



Automotive

DRIVING ELECTRIFICATION WITH ESSENTIAL COMPONENTS

COMPONENTS THAT MAKE ALL THE DIFFERENCE

We're Essentra Components, a worldwide manufacturer and distributor of small, but vital, components for multiple industries. Our solutions play a big part in the automotive industry as it transitions towards an electric future.

We work with the 5 largest EV manufacturers and top 15 tier one automotive suppliers globally, providing the highest standards of service and quality, supporting their journey towards electrification.

We are a FTSE 250 company and while our reach is global, we have a local understanding with 14 manufacturing facilities and 34 distribution centres across the world. For you, that means we provide bespoke solutions, leveraging our manufacturing capabilities, experience, customer focus, and global infrastructure. This is how we deliver the best products, ideas and hassle free service for the automotive sector.

"FROM CONCEPT TO PRODUCTION, ESSENTRA WAS ABLE TO SMOOTHLY MANAGE ALL PROJECT REQUIREMENTS TO COME UP WITH THE PERFECT SOLUTION."

"ESSENTRA WAS SO EASY TO DEAL WITH, PROVIDING SAMPLES AND 3D PROTOTYPES THROUGHOUT THE PROJECT."

Bob Siegwald,
Burgaflex Executive Vice President

WE WORK WITH THE TOP
15
GLOBAL TIER ONE AUTOMOTIVE SUPPLIERS

WE WORK TO THE HIGHEST STANDARDS WITH
ISO & IATF
ACCREDITATION



EUROPE



AMERICAS



ASIA PACIFIC

GLOBAL REACH WITH A LOCAL TOUCH

Whether you have a global or local project, with over 65 years' experience, and worldwide coverage, we are here to help you.

WHO IS ESSENTRA COMPONENTS?

We combine the expertise of a manufacturer with the range and service of a distributor. We act as the one-stop shop, single-source supplier of c-class components to 70 of the top 100 global manufacturers.

14 manufacturing facilities	More than 65 years heritage
>1 BILLION parts in stock	
34 distribution centres	More than 45k products available



OUR AUTOMOTIVE APPROACH

As a global partner to the automotive industry, we'll take your challenge and create a solution. Tell us your needs and our team of experts will work with you to find a solution that delivers on your key priorities across a range of business areas, including product or process improvement, innovation, reducing cost and waste, and ensuring supply-chain security.

FROM CONCEPT TO MARKET

Our engineers are experts at designing business critical solutions that can turn your vision into reality. From design to 3D samples to finished products, our complete end-to-end service ensures a unique approach is taken with every project.

1. PRODUCT DEVELOPMENT

From the very start of your project, we partner with you to save design time and expense whilst ensuring a solution that is fit for your needs. With knowledge of application requirements and annual production volumes, our team will deliver a fit-for-purpose solution and will support you with selecting standard parts for your application or an entirely new design. When designing your solution we'll provide drawings and 3D CADs, allowing you to model your application. We can also support you with 3D printed samples for testing in application. An exact prototype part can then be manufactured to meet precise material and dimensional requirements for pre production testing.

2. PRODUCTION

With over 65 years of manufacturing experience as a foundation, we are constantly enhancing our production and sub-assembly processes. This allows us to maintain industry-leading manufacturing quality and consistency. With over 400 injection moulding machines and 50,000 tools across our network, we've got the scale to meet your demands, big or small. Our electric machine replacement programme continues to deliver energy efficiency, improved quality and reduced cycle times. Dedicated test facilities ensure we maintain the highest industry standards of quality.

3. DISTRIBUTION

With 1 billion standard parts in stock and 34 strategically located distribution hubs across the globe, we can support your manufacturing requirements by having what you need, when you need it. Essentra will work with you to optimise the supply chain, leveraging our flexibility to provide you with hassle-free service.

4. AFTERCARE

As a strategic partner Essentra will take the time to ensure your needs are met every step of the way. We pride ourselves on solving challenges for over 100,000 customers everyday. We'll help to identify possible enhancements and work to streamline processes. You can rely on our 2,500 experts worldwide to ensure your procurement priorities are met in a hassle-free manner, giving you peace of mind.



IATF
16949:2016
accredited

5
R&D Centres



THE SOLUTIONS YOU NEED

You may require a small variation, an alternative colour, material or size.

With our state-of-the-art R&D facilities, we constantly pursue innovation to offer new and alternative solutions to you and your customers' everyday problems.

TECHNICAL CAPABILITIES

- Proven in-house engineering design team
- All items available in 3D CAD
- Advantage of 3D printing
- Cross-sector experience

SOLUTIONS FOR ELECTRIC VEHICLES

We know what matters to you: reliability, flexibility, optimisation through productivity gains, and of course, consistent quality products. Our components are at work throughout an EV and at every stage of the process: from masking components during the paint process, to protecting components during transit, to organising, fastening and securing electronic components in a completed vehicle. Our small, but essential, components help you deliver your electrification targets.

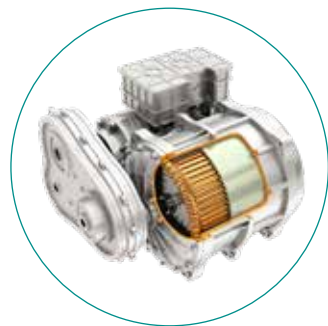


HVAC & COOLING

Customers rely on us for protection of HVAC and cooling parts, as well as fluid pipes when routed through the body. Common solutions include clips, clamps and ties along with wraps, conduit and general protection.

POWERTRAIN

As the driving force behind an EV, protecting powertrain components from ingress during shipping and transit is paramount. Our general protection range has you covered. Cable management solutions are also required and our EMI shielding components solve some of the challenges posed by these high-voltage systems.



POWER ELECTRONICS

Components required for these critical power electronic systems include adhesive cable clips, cable terminals, PCB supports and spacers as well as general protection during transit. Typical applications include the inverter, on board charger and power conversion components.



BATTERY MANAGEMENT SYSTEM

Battery management systems play a critical role in safety and reliability. Our PCB hardware solutions are an essential solution for this PCB-based system. Key components include support, spacers, standoffs and card guides where multiple boards are utilised.

INTERIOR & TRIM

Solutions to help keep car interiors secure include fasteners, hook and loop tape and weather-stripping gasketing.



BODY & CHASSIS

Customers rely on us for bushings, grommets, blanking and sheet metal plugs, as well as masking solutions for paint processes.



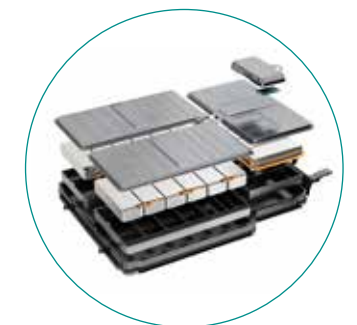
WIRING LOOM

With electrification driving more and more complex wiring looms, cable ties and straps, clips and clamps, split harness wraps, adapters, conduits, heat-shrink tubing and twist ties are common solutions to manage this complexity.



BATTERY PACK

Essential components within the battery pack include cable conduit and wraps, cable ties and conduit clips, fastening solutions, as well as custom caps to protect electrical connectors during transit. Orange (high voltage) variants available by request.



BRAKE SYSTEMS

Protect and secure vital components within the braking systems with our general protection and cable management ranges.



SPEAK TO ONE OF OUR EXPERTS ABOUT APPLICATION REQUIREMENTS

CABLE MANAGEMENT

EVs demand complex wiring looms. We can help you manage, organise and protect your cabling with solutions designed to suit a range of demanding applications and environments.

CABLE GLANDS, BUSHINGS & GROMMETS

Protect cables and surrounding applications as they are routed through the vehicle with our glands, grommets and bushings.



STRAIGHT CABLE GLANDS

Available in forms Advanced EMC, EMC, easy fix, high performance and standard. Choose from a diverse range of thread sizes on offer too with NPT, M12 to M63, and PG7 though to PG48.



MEMBRANE ENTRY GROMMETS

Suitable for applications where space is limited and flexibility and appearance are important. Quick and easy installation without tools. Dust tight and easy mounting. Suitable for unthreaded holes.



TPE GROMMETS

Snap-in design enables quick and easy installation. Suitable for harsh environments with wider operating temperature range. UL94 V-2.



SNAP-FIT BUSHINGS

Protect wires, cables, and tubing from sharp edges of sheet metal holes. The push-fit design easily installs in common panel thicknesses while the durable material creates a smooth opening.



IP67 SEALING GROMMET

Provides a dust and watertight seal, making it suitable for vehicle applications. Easy to apply, withstands vibrations and also acts as a blanking plug until a cable is installed.



STRAIN-RELIEF BUSHINGS

Strain-relief bushings securely anchor and insulate cables, providing protection against pulling forces and the rough edges of panels they go through.



HEAT SHRINK TUBING

Heat shrink tubing is flexible and has excellent mechanical strength. It's used to protect a connection between a wire and a connector, while offering protection and sturdiness.



HEAT SHRINK – ADHESIVE & NON ADHESIVE

Widely used for wiring loom insulation and sealing, it protects inline components such as terminals or connectors with its high insulation and excellent resilience. Polyolefin material. Rated UL94 V-0.



HEAT SHRINK TUBING – YELLOW & GREEN STRIPED

Designed to meet the standard of UL224. Free from environmentally harmful substances such as PBBs, PBBs and PBBEs. No dioxin is produced when the tubing is burnt. Widely used in wiring loom and electronics applications. Highly flame retardant, UV resistant and excellent physical, chemical and electrical properties.

CABLE CONDUITS & WRAPS

Our cable conduits and wraps help cables meet environmental demands while also protecting against dirt, dampness and extreme temperatures.



CABLE CONDUIT

Developed and tested to the most demanding quality standards and awarded quality approvals and compliance worldwide. Rated IP54, this plastic conduit is highly flexible and has a high-fatigue life. Its high-impact strength aids its recovery capability when crushed.



SLIT HARNESS CLIP

These clips come in different mounting types: snap lock into either a round or square hole to prevent rotation, screw mount and adhesive mount. Internal rib that grips the wrap. Releasable latch allows for maintenance.



CONDUIT CLIP

Securely holds corrugated/convoluted tubing or other bundles. An internal rib spanning the diameter of the clamp provides a tight grip. Releasable latch for convenient maintenance. Fir-tree mount accommodates a large range of panel thicknesses. UL94 V-2.



BRAIDED CABLE SLEEVES

Expandable sleeves ease assembly. These sleeves fit a range of diameter cables and protect against abrasion in application. A range of materials available for different environments. PPS sleeve, certified UL224 VW-1 or PES, certified UL94-V0 are most commonly used in battery and wiring loom applications due to superior flammability properties.



SLIT HARNESS WRAP

Perfect for organising and protecting cables, providing a durable, crush-resistant shell without restricting flexibility. Wires are easily fed into the harness with the compatible installation tool.



SPIRAL CABLE WRAP

A lightweight and protective black polyethylene wrap, which provides cost-effective hose and cable protection. Crush resistant, flexible and easy to install. Protects against wear without restricting flexibility.

CABLE CLIPS, TIES & FIXINGS

High-quality solutions which can meet practically any challenge, helping you keep your cables organised, bundled and protected from hot components and sharp edges.



HEAT STABILISED CABLE TIES

Ideal for applications where heat is generated or present. UL94 V-2, UV resistant with greater stability properties in harsh environments.



ADHESIVE MOUNT CABLE TIE HOLDER

Versatile mounting options. Comes supplied with adhesive and also allows screw fixing. Available in fixed four-way cable-tie installation direction or swivel base holder. UL94 V-2.



MOUNTING CABLE TIE - PUSH FIT

This releasable tie easily snaps into pre-drilled holes, and can be mounted to installation before final assembly. Eliminates the need for tie mount and fastener.



P STYLE CABLE CLAMP

Screw-mount metal with vinyl coating that provides insulation, protects against corrosion and reduces vibration.



PUSH-FIT WIRE SADDLE

Routes cables within electrical and electronic applications to keep components uncluttered and easily accessible for further assembly or repair. Manufactured with material rated UL94 V-0.



TWIST LOCK TIES

Quickly bundle wires together. Simply twist the ends to provide a firm hold. Twist in the opposite direction to remove the tie just as easily. Manufactured in material rated UL94 V-2.



FIR TREE MOUNT WIRE HARNESS CLAMPS

Blind-hole, mounted arrow clip inserts into a mounting hole to securely anchor cables and wires. Manufactured from natural nylon. Rated UL94-V2.



DUAL HALF U CLAMP

Low profile, ideal for use in limited spaces. Useful for routing two parallel wire bundles. Made from nylon, the clamp is UL recognised under #E71558.



CABLE TERMINALS

Our range is made from tin-plated copper, available insulated or uninsulated. Choose from butt connectors, tubular terminal cables and crimp ferrules to support your application.



RING, SPADE & TUBULAR TERMINALS

Available across a range of cross sections from 0.75-35mm².



CRIMP FERRULES

Ideal for quick fitting. Protects exposed wires from damage, terminating cable ends prior to fitting. Also provides a better electrical connection, preventing losses.



BUTT CONNECTORS

Butt Connectors are ideal for connecting to wires together to ensure constant connectivity. Uninsulated and ideal for crimping.

CHOOSING THE RIGHT CABLE CLAMP

Choosing the correct cable clamp will ensure a clean, easy-to-manage cable installation. Here are some simple guidelines to get you started.

	Cables raised off the panel-board surface: STANDOFF CLAMP		Quick and simple installation on flat, dry surfaces: ADHESIVE-BACKED CLAMPS, D-STYLE
	Ability to adjust for cabling changes: ADJUSTABLE ADHESIVE DIAMETER CLAMP		Push-in-place installation for pre-drilled or non-pre-drilled applications: ROUND CABLE CLAMPS, PLUG IN
	Run multiple cables or cable bundles in parallel: MULTI-CABLE CLAMPS, SCREW-MOUNT CABLE GRIPS		Prevent cables from shifting and/or tipping: U-SHAPED CLAMP, SCREW MOUNT
	Run ribbon cables for computers and other applications: FLAT CABLE CLAMP, ADHESIVE-MOUNT, TENSION		Add support for strain relief: STRAIN RELIEF CLAMP
	Hose protection, vibration absorption and electrical insulation: STEEL CABLE CLAMPS WITH RUBBER CUSHION		Route cable bundles in limited space: HALF U SNAP-IN CABLE CLAMPS

PCB HARDWARE

PCBs play a significant role in the production and running of cars, buses and other EVs. Our PCB and Electronics Hardware range offers an extensive array of PCB spacers, pillars, supports and standoffs to support, lock, space or guide the PCB.

CARD GUIDES & PULLERS

Our card guides and pullers are easy to use and provide protection from undue stress for damage-free insertions and extractions of PCBs, components and connectors.



HORIZONTAL CARD GUIDES

Available in nylon 6/6, allow for maximum PCB retention, and accepts PCB thicknesses of 1/16", 3/32" and 1/8". Rated UL94 V-0.



PCB CARD PULLERS

Attaches to a PCB to help pull it out and push it back into position. Curved tab for fingertip grip. Nylon 6/6 and rated UL94 V-2.



VERTICAL CARD GUIDE

Snap-in locking tabs hold boards in place more securely. Tension guides with double channel enable side-by-side mounting. Nylon 6/6 and rated UL94 V-2.



PCB CARD INSERTERS & EXTRACTORS

Fitted to PCBs to aid removal of the card from a restricted space so the technician can pull the board without touching any of the circuitry. Level action ejectors aid card insertion and extraction.

PCB SPACERS & STANDOFFS

PCB standoffs and spacers help maintain space and positioning of components. Our range includes both hexagonal and round standoffs and spacers, and is available in PEEK, PPS, POM and PS thermoplastics for a broader variety of properties to choose from.



ROUND INSULATION STANDOFFS

Suitable for a wide range of applications and are ideal for use when high-mechanical strength is required, providing sturdy, insulated spacing for high-powered electronic applications. Made of nylon with brass inserts. Rated UL94 V-2. Do not require assembly equipment and can easily be installed by hand.



HEXAGONAL INSULATION STANDOFFS

Suitable when high-mechanical strength is required, providing sturdy, insulated spacing for high-powered electronic applications. Made of nylon with brass inserts. Rated UL94 V-2. Do not require assembly equipment and can easily be installed by hand.



ROUND UNTHREADED PA SPACERS

Made from PA, or nylon, offering physical spacing for your assemblies, as well as providing thermal and electrical insulation between components. Glass-filled PA is also available for applications where higher-maximum service temperatures and improved strength and stiffness are required.

PCB SUPPORTS

PCB supports, or support pillars, join your PCB to the required surface. They also add an element of insulation and protection from electrical transmission, while providing a more secure, stable hold.



DUAL LOCKING SUPPORT PILLARS

Available in different locking options for both ends and in different body types, making them suitable for a range of needs.



SELF-ADHESIVE PCB SUPPORT PILLARS - NON-LOCKING

Double-sided adhesive tape and release tab enable quick installation and removal. Three options for PCB mounting: snap locking, non-locking and flat rest.



MOUNTING TYPES

SNAP FIT



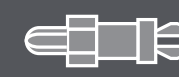
Pushes into place for secure hold

THREADED



Holds in position with standard, undercut and self-tapping options

SNAP LOCK



Pushes into place for secure but releasable fix

BLIND HOLE



Fins hold securely to blind holes

ADHESIVE BASE



Adhesive tape backing for a strong hold

KEY CONSIDERATIONS

TYPE OF PCB SUBSTRATE



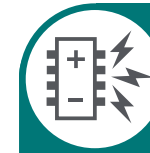
FLEXIBLE MATERIAL

IDEAL: Snap-in or Snap-fit components



RIGID MATERIAL

IDEAL: Push spacer for support, without penetrating board



CONDUCTIVE OR NON-CONDUCTIVE?

MAINTAIN a circuit: choose METAL components

AVOID short circuits: choose PLASTIC components



SPACE LIMITATIONS - STACKING PCBs

IDEAL: Wing or arrowhead supports

FASTENERS

It's easy for plastic interior trim components, such as access panels, flooring and seat fabric to shift. Our fasteners keep them tightly and securely in place.



PUSH-IN RIVET

Quick and economical way to hold together a vehicle's front lower valance to the front bumper. Push rivets install quickly and easily without needing tools to provide a strong hold and clean, finished look.



GROMMET NUT

A cost-effective, vibration and corrosion resistant solution for connection of thin gauge materials. Provides a secure threaded connection between two panels.



HEX HEAD CAP SCREWS

Ideal fasteners for mechanically securing materials. Lightweight and resistant to corrosion, oil, abrasion and most chemicals.



RETAINING WASHERS

Conveniently hold screws and bolts in place during assembly. Lightweight, yet strong natural LDPE or nylon provide full moisture and electrical insulation, cushioning and spacing.



QUARTER TURN PANEL FASTENERS

Secures plastic interior trim components, such as access panels. Easy solution to fix two panels together. A flat screwdriver will enable a quarter-turn release.



WHAT DO YOU WANT FROM YOUR FASTENERS?



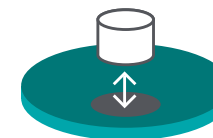
EASY INSTALLATION



HEX NUT



PUSH-IN RIVETS, SNAP



EASY REMOVAL



WING & FLY NUTS



PUSH-IN RIVETS, REMOVABLE



VIBRATION RESISTANCE



HEX HEAD CAP SCREWS



NYLON GROMMET NUTS



RESISTANCE TO TAMPERING



PUSH-IN RIVET, COUNTERSUNK



HIGH-BOND TAPE



PERFORM OUTDOORS



RETAINING WASHERS



PAN PHILIPS HEAD SCREWS

WHAT PROPERTIES DOES YOUR PROJECT REQUIRE?

	TOUGH/DURABLE	HIGH-LEVEL OF TORQUE	HIGH-IMPACT STRENGTH	GOOD CHEMICAL RESISTANCE	GOOD IN HIGH-TEMPERATURE ENVIRONMENTS	GOOD FOR ELECTRICAL/ELECTRONIC APPLICATIONS
NYLON	✓	✓		✓*		✓
LDPE			✓			
PC	✓		✓		✓	
PE	✓		✓			
ACETAL	✓			✓		
PVC				✓	✓	✓
PSU			✓	✓	✓	✓
PEEK®		✓		✓	✓	
PP				✓**		✓
CARBON STEEL	✓					

*Except for acids & alcohols ** Except for hydrocarbons

GASKETING & SEALING PROFILES

Our gaskets and sealing profiles are ideal for automotive sealing applications including but not limited to, doors, windows and frames.

SEALING GASKETS

The objective of these gaskets is to not only provide edge protection, but to provide a sealing function against dust, dirt and moisture, in addition to protection from vibration and noise. Typical applications include; extruded door seals, frame seals and window seals.



EPDM WEATHER STRIPPING & GASKET TAPE

A closed-cell foam offering great barrier protection from moisture and air, excellent weather and oxidation resistance, excellent conformability and flexibility at low temperatures. Ideal for use in automotive sealing applications.



RELIABLE SUPPORT

Let Essentra make your job easier with the peace of mind you need:

INDUSTRY-LEADING PRODUCT QUALITY

Approved against industry accreditations and standards:



RESPONSIVE SERVICE
Support for your business with 1 billion products in stock, fast dispatch and access to a wealth of industry expertise

SUPPLY-CHAIN SECURITY
Lead times reduced with 14 manufacturing facilities, 34 distribution centres and 39 sales and service locations

AVAILABLE 3D CAD FILES
CADs are available for most solutions. Please request yours today. If you're not quite sure which product will work best for your application, our experts can advise you

DEVELOPING SUSTAINABLE COMPONENT SOLUTIONS

At Essentra Components, we are committed to helping our customers achieve their sustainability objectives and reduce their carbon footprint. We're aiming to be the world's leading responsible hassle-free supplier of essential industrial components and we've been developing sustainable component solutions across our range, making our products recyclable and using resources effectively.

- Our LDPE range contains (50%) recycled content and has been helping customers to be more responsible with their material usage and reduce their scope 3 carbon emissions.
- We've been helping customers with waste management/reduction through our recyclable solutions and providing flexibility with sustainable alternatives for custom products, tailored to their needs.
- Essentra Components are also committed to investing in our operations by maximising efficiency of our global sites in terms of waste and energy.



TO FIND OUT MORE, SPEAK TO ONE OF OUR EXPERTS TODAY.

WHY ESSENTRA?

**FREE
SAMPLES**

**FREE
CADs**

**LOCAL
STOCK**

**FAST
DISPATCH**

**LOCAL
TEAM**

**OVER
45,000
PRODUCTS**

**ISO & IATF
ACCREDITED**

LET'S TALK

For more information, please contact your nearest Essentra office:

AUSTRIA

Tel: +43 (0) 1-3649330
Fax: +43 (0) 1-3649041
sales@essentracomponents.at
www.essentracomponents.com/de-at

CZECH REPUBLIC

Tel: +420 545 221 660
Fax: +420 545 221 877
sales@essentracomponents.cz
www.essentracomponents.com/cs-cz

FINLAND

Tel: +358 92522 1500
Fax: +358 92522 1540
sales@essentracomponents.fi
www.essentracomponents.com/en-fi

FRANCE

Tel: +33 (0) 1 48 17 50 00 (local)
Fax: +33 (0) 1 48 17 50 29 (local)
sales@essentracomponents.fr
www.essentracomponents.fr

GERMANY

Tel: +49 (0) 180 389 0089
Fax: +49 (0) 21 57 89 69 89
sales@essentracomponents.de
www.essentracomponents.com/de-de

HUNGARY

Tel: +36 1 610 5845
info@essentracomponents.hu
www.essentracomponents.com/hu-hu

IRELAND

Tel: +35 31 806 2266
Fax: +35 31 806 2299
sales@essentracomponents.ie
www.essentracomponents.ie

ITALY

Tel: +39 051 6325 266
Fax: +39 051 6325 279
sales@essentracomponents.it
www.essentracomponents.com/it-it

NETHERLANDS

Tel: +31 (0) 497 572002
Fax: +31 (0) 497 574185
sales@essentracomponents.nl
www.essentracomponents.com/nl-nl
www.essentracomponents.com/fr-nl

POLAND

Tel: +48 (0) 42 639 52 64 lub...65
Fax: +48 (0) 42 639 52 66
info@essentracomponents.pl
www.essentracomponents.com/pl-pl

ROMANIA

Tel: +40 317 112 790
Fax: +40 317 112 793
info@essentracomponents.ro
www.essentracomponents.com/ro-ro

SOUTH AFRICA

Tel: +27 (0) 11 314 8750
Fax: +27 (0) 11 314 8759
sales@essentracomponents.co.za
www.essentracomponents.com/en-za

SPAIN

Tel: +34 900 802 600
Fax: +34 902 627 871
madrid@essentracomponents.es
www.essentracomponents.com/es-es

SLOVAKIA

Tel: +421 2 21 29 11 11
Fax: +421 2 21 29 11 12
sales@essentracomponents.sk
www.essentracomponents.com/sk-sk

SWEDEN

Tel: (+46) (0)31 10 50 00
Fax: (+46) (0)31 10 50 99
sales@essentracomponents.se
www.essentracomponents.com/sv-se

TURKEY

Tel: +90 212 721 4444
Fax: +90 212 721 4445
sales@essentracomponents.com.tr
www.essentracomponents.com.tr-tr

UNITED KINGDOM

Tel: +44 (0) 345 528 0474
Fax: +44 (0) 1914 962 699
sales@essentracomponents.co.uk
www.essentracomponents.com/en-gb