With compliance key to contractors delivering projects on-time, and for end users avoiding maintenance and downtime, it means you can have total trust that your cables and accessories meet the highest standards.



"As the first company to achieve the BSI Cable Testing Verification Kitemark, Eland Cables sets a new benchmark in cable compliance."









### **INDUSTRY-LEADING QUALITY ASSURANCE**

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



#### **WORLD-CLASS LAB TESTING**

Internationally, the gold standards for cable testing laboratories are IECEE CBTL and ISO/IEC 17025 - The Cable Lab® holds both accreditations. Our extensive testing capabilities allow us to verify quality and compliance by analysing the completed cable and the component layers, including after accelerated ageing for assurances of longevity.



### **THIRD-PARTY QUALITY MARK TESTING**

We can test cables under the BSI Cable Testing Verification Kitemark to provide a globally-recognised third-party mark of quality. It requires in-depth testing to certify the performance safety standards of the cable across specific manufacturing runs and across core and size configurations.



### 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. Our Pan European fleet has on-time delivery rates of 99.9%.



### 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 JAUPT accredited driver school ensure our drivers remain up-to-date with all requirements including the Certificate of Professional Competency, and our maintenance workshop keeps our vehicles in prime condition.



### **FULLY TRACEABLE, FULLY CONTACTABLE**

Our drivers are connected and in constant contact with our transport team, allowing up-to-the-minute location tracking for site ETAs and instant PODs.



### **PROJECT DISTRIBUTION HUBS**

To aid accessibility for large-scale builds we establish dedicated distribution hubs where cables can be stored ready for local delivery when site requires. It minimises on-site storage and space demands, reduces security risks, and can provide a buffer for unforeseen demands.



### SWEDEN **OUR DATA CENTRE** FINLAND **NORWAY CREDENTIALS** ESTONIA **OUR EMEA IRELANI DATA CENTRE PROJECTS POLAND** UKRAINE MOLDOVA **SPAIN** PORTUGAL AZERBAIJAN TURKEY TUNISIE CYPRUSS 🕶 **SYRIA** MALTE LEBANON IRAN MOROCCO **IRAQ** ISRAEL JORDAN **ALGERIA** LIBYA **EGYPT SAUDI ARABIA MAURITANIA** MALI CAPE VERDE **NIGER** ERITREA 141 CHAD GAMBIA SUDAN DJIBOUTI GUINEA-BISSAU GUINEA **NIGERIA ETHIOPIA** SIERRA LEONE CENTRAL AFRICAN CAMEROON REPUBLIC LIBERIA SOMALIA BIOKO (FOLIATORIAL GLIINEA) KENYA EQUATORIAL GUINE SAO TOME DEMOCRATIC ABON CONGO REPUBLIC OF THE CONGO SEYCHELLES **TANZANIA** COMÓROS ANGOLA ZAMBIA ST-HELENA ASCENSION MOZAMBIQUE MAUR ZIMBABWE NAMIBIE MADAGASCAR BOTSWANA REUNION SWAZILAND SOUTH 🥏 AFRICA DATA CENTRES | eland cables

### TRUSTED IN INDUSTRY

Our proven track record speaks for itself, but we're pleased to be known for more than just our cables.

#### **FOR CABLE TESTING**

It's the most rigorous and intensive testing programme in the industry and it's in place to protect our clients from sub-standard and non-compliant cables. We're unashamedly obsessive about cable testing in our worldclass facility so performance, compliance and longevity are assured.

### **FOR SUSTAINABILITY**

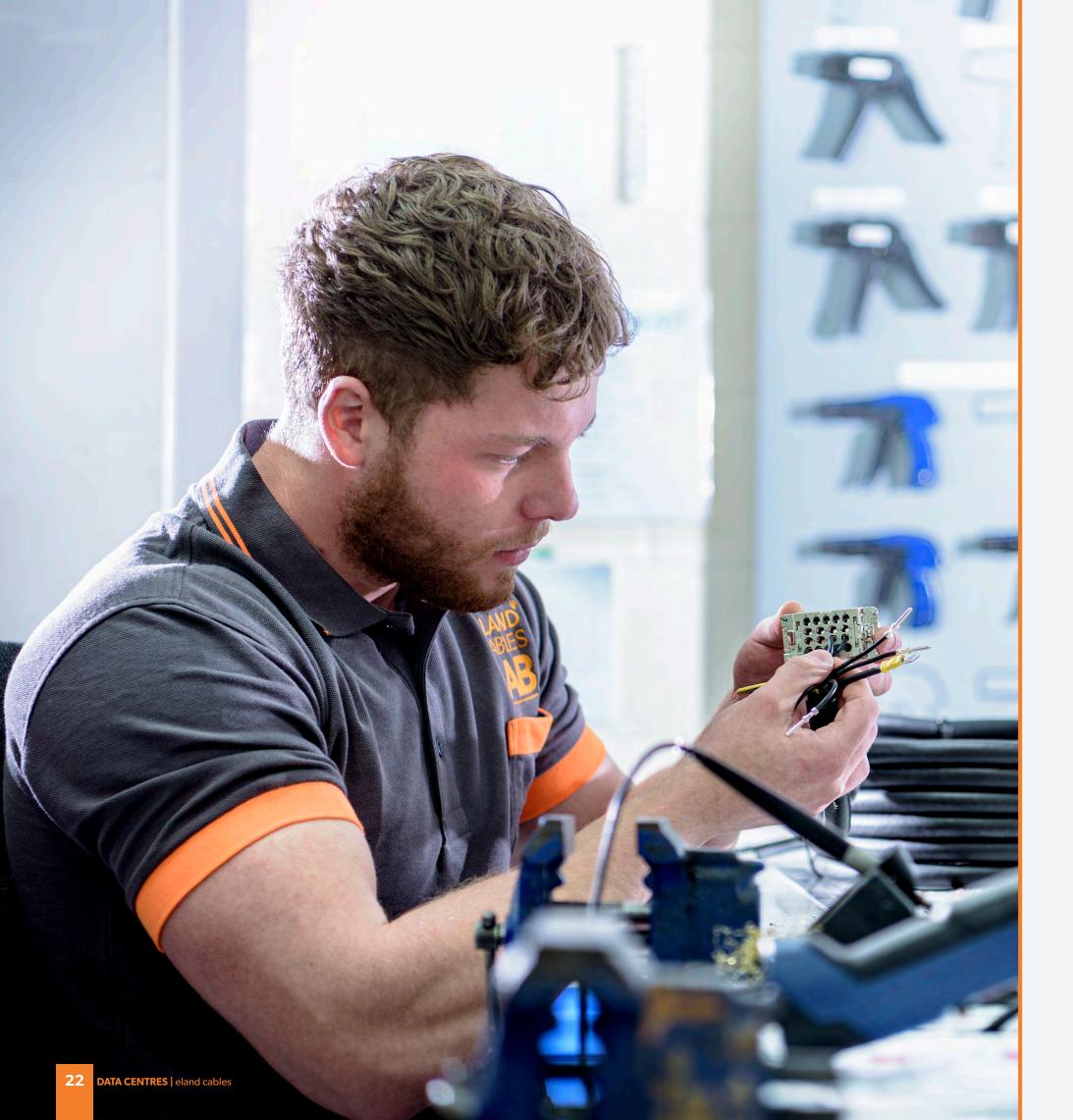
From understanding embodied carbon lifecycle to practical and wideranging actions to reduce carbon emissions, we're leading the industry on environmental sustainability. Sustainable operations and ESG is broader though, and includes values we share with you on looking after our people and their wellbeing, being active in supporting our communities, and ethical and sustainable procurement practices.

#### FOR CPR COMPLIANCE

Our know-how navigates the CPR landscape, tailoring the specification to the European country and its regulations. Where some set no minimum CPR classification, others such as Belgium, the Netherlands and Sweden operate a risk-based assessment; Ireland has minimum classifications along with LSZH requirements. We also see projects where a Euroclass in excess of any regulatory minimum is stipulated by the electrical engineers. We work with client and consultants to identify the most appropriate cable, whether in general circulation or custom designed by our team and specifically manufactured and tested, so that all CPR requirements are complied with.

### FOR CPD-CERTIFIED CABLE TRAINING

Sharing the knowledge is important to us, our CPD-certified cable training courses, delivered by qualified experts in their fields, help upskill your team with topics including CPR compliance, MV Cables, Construction & Applications, and 'Green' cables and sustainability. Our expertise can give your team valuable knowledge on standards, regulations and best practice making them better equipped for challenges they face in their own work.



## 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.

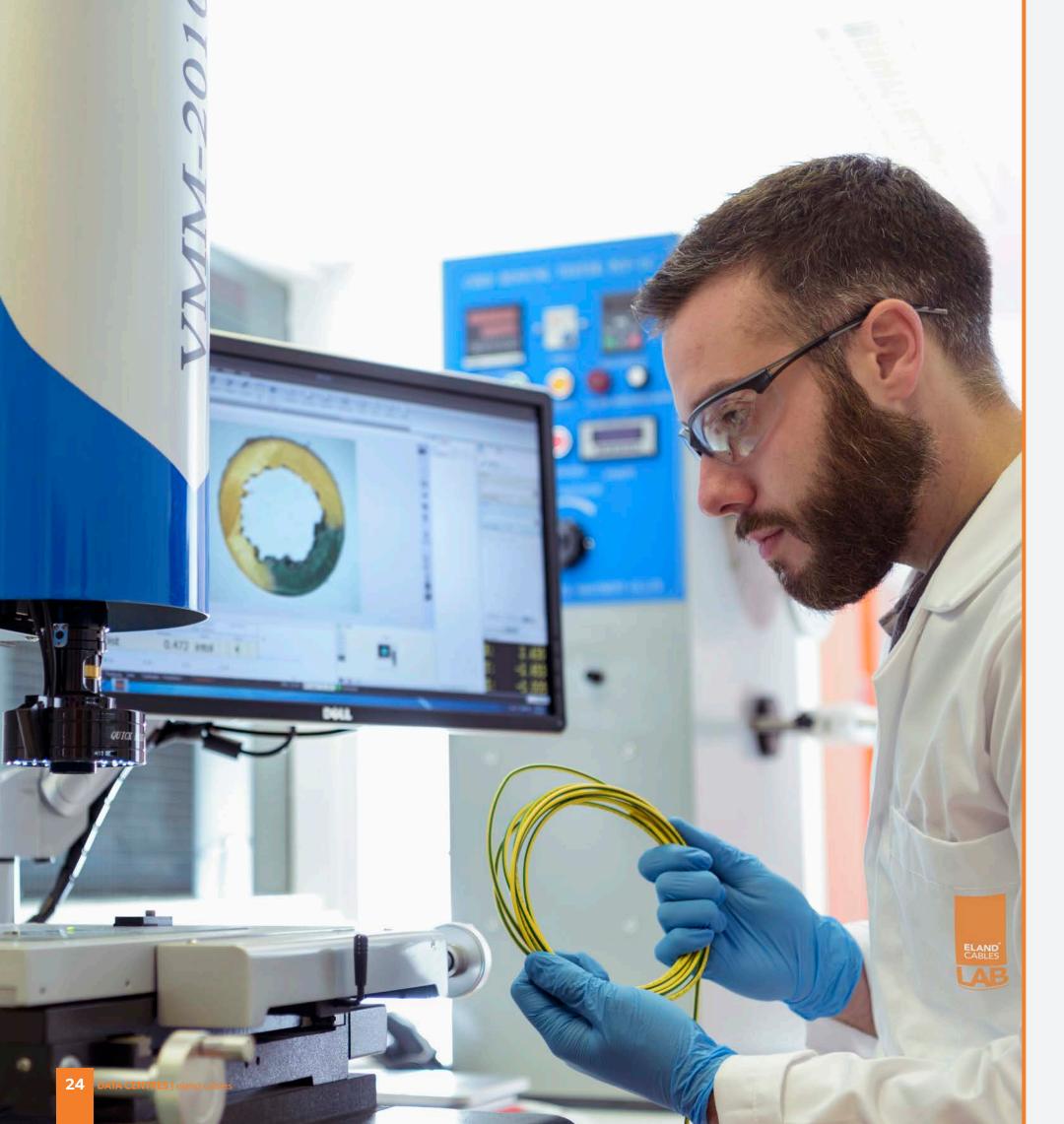


### **CABLE ASSEMBLIES**

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 oversheathing 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 sustainability commitments that benefit everyone

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

We've committed to the Science Based Targets Initiative and are signatories to the United Nations Global Compact, formally reporting our progress annually. We're supporting carbon-reduction initiatives throughout our supply chain, and we can provide information on embodied carbon in our products for EPD documentation, aiding procurement decisions based on sustainability criteria.

Our customers understand that Quality is key to being 'Green' in the life cycle of a cable. Quality products verified in a cable laboratory, coupled with the expert technical support to ensure the specification matches the design and installation parameters, can have an extended lifespan. It means fewer return visits to site for remedial maintenance or premature replacement.

Environmental sustainability is just part of our wider ESG commitments – focusing on sustainable, ethical operations that look after our people, and support our communities and bring social value. Talk to our team for more information about how our efforts bring benefit to your project.







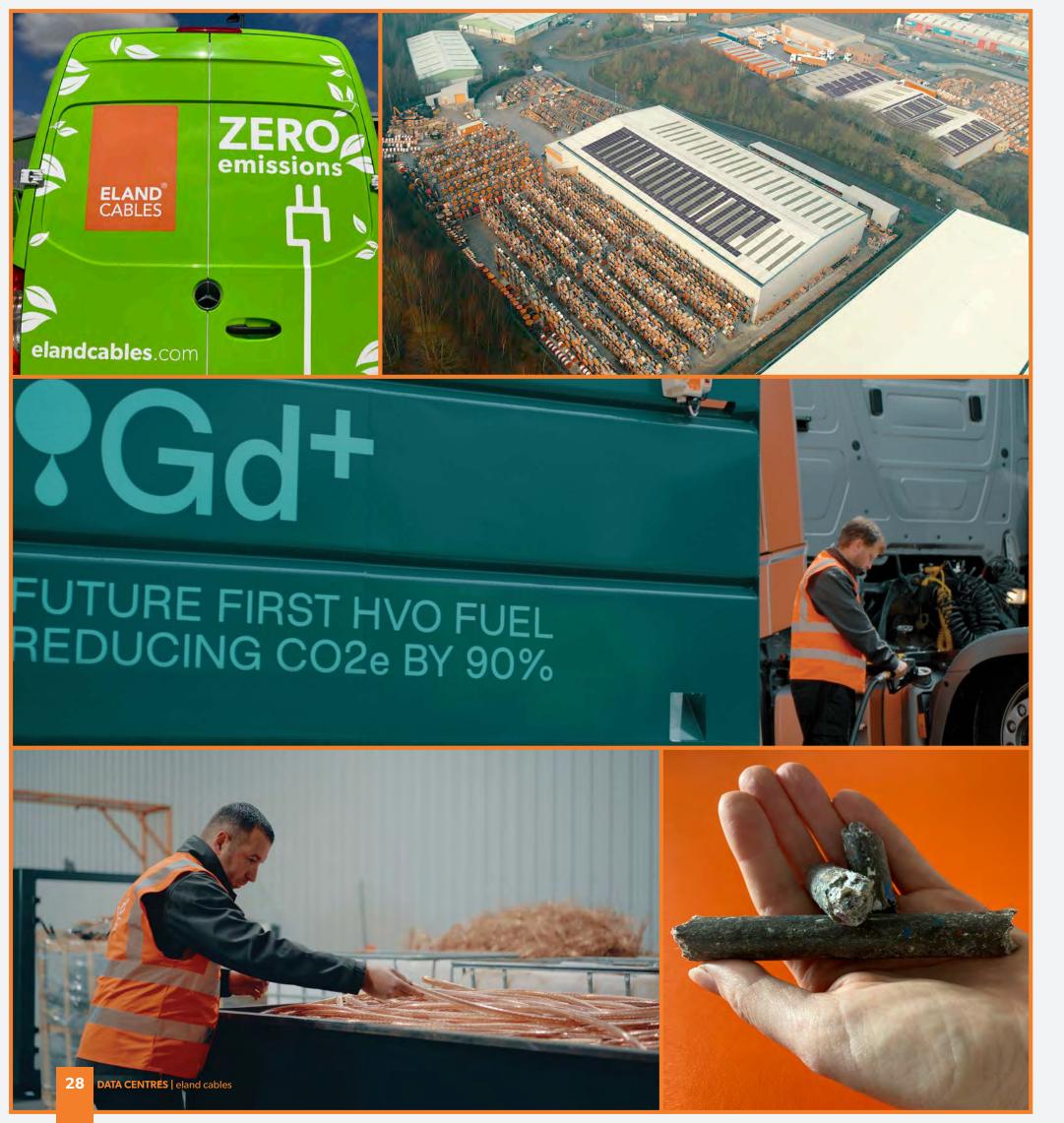






CERTIFIED

ENMS 7762



## DELIVERING NATURE NET POSITIVE ACTIONS

The real and tangible steps we're taking to make our operations and your installations more sustainable

#### **SOLAR PANELS FOR CLEAN ENERGY**

The solar panels installed at our Operations sites generate as much electricity as we consume annually.

### **SUSTAINABLE HVO BIOFUELS**

Our fleet of HGVs is fuelled with sustainable HVO biofuels instead of diesel, significantly reducing carbon emissions associated with cable delivery.

#### **ELECTRIC VEHICLES**

Our fleet also includes EVs and delivering with these electric vans means zero emissions - they're charged using our onsite solar power too.

### **RECYCLED & RECYCLABLE PACKAGING**

All our packaging is recyclable or biodegradable, including our pallet wrap. All our plastics, paper, cardboard and wood waste is all crushed, bailed or chipped on site.

### **CABLE RECYCLING**

Our cable recycling facility sees us process copper & aluminium conductor cables, stripping, granulating and processing the different material layers so they can be reused and recycled for other products. We can recycle your legacy and waste cables as part of a scheduled backhaul from your site.

### **ZERO LANDFILL SITES**

We're a zero waste site where any waste not suitable for recycling, even floor sweepings, get processed into biofuel pellets instead of going to landfill.

We recognise there is still a way to go to become Net-Zero and are continuing to make changes to reduce our carbon emissions. We encourage the wider industry to join us in supporting technology and change that can deliver nature net positive results.



# TRUSTED FOR COMPLETE CABLE SOLUTIONS

### For high-profile and hyperscale projects we're the cable partner to 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 for data centre operations are built around a collaborative approach with a team that's always available, whenever you need them. We've delivered projects and continue to support operations across Europe and into emerging markets including Africa. For each project we've ensured quality, compliance and full traceability, meeting strict development time-lines to bring systems online.

We're the cable supplier the industry trusts.

Project references available upon request.



"The value of quality and compliance cannot be underestimated when delivering a data centre project where continuous and reliable operation (and that all-important up-time) is essential. From the substation through the generators and switchgear and into the server halls, the best systems are only as good as the cables that connect them

By working with cable experts you're in the best position to deliver the sustained success your project demands."

Ivan Cleere, Head of Technical/QA







Supporting projects globally

www.elandcables.com

Data Centre Technical & Project Team tel: +44 (0) 20 7241 8518 projects@elandcables.com

Eland Cables Ltd, 10 Jamestown Road, London, NW1 7HW, United Kingdom © Eland Cables Ltd. All rights reserved. Compiled and produced in September 2023



ISO 14001 Environmenta Management

ISO14064-Carbon

ISO 45001 Occupational Health and Sa Management ISO 50001 Energy Management

















