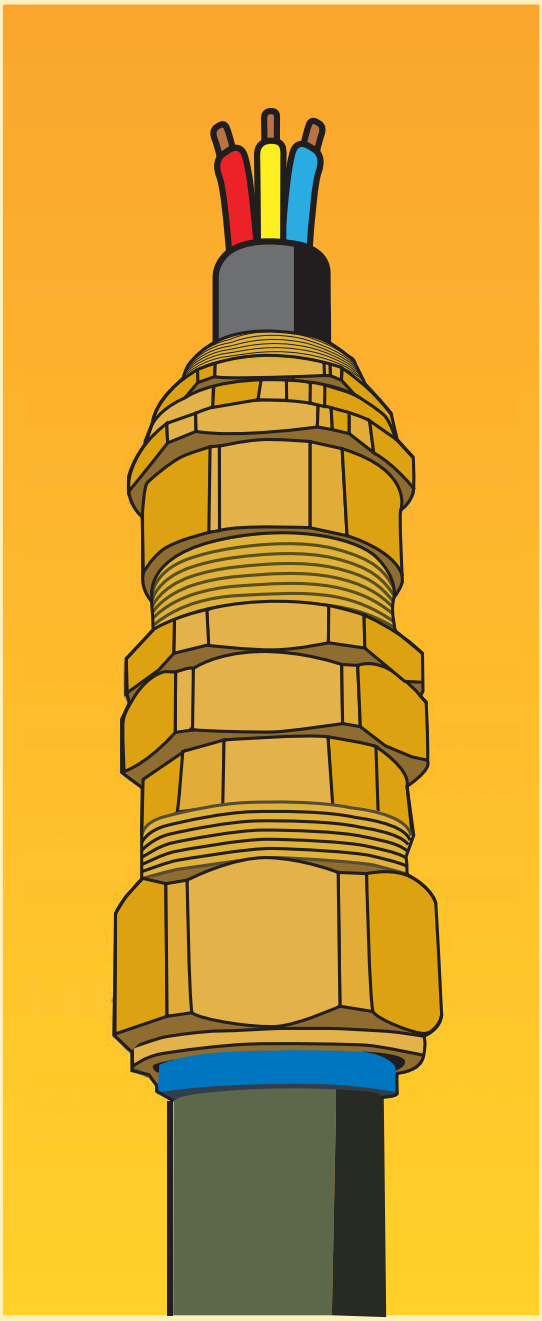


BICC COMPONENTS

HAND BOOK

CABLE ACCESSORIES

Designed & Engineered by BICC Components, U.K.

BICC COMPONENTS

CONTENTS

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

Section 1

HISTORY

The idea of providing high quality cables and accessories was conceptualized in the UK in the midst of 20th century. This led to the formation of the BICC Group who became the market leader, manufacturing power, data, optical and telephone cables; with a full range of accessories to complement them, for several decades.

The late 90's saw innumerable consolidations and mergers of similar businesses across the globe. BICC sold its optical cables business to Corning and power cables business to General Cable Corporation, which subsequently sold on parts to Pirelli that later became Prysmian Cables and Systems. BICC Components whose core competency was cable accessories became an independent organization.

A NEW BEGINNING

Starting June 2008, a new lease of life was infused in BICC Components Limited at its headquarters in Manchester, England. The driving force behind BICC Components is the core team members – visionaries of erstwhile BICC group. Retaining its tradition of British quality and service, BICC Components offers to the market commitment of quality, service and latest knowhow. The forerunners who now manage BICC Components have either had a history of working with the BICC group or have been contract manufactures for BICC Group who have designed, developed and produced the complete range of cable accessories for the BICC group going back several decades.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

BICC LEGACY

The advancements in products and technologies are driven by an ever-evolving human nature to strive for excellence and to constantly improve on what is already available.

This is the concept that was driving BICC group over the last fifty years as one of the prestigious business house based out of UK. We at BICC Components have inherited this very legacy from BICC to re-introduce our complete range of cable accessories, allowing us to stay ahead of competition by continuous improvement that enables us to offer better customized products and higher value to our customers.

A world leader, BICC Components designs, manufactures and distributes quality cable glands. From the simple 'A' type gland right through to the superior explosion proof gland kit; BICC Components have one of the most comprehensive ranges in the world.

BICC Components have developed a range of cable accessories to meet the highest national and international standards. Significant developments have been made by BICC Components in the area of cable gland construction that makes our products more reliable and better value for money.

BICC Components Limited is very proud to be an integral part of the approved vendor list of most prestigious consultants and has been associated with some of the most iconic projects in the Middle East and Africa region. Our current line of products includes:

- ✓ Brass & Nickel Plated Brass Industrial Cable Glands
- ✓ Aluminium Cable Glands
- ✓ PG Metal Cable Glands
- ✓ Tinned Copper Terminal
- ✓ Aluminium and PVC Cable Cleats
- ✓ Earthing Clamps

This brochure is a complete products information guide enabling you to understand and select right product for the cable you are working with.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

Section 2

INTERNATIONAL STANDARDS

Cable glands are designed, manufactured and tested by BICC Components to meet the stringent standards laid down by British and International authorities. Our range of industrial glands are designed to BS 6121:2005, EN 62444:2013 and copper terminals to IEC 61238-1.
A brief on the various standards are elucidated below:

BS STANDARD

The BSI Group produces British Standards under the authority of the Royal Charter, which lays down as one of the BSI's objectives to set up standards of quality for goods and services, and prepare and promote the general adoption of British Standards. They also from time to time revise, alter and amend such standards as experience and circumstances require.
Ex: BS 61 Specification is meant for Copper Tubes and their Screw Threads.

IEC STANDARD

The International Electrotechnical Commission is a non-profit, non-governmental international standards organization that prepares and publishes International Standards for all electrical, electronic and related technologies. The IEC charter embraces associated general disciplines including measurement and performance, dependability, design and development, safety and the environment. The 60000 series of standards are also found preceded by EN to indicate the IEC standards harmonized as European standards; for example IEC 60034 would be EN 60034.

BICC COMPONENTS

UL STANDARD

UL LLC stands for Underwriters Laboratories which is an American worldwide safety consulting and certification company. UL provides safety-related certification, validation, testing, inspection, auditing, advising and training services to a wide range of clients, including manufacturers, retailers, policymakers, regulators, service companies and consumers.

DIN STANDARD

DIN, Deutsches Institutfür Normung translates to German Institute for Standardization develops norms and standards for rationalization, quality assurance, environmental protection, safety and communication in industry, technology, science, and government, as well as the public domain. DIN standards provide companies a basis for quality, safety and minimum functionality expectations that enables lowered risks and improves marketability.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

MATERIAL INFORMATION

ALUMINIUM (Al):

Aluminium is a silvery-white, soft, nonmagnetic, ductile metal that offers a rare combination of valuable properties. It is one of the lightest metals in the world, almost three times lighter than iron. It also is very strong, extremely flexible and corrosion resistant because its surface is always covered in an extremely thin and yet very strong layer of oxide film. This metal doesn't magnetize, is a great electricity conductor and forms alloys with practically all other metals.

BRASS:

Brass is a metal alloy made of copper and zinc; the proportions of zinc and copper can be varied to create a range of brasses with varying properties. Basic brass has approximately 67% copper and 33% zinc, making it stronger and more resilient to environmental factors than copper.

This alloy has higher malleability than bronze or zinc individually. Soft brass may be used where low chance of sparking is necessary. It also has a relatively low melting point, it is easy to cast and not ferromagnetic (which makes it easier to separate from other metals for recycling).

COPPER (Cu):

Copper is a soft, malleable and ductile metal with very high thermal and electrical conductivity. It is used in electrical terminations as a conductor of heat and electricity, as a building material, and as a constituent of various metal alloys. Copper is ideal for electrical wiring because it is easily worked, can be drawn into fine wire and has a high electrical conductivity.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

NICKEL (Ni):

Nickel is a silvery-white lustrous metal with a slight golden tinge. It belongs to the transition metals and is hard and ductile. Nickel is very strong and resistant to corrosion, making it excellent for strengthening metal alloys. This metal is used to provide hard-wearing decorative and engineering coatings as 'nickel-plating' or 'electroless nickel coating' or 'electroforming'. Most nickel containing products have long functional lives.

STAINLESS STEEL:

Stainless steel is a steel alloy with a minimum of 10.5% chromium content by mass. Other alloying elements are added to augment their structure and properties such as formability, strength and cryogenic toughness.

Stainless steel does not readily corrode, rust or stain with water as ordinary steel does. However, it is not fully stain-proof in low-oxygen, high-salinity, or poor air-circulation environments. It is used where both the properties of steel and corrosion resistance are required.

TIN (Sn):

Tin is primarily obtained from the mineral cassiterite (SnO_2) and is extracted by roasting cassiterite in a furnace with carbon.

A significant property of tin is that it resists corrosion and is used as a protective coating on other metals. It is also used to form many useful alloys, such as bronze. An alloy of tin and niobium is used to make superconductive wire. Tin salts can be sprayed onto glass to make electrically conductive coatings. These can then be used to make panel lighting and frost-free windshields.

Section 2

PRODUCT INFORMATION

CABLE GLANDS:

Cable glands are mechanical cable entry devices and can be manufactured from metallic or non-metallic materials. They are used throughout a number of industries in concurrence with cable and wiring used in electrical instrumentation and automation systems.

Cable glands may be used with all types of electrical power, control, instrumentation, data and telecommunications cables. They are used as a sealing to ensure that the characteristics of the enclosure which the cable enters can be maintained sufficiently.

BICC Components bases its gland design and testing philosophy on the performance requirements of BS 6121:2005 and EN 62444:2013. Additional testing for Ingress Protection Ratings IP68 are performed for all our outdoor cable glands which reiterates that our glands are specially constructed for use in high temperature GCC environment.

Single Compression & Double Compression Glands

In single compression, also known as CW cable gland, as the name suggests, while you tighten the gland, the grip or compression is affected only at one place i.e. at the cable armour only. These types of glands are used for light armoured cables.

In double compression, also known as E1W cable gland, the compression happens at both the cable armour as well as at the inner sheath. This minimizes the chances of moisture or vapour entry. Hence these glands are also known as weather-proof cable glands. These cables also provide extra support to the heavy armoured cables entering or exiting the panel.

BICC COMPONENTS

Armour Locking Ring

All glands for armoured cables have an armour locking ring with the exception of BW. We believe that the armour locking ring design is far superior to the two part gland in terms of overall design and performance.

The armour wires are trapped between a locking ring and the armour cone of the threaded fixing component. This ring will continue to trap the armour wires even if the gland body becomes loose through heat cycling vibration or during maintenance.

The earth continuity can be electrically and visually inspected after installation. This would be impossible to do with a two part gland because if you undo the gland the earth continuity has gone and there is nothing to inspect.

The gland with a locking ring has the following benefits:

- Gives a firmer anchorage between cable and gland.
- Allows you to inspect the gland without disturbing the earth continuity.
- Is safer than the two part gland because of its design and performance.

Sealed Cable Glands

All outdoor cable glands contain neoprene seals that have a wide cable range intake. As the cable gland is tightened it compresses the seal which grips the cable (See also Ingress Protection Rating).

Low Smoke and Fume Gland Kits

BICC Components is the first company to market a comprehensive range of glands with flame retardant, zero halogen, low smoke and fume properties.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

Section 2

LSF Gland Kit:

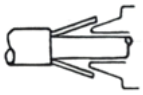
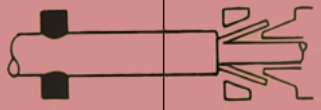
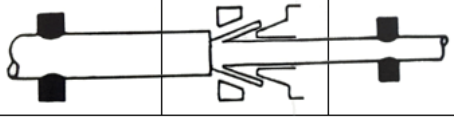
- Convenient ready to use kits.
- Contain everything necessary to terminate an LSF cable run – gland(s) with LSF seal(s), backnut(s), earth tag(s) and LSF shroud(s).
- Zero halogen
- Resists most chemicals, solvents, acids, alkalis, oils, moisture, steam and UV light.
- Excellent tear resistance.

Note: The materials utilised in these kits are noted for the absence of smoke generating constituents, particularly halogens (fluorine, bromine and chlorine) thus avoiding the hazards of highly irritant and toxic fumes emitted by standard materials such as PCP and PVC when exposed to flame.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

Cable Gland Application Chart

GLAND TYPE	OUTER SEAL	ARMOUR LOCK	INNER SEAL	INCREASED SAFETY
A		✗	✗	✓
B	✗		✗	✗
C			✗	✓
E				✓

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

TYPES:

BW CABLE GLAND

Application:

BW Cable Glands are intended for indoor use with all kinds of Steel Wire Armoured and Aluminium Wire Armoured cables.

Function:

BW Cable Glands provide low impedance earth termination, mechanical cable retention and ensures electrical continuity.

CW CABLE GLAND

Application:

CW Cable Glands are intended for both indoor and outdoor use with Steel Wire Armoured (SWA) cables.

Function:

CW Cable Glands provide single compression hence providing environmental seal in cable outer sheath. Also provides mechanical cable retention and ensures electrical continuity.

A2 CABLE GLAND

Application:

A2 Cable Glands are intended for both indoor and outdoor use with all types of Unarmoured Cables.

Function:

A2 Cable Glands provide single compression hence providing seal on outer sheath of the unarmoured cable. Also provides mechanical cable retention and electrical continuity.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

E1W CABLE GLAND

Application:

E1W Cable Glands are intended for both indoor and outdoor use with all types of Armoured Cables.

Function:

E1W Cable Glands provide double compression hence outer seal grips bedding layer of cable which allows usage in most climatic conditions. This type of cable gland is known for its uninterrupted services. Also provides mechanical cable retention and ensure selectrical continuity.

PG CABLE GLAND

Application:

PG Cable Glands are intended for both indoor and outdoor use with all types of unarmoured cables.

Function:

PG Cable Glands provide anti-vibration capability, the neoprene results in weatherproof seal, tightening part exerts strong pressure on cable resulting in excellent tensile strength and mounting seal is also provided.

MATERIAL DESCRIPTION:

Aluminium Cable Glands:
Do not get magnetized, hence high voltage cables carrying large quantities of electric current can be safely secured.
Brass Cable Glands:
Exhibits high strength resulting in more durability and performs exceptionally well in high temperature and outdoor conditions.
Stainless Steel Cable Glands:
Exhibits excellent resistance towards corrosion. These are special type of glands that at times are recommended for high corrosion areas.

GLAND FINISH DESCRIPTION:

Nickel Plated Brass Cable Glands:
Offers long lasting life. Usage is recommended in places where serviceability is an issue.

THREAD DESCRIPTION:

Metric screw threads are the world-wide most commonly used type of general-purpose screw thread.The “M” designation for metric screws indicates the nominal outer diameter of the screw in millimeters (Ex: an M8 screw has a nominal outer diameter of 8 millimeters).

NPTT stands for National Pipe Thread Taper. The taper on NPT threads allows them to form a seal when torqued as the flanks of the threads compress against each other, as opposed to parallel/straight thread fittings or compression fittings in which the threads merely hold the pieces together and do not provide the seal. The tapered threads pull tight and therefore this makes a fluid-tight seal.

BICC COMPONENTS

CABLE TERMINALS:

Cable terminals are devices used for connecting cables to electrical appliances, cables, or surfaces. Designed to be easily installed and removed for repairs or maintenance, cable terminals are generally used when permanent, direct-fastening methods are not feasible or required.

Depending on the type, the end of a cable terminal that is used for connecting a cable could be soldered, welded, or crimped. By means of a bolt, screw, or spring clip, the connection end of the terminal is then fastened to a matching terminal. All cable terminals should be crimped properly using a suitable tool. Incorrect crimping can result in increased joint resistance, increased temperature and even fire.

Cable terminals can be found on the wiring systems of automobiles, electrical boxes, machinery, household appliances, electronics, and other durable goods. For electrical use, cable terminals are typically insulated with rubber or plastic to prevent accidental transference of electricity to people or nearby electrical components. Other types require no insulation due to either cable terminal placement or the lack of voltage.

Standard tubular cable terminals are usually shorter than DIN cable terminals. Standard tubular cable terminals are recommended to have single crimping during installation. DIN compression cable terminals show the required two crimps specified during installation.

It is also important to note that double crimping is recommended for MV type cable terminals (11 – 32 kVA).

All BICC Components Tinned Cable terminals comply with IEC 61238-1&BS EN 12449:201 standard. Manufactured from seamless copper tube, BICC Components Tinned Cable terminals give an assurance of minimum 99.5% copper content for maximum current flow and electrical conductivity.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

Section 2

TYPE:

BELL-MOUTH (BM)

BM Cable Terminals are suitable for low and medium voltage switch gear and control panel. Extremely fine copper strands can be easily fitted and crimped due to flared end of the terminal. This type of cable terminal allows cable insertion to be handled efficiently at the opening of the conductor. The unique design of the inspection hole helps complete conductor insertion. The stopper at the end of the insertion allows conductor to be placed itself rightly inside the area of the crimp. Recommended for class 5 and 6 cable conductors along with indent crimping.

STRAIGHT-ENTRY (SE)

SE cable terminals are suitable for low & medium voltage switch gear & control panel. They enable efficient handling of cable insertion at the opening of the conductor. Complete cable insertion is possible owing to the unique design of inspection hole. The conductor is placed rightly inside the area of the crimp thanks to the stopper at the end of the insertion.

RING TYPE

Ring type design assures a secure connection in high vibration applications. The internal barrel serrations assure good wire contact and maximum tensile strength.

BICC COMPONENTS

BI-METALLIC

Bi-Metallic Cable Terminals are used for joining aluminium & copper circular conductors. The barrel of the lug is of aluminium and the head or palm of the lug is of copper. This ensures contact between aluminium cable to copper bus bar. Thus galvanic action is completely eliminated and hence technically sound and durable joint is achieved.

U / FORK TYPE

Fork type cable terminal provides fast and easy installation without the need to remove fastener. The flange design provides extra secure connection for a variety of applications. Internal barrel serrations assure good wire contact and maximum tensile strength. Barrel of terminal is internally beveled to provide quick and easy wire installation.

PIN TYPE

Solid pin is designed to prevent damage to the wire from over tightening which results in a reliable connection. The internal barrel serrations assure good wire contact and maximum tensile strength. Barrel of terminal is internally beveled to provide quick and easy wire insertion.

FLAT BLADE

Flat blade terminals are designed to prevent the wire from over tightening, thus producing reliable electrical connection. They are an alternative to using wire ferrules in certain applications.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

MATERIAL DESCRIPTION:

Bi-Metal Cable Terminals:

When an aluminium cable is to be terminated onto a copper bus or copper contact, due to dis-similar metals making contact, galvanic action takes place, to counteract this phenomenon, the lug barrel is formed of aluminium and the head is copper. The bond between aluminium and copper is friction welded ensuring electrical continuity.

Aluminium Cable Terminal:

It is recommended when aluminium cables are used and the termination is on an aluminium contact or aluminium bus.

FINISH DESCRIPTION:

Tin Plated Copper Terminals:

Tinning eliminates the possibility of oxidation of copper. Oxidized copper causes poor electrical conductivity, causes heating at contact points, arcing at joints are produced causing copper erosion. By tin plating copper terminals, all of the above are avoided ensuring longer lifespan and safe operation.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

CLEATS:

A cable cleat is a cable restraint device that is designed and tested to provide securing and retention of cables when installed at intervals along the length of cables. A cable cleat is typically fixed to a mounting surface (e.g. cable ladder rung), and fastened around one or more cables.

Without cleats, the dangers are obvious – expensive damage to cables and cable management systems, plus a risk to life posed by incorrectly or poorly restrained live cables.

Cable cleats went through an evolution and new standards were developed in 2003 the standard BS EN 50368 was released. This standard highlighted retention and support that cable cleats provided to cables. It also highlighted the protection of the cable management system and the potential risk to human life without the use of cable cleats. Before BS EN 50368 came into existence, both cable and cleat manufacturers provided their own testing to their own standards.The publication of IEC 61914 in 2009 further highlighted the importance of cable cleat products.

Tele Cable Cleat

Two Bolt Cable Cleat

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

Section 2

GLAND SHROUDS:

The addition of a shroud may aid in keeping the surface of the cable gland free from dust or dirt build up, it does not necessarily help in improving the Ingress Protection rating of the cable gland. In general testing for ingress protection takes place without a shroud present over the cable gland. In certain conditions the usage of a shroud may cause retention of unwanted moisture. Following are the different types of shrouds:

PVC SHROUDS:

Polyvinylchloride shrouds are designed to provide cable glands and the cable sleeve a certain degree of additional protection. It shall protect cable glands against external conditions. Highly recommended for indoor use.

LS0H SHROUDS:

Low smoke and fume shrouds are manufactured to exhibit self-extinguishing characteristics, emitting only white, semi-transparent, non-toxic smoke if combustion were to ever take place. The smoke allows a certain degree of visibility, enabling trapped persons to read fire exit signs and provides a safe passage through the smoke. The smoke produced contains no poisonous toxins such as halogens.

PCP SHROUDS:

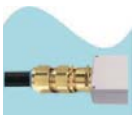
Polychloroprene shrouds are recommended for use against hostile weather and corrosive conditions. PCP shrouds are not affected by the ultraviolet rays contained in sunlight, hence they are used in outdoor conditions.

BICC COMPONENTS

SOLID PROTECTION

1		Protected against solid bodies larger than 50mm, such as back of the hand.
2		Protected against solid bodies larger than 12.5mm, such as finger of the hand.
3		Protected against solid bodies larger than 2.5mm, such as tools & wires.
4		Protected against solid bodies larger than 1.00mm, such as fine tools & small wires.
5		Dust protected. Limited ingress of dust permitted.
6		Dust tight. Zero ingress of dust permitted.

LIQUID PROTECTION

1		Protected against vertically falling drops of water.
2		Protected against vertically falling drops of water at upto 15° from the vertical.
3		Protected against vertically falling drops of rain water at upto 60° from the vertical.
4		Protected against splashing water from all directions.
5		Protected against jets of water from all directions.
6		Protected against water projected from powerful jets from all directions.
7		Protected against immersion between 15 cm and 1 m for up to 30 minutes.
8		Protected against long periods of immersion.

Rating Example:

IP 6 7

INGRESS PROTECTION

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

Section 2

BICC COMPONENTS

File Copy

We certify this is a true copy of original

Signed .....

Date 26 MAY 2015

SEDGWICK LEGAL
J. Peter Carey Solicitor
Royal London House, Four Four 56 58,
Lloyd Street Middleton Manchester M24 6UQ

CERTIFICATE OF INCORPORATION OF A PRIVATE LIMITED COMPANY

Company No. 06630405

The Registrar of Companies for England and Wales hereby certifies that
BICC COMPONENTS LIMITED

is this day incorporated under the Companies Act 1985 as a private company and that the company is limited.

Given at Companies House on 25th June 2008

N06630405B

REGISTRAR OF COMPANIES FOR ENGLAND AND WALES

THE OFFICIAL SEAL OF THE REGISTRAR OF COMPANIES

Companies House
— for the record —

The above information was communicated in non-legible form and authenticated by the Registrar of Companies under section 710A of the Companies Act 1985

BICC COMPONENTS

APOSTILLE
(Convention de La Haye du 5 octobre 1961)

1. Country: Pays/Pais	United Kingdom of Great Britain and Northern Ireland
This public document Le présent acte public / El presente documento público	
2. Has been signed by a été signé par ha sido firmado por	J P Carey
3. Acting in the capacity of agissant en qualité de quien actúa en calidad de	Solicitor.
4. Bears the seal/stamp of est revêtu du sceau / timbre de y está revestido del sello / timbre de	Not Applicable
Certified Attesté / Certificado	
5. at á / en: London	**6. the** le / el día: 08 June 2015
7. by par / por	Her Majesty's Principal Secretary of State for Foreign and Commonwealth Affairs
8. Number sous no / bajo el número	K546180
9. Seal / stamp: Sceau / timbre: Sello / timbre:	**10. Signature:** A. Hodges Signature: Firma:

This Apostille is not to be used in the UK and only confirms the authenticity of the signature, seal or stamp on the attached UK public document. It does not confirm the authenticity of the underlying document. Apostilles attached to documents that have been photocopied and certified in the UK confirm the signature of the UK public official who conducted the certification only. It does not authenticate either the signature on the original document or the contents of the original document in any way.

If this document is to be used in a country which is not party to the Hague Convention of 5th October 1961, it should be presented to the consular section of the mission representing that country.

Section 3

BICC COMPONENTS

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 60112522

Blatt *Page*
0001

Ihr Zeichen *Client Reference*	Unser Zeichen *Our Reference*	Ausstellungsdatum	*Date of Issue*
	0001--19600138 002	15.07.2016	*(day/mo/yr)*

Genehmigungsinhaber *License Holder*
BICC COMPONENTS LIMITED
28A, LANGLEY ROAD, WATFORD
WD17 4PT HERTS
UK
United Kingdom

Prüfzeichen *Test Mark*

TÜVRheinland® CERTIFIED
Type Approved
Safety
Regular Production Surveillance
www.tuv.com
ID 1111210261

Geprüft nach *Tested acc. to*
EN 62444:2013

Zertifiziertes Produkt (Geräteidentifikation) *Certified Product (Product Identification)*

Lizenzentgelte - Einheit *License Fee - Unit*

Cable Screw Fitting Cable Gland

Type designation:	a)A2 M XX	5
	b)CW M XX	1
	c)EIW M XX	1
	M XX = (Metric size,20...75)	
Trade Mark:	BICC	
Temperature Range:	-20°C to +130°C	
Entry Threads:	Metric	
Material:	Brass	
Sealing System:	Single-Orifice Seal	
IP Degree:	a) 1P66/IP68	
	b, c) IP66	
Impact Category:	Category 8	

7

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle

Sahure Orallalp

TÜV Rheinland LGA Products GmbH Zertifizierungsstelle

BICC COMPONENTS

Zertifikat *Certificate*

TÜVRheinland®

Zertifikat Nr. *Certificate No.*
R 60112669

Blatt *Page*
0001

Ihr Zeichen *Client Reference*	Unser Zeichen *Our Reference*	Ausstellungsdatum	*Date of Issue*
	0001--19600139 003	22.07.2016	*(day/mo/yr)*

Genehmigungsinhaber *License Holder*
BICC COMPONENTS LIMITED
28A, LANGLEY ROAD, WATFORD
WD17 4PT HERTS
UK
United Kingdom

Fertigungsstätte *Manufacturing Plant*
0001--19600139 001

Prüfzeichen *Test Mark*

TÜVRheinland® CERTIFIED
Type Approved
Safety
Regular Production Surveillance
www.tuv.com
ID 1111210303

Geprüft nach *Tested acc. to*
BS 6121-1:2005

Zertifiziertes Produkt (Geräteidentifikation)
Certified Product (Product Identification)

Lizenzentgelte - Einheit
License Fee - Unit

Cable Screw Fitting Cable Gland

Type designation:	BW M XX	5
	XX = (Metric size: 20...75)	1
Trade Mark:	BICC COMPONENTS	
Temperature Range:	-20°C to +130°C	
Entry Threads:	Metric	
Material:	Brass	
IP Degree:	1P2X	
Impact Category:	Category 8	

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg
Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle

TÜV Rheinland LGA Products GmbH Zertifizierungsstelle

Sahure Oralalp

10020 h 04.06 ® TÜV, TUEV and TUV are registered trademarks. Utilisation and application requires prior approval.

Annex- I

Testing Status of Cable gland According to EN 62444 and EN 6121-1

S.No.	Clause	Test requirement	Test Details	Status
1	6	Classification		Completed
2	7	Marking and documentation	Durability test	Completed
3	8	Construction		Completed
4	9	Mechanical Properties	Type A, Type B	
5	9.2	Cable retention	cable retention test	Completed
6	9.3	Cable anchorage test for non-armored cable	50times 1sec pull test and twist test	Completed
7	9.4	Cable anchorage test for armored cable	Load is maintained (as per table) 5mins displacement<3mm	Completed
8	9.5	Resistance to impact	Pre- condition 8H@lower temp and impact test	Completed
9	9.6	Seal performance		Completed
10	10	Electrical properties	Category A, category B, category C	
11	10.1	Equipment bonding to electrical equipment	IR test (resistance<0.1Ω)	Completed
12	10.2	Equipment bonding to metallic layers of cable	loaded according to 9.3 &IR test (resistance<0.1Ω)	
13	10.3.2	Electrical current test	Short circuit test and resistance measurement	Completed
14	11	EMC		N/A
15	12	External Influences	IP rating testing	A2,E1W, CW Completed
16	12.2	Resistance to corrosion	steel glands(salt spray 96hours)	N/A
17	13	Fire hazard		N/A
18	13.1	Reaction to fire	Glow wire test	N/A

BICC COMPONENTS

TÜVRheinland®

TO WHOM-SO-EVER IT MAY CONCERN

This is to confirm that M/s BICC Components, UK have submitted the below mentioned product to for testing & certification purpose for TUV Bauart Mark as per EN 61238-1 for following product:

Product	:	Cable Lug
Model / Type	:	BCT-BM / SE
Product Range	:	Cable Lugs for connectors size 1.5 Sq.mm to 630 Sq.mm
Test Status	:	The testing of the above product is expected to be started by the middle of the February 2016.

Date: February 11th, 2016
Place: Bangalore, India

(Mahesh Kumar Jaiswal)
For TUV Rheinland India Pvt. Ltd.

Regd. Office:
Block A, West Wing, 3rd Main Road
Electronics City Phase 1
Bangalore-560 100, India
Tel. +91 80 6723 3500
+91 80 6723 3610
Fax +91 80 6723 3542

Regional Offices:
Ahmedabad Mumbai
Chennai Noida
Coimbatore Panchkula
Gurgaon Odisha
Hyderabad Pune
Indore Ranipet
Jodhpur Tirupur
Kochi Trichy
Kolhapur Vadodara
Kolkata Visakhapatnam

Email : info@ind.tuv.com
Website : www.ind.tuv.com

CIN: U72501KA1996PTC020053

BICC COMPONENTS

BICC COMPONENTS

Certificate of Conformance

Program: CU-20 CU-117550 Elements: Brass
Comment: Cu/Zn-alloy
Average (n=0)

Sample No: H. No. 06

Quality:
CuZn39Pb3 (CW614N)

Sample Id: BR10329 / BR15414

Zn Con %	Pb Con %	Sn Con %	P Con %	Mn Con %	Fe Con %	Ni Con %	Si Con %	Mg Con %	Cr Con %	As Con %	Sb Con %
39.11	2.54	0.10	0.00	0.01	0.12	0.07	0.00	0.00	0.00	0.00	0.01

Cd Con %	Bi Con %	Co Con %	Al Con %	S Con %	Be Con %	B Con %	Se Con %	Cu Con %
0.001	0.002	0.001	0.002	0.004	<0.0001	0.0008	<0.008	58.00

For BICC COMPONENTS
D. Madan
Authorised Signatory

Supplier Quality Representative: Mr. Madan

Date: 11/01/2016

SPECTRO REPORT BICC BCT 630-16

Sample Result Name	Type	Measure Date	Time	Recalculation Date	Time	Origin	Method Name	Check Type
DHP 02 BCT	Unknown	11 - 01 -12016	18:06	11-01-2016	18:06	Measured	Cu-10-F	None

Check Status	Correction Type	Outlier Test Type	Status
Not Used	None	None	Not Used

Sample Name

H.NO 02/JAN/006/DHP

	Zn Conc %	Pb Conc %	Sn Conc %	P Conc %	Mn Conc %	Fe Conc %	Ni Conc %	Si Conc %	Mg Conc %	Cr Conc %	As Conc %	Sb Conc %	Cd Conc %	Bi Conc %	Co Conc %	Al Conc %	S Conc %
1	0.041	0.009	0.01	0.035	0.0001	0.034	0.002	0.025	0.002	0.0002	0.002	0.009	0.0001	0.002	<0.001	0.002	0.004
Mean	0.041	0.009	0.01	0.035	0.0001	0.034	0.002	0.025	0.002	0.0002	0.002	0.009	0.0001	0.002	<0.001	0.002	0.004

	Be Conc %	B Conc %	Se Conc %	Cu Conc %
1	<0.0001	0.0008	<0.008	99.8
Mean	<0.0001	0.0008	<0.008	99.8

For BICC COMPONENTS
Authorised Signatory

BICC COMPONENTS

CERTIFICATE OF REGISTRATION

EQUALITAS™

BICC COMPONENTS

This certificate verifies that the above Organisation has been audited on the above address for scope as under and found to be in accordance with the requirements of Management system.

ISO 9001:2008

Quality Management System

Manufacturing, Supply & Export of Machined Metal Components and Assemblies for Electrical & Engineering Applications, Assembling of LED Lighting for Indoor and Outdoor

Certificate No: **Q-03151102**

Original Issue Date: **02 Nov 2015**

Issue Date: **21 Nov 2015**

1st Surv. Due Before: **19 Oct 2016***

2nd Surv. Due Before: **19 Oct 2017***

Valid Till: **01 Nov 2018**

*** After successful completion of surveillance audit, new certificate shall be issued.**

This Certificate is valid as per Rules and Regulations of ECL & also the surveillance audits conducted atleast once a year.
To check the certification validity please contact -**info@theecl.com**

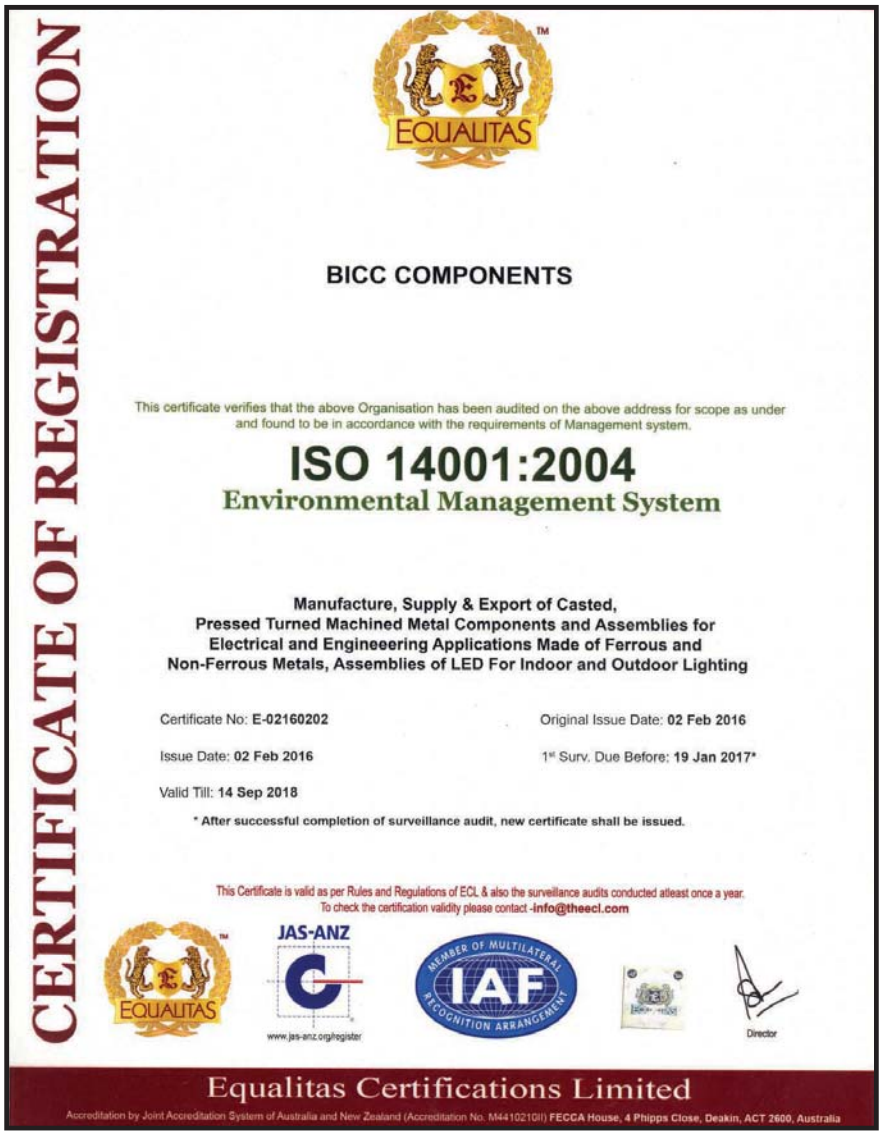
EQUALITAS™ JAS-ANZ www.jas-anz.org/register MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF Director

Equalitas Certifications Limited

Accreditation by Joint Accreditation System of Australia and New Zealand (Accreditation No. M4410210II) **FECCA House, 4 Phipps Close, Deakin, ACT 2600, Australia**

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS



CERTIFICATE OF REGISTRATION

EQUALITAS

BICC COMPONENTS

This certificate verifies that the above Organisation has been audited on the above address for scope as under and found to be in accordance with the requirements of Management system.

ISO 14001:2004

Environmental Management System

Manufacture, Supply & Export of Casted,
Pressed Turned Machined Metal Components and Assemblies for
Electrical and Engineeering Applications Made of Ferrous and
Non-Ferrous Metals, Assemblies of LED For Indoor and Outdoor Lighting

Certificate No: **E-02160202**

Original Issue Date: **02 Feb 2016**

Issue Date: **02 Feb 2016**

1st Surv. Due Before: **19 Jan 2017***

Valid Till: **14 Sep 2018**

* After successful completion of surveillance audit, new certificate shall be issued.

This Certificate is valid as per Rules and Regulations of ECL & also the surveillance audits conducted atleast once a year.
To check the certification validity please contact -info@theecl.com

EQUALITAS

JAS-ANZ

www.jas-anz.org/register

MEMBER OF MULTILATERAL RECOGNITION ARRANGEMENT IAF

Director

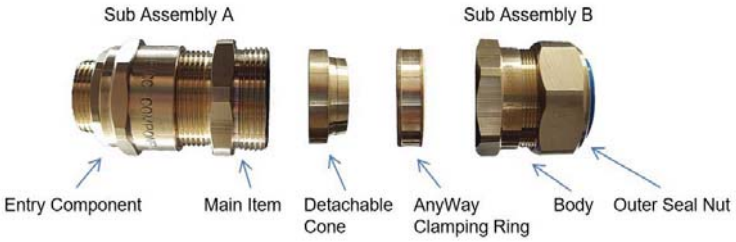
Equalitas Certifications Limited

Accreditation by Joint Accreditation System of Australia and New Zealand (Accreditation No. M4410210II) FECCA House, 4 Phipps Close, Deakin, ACT 2600, Australia

Section 3

BICC COMPONENTS

INSTALLATION INSTRUCTIONS:



E1W Gland Installation instructions

STEP 1. Cut the shroud to fit the diameter of the cable, if needed. Then, fit the shroud over the outer sheath of the cable.

STEP 2. Next, fit Sub Assembly B and the *AnyWay clamping ring over the outer sheath of the cable.

STEP 3. Use an entry thread seal over the gland entry threads of Sub Assembly A. Now tighten Sub Assembly A onto the required equipment. Secure it with a spanner.

STEP 4. Determine the length of the cable required to suit the geometry of the equipment. Then remove the outer sheath using appropriate and safe equipment. Be careful to not cut into the inner sheath.

STEP 5. Using an appropriate tool, remove this outer sheath and the armour wires (can be twisted and removed easily).

STEP 6. Now, measure and mark the armour length which depends on the gland being installed. Remove the outer sheath. This will reveal armour wires of the appropriate length.

STEP 7. To suit the armour cone, pull up and form the armour wires.

STEP 8. Insert the cone into Sub Assembly A secured to equipment in STEP 5.

STEP 9. Next, insert cable into Sub Assembly A. Ensure the armour in evenly spaced.

STEP 10. Push the cable gently forward to maintain contact between the armour wires and armour cone, hand tighten the main item on Sub Assembly A until heavy resistance is achieved. Tighten further with aspanner.

Step 11. Pass AnyWay clamping ring on Sub Assembly B. Hold the main item on Sub Assembly A with a spanner and tighten Sub Assembly B until “metal to metal” contact is made.

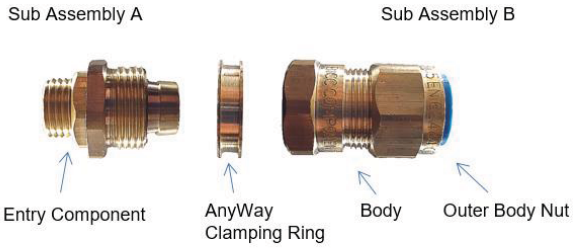
STEP 12. Use spanner and loosen Sub Assembly B from Sub Assembly A. Once removed, recheck and confirm that the AnyWay clamping ring is tightly and securely clamped.

STEP 13. Re-tighten the two sub assemblies using hand. Using a spanner, hold Sub Assembly A, and tighten the body of Sub Assembly B until “metal to metal” contact is made.

STEP 14. Finally, tighten the outer seal housing with a spanner, until excessive force is required to tighten further. If required, pass the shroud over the cable and position around the gland.

NOTE. 1. The AnyWay clamping ring can be installed either way.
2. It is not necessary to dismantle the gland any further than depicted in the image above.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com



CW Gland Installation instructions

STEP 1. Cut the shroud to fit the diameter of the cable, if needed. Then, fit the shroud over the outer sheath of the cable.

STEP 2. Next, fit Sub Assembly B and the *AnyWay clamping ring over the outer sheath of the cable.

STEP 3. Use an entry thread seal over the gland entry threads of Sub Assembly A. Now tighten Sub Assembly A on to the required equipment. Secure it with a spanner.

STEP 4. Determine the length of the cable required to suit the geometry of the equipment. Then remove the outer sheath using appropriate and safe equipment. Be careful to not cut into the inner sheath.

STEP 5. Using an appropriate tool, remove this outer sheath and the armour wires (can be twisted and removed easily).

STEP 6. Now, measure and mark the armour length which depends on the gland being installed. Remove the outer sheath. This will reveal armour wires of the appropriate length.

STEP 7. To suit the armour cone, pull up and form the armour wires.

STEP 8. Insert cable armour wires over the cone in Sub Assembly A. Ensure the armour in evenly spaced.

STEP 9. Push the cable gently forward to maintain contact between the armour wires and armour cone, hand tighten the main item on Sub Assembly A until heavy resistance is achieved. Tighten further with a spanner.

STEP 10. Pass AnyWay clamping ring on Sub Assembly B. Hold the main item on Sub Assembly A with a spanner and tighten Sub Assembly B until “metal to metal” contact is made.

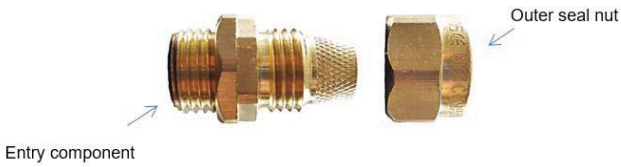
STEP 11. Use spanner and loosen Sub Assembly B from Sub Assembly A. Once removed, recheck and confirm that the AnyWay clamping ring is tightly and securely clamped.

STEP 12. Re-tighten the two sub assemblies using hand. Using a spanner, hold Sub Assembly A, and tighten the body of Sub Assembly B until “metal to metal” contact is made.

STEP 13. Finally, tighten the outer seal housing with a spanner, until excessive force is required to tighten further. If required, pass the shroud over the cable and position around the gland.

NOTE. 1. The AnyWay clamping ring can be installed either way.
2. It is not necessary to dismantle the gland any further than depicted in the image above.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com



BW Gland Installation instructions

STEP 1. If required cut shroud and put it over the cable.
STEP 2. Move outer seal nut over the cable.
STEP 3. Secure entry component into equipment.
STEP 4. Remove cable outer sheath and remove armour wires.
STEP 5. Measure specific amount of cable wire based on gland length and further remove outer sheath to reveal armour wires.
STEP 6. To suit the armour cone, pull up and form the armour wires.
STEP 7. Insert the cable into entry component ensuring armour wires are placed evenly around the cone.
STEP 8. Tighten the outer seal nut.
STEP 9. Pass the shroud over the gland.

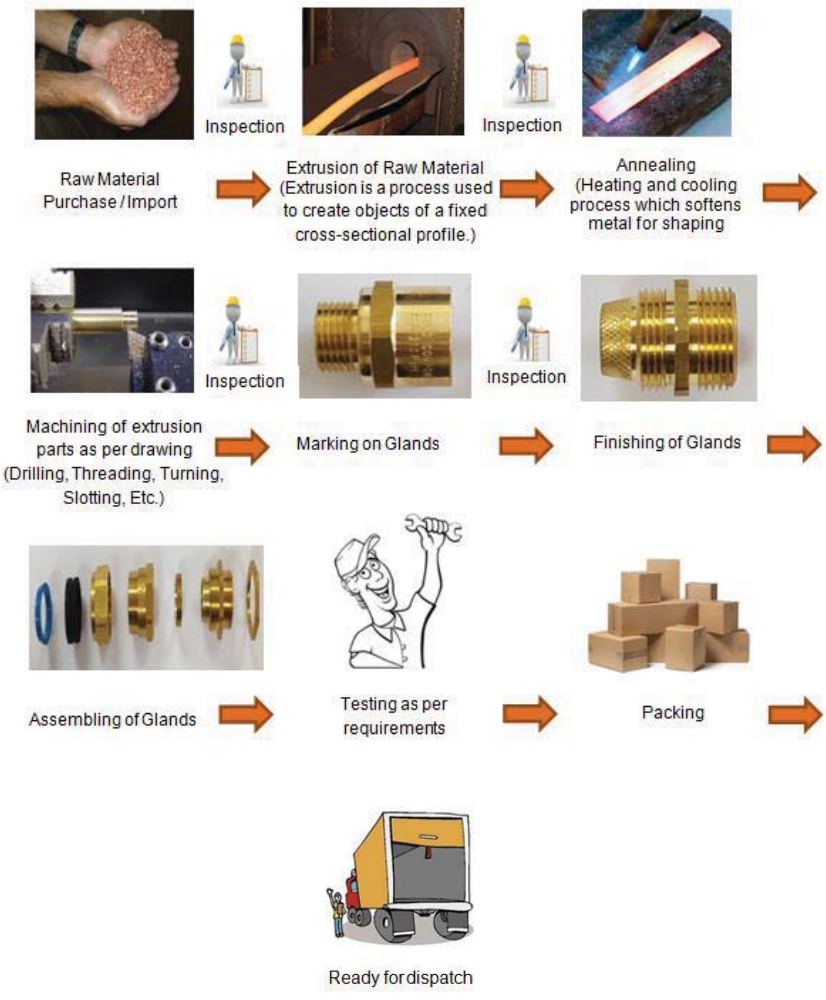
A2 Gland Installation instructions

STEP 1. If required cut shroud to suit cable diameter and put it over cable.
STEP 2. Pass the shroud over the cable.
STEP 3. Remove the cable outer sheath.
STEP 4. If required, fit entry thread seal over the gland entry thread and tighten the gland into the equipment.
STEP 5. Pass the cable through the gland and tighten the outer seal nut until resistance is felt. Use a spanner to further tighten.
STEP 6. Pass the shroud over the gland.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

PROCESS FLOWCHART - CABLE GLANDS



Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

Section 5

BICC COMPONENTS

PROCESS FLOWCHART - CABLE TERMINALS

Section 5

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BICC COMPONENTS

GENERAL COMPLIANCE STATEMENT

Material: BICC Components LTD Industrial Cable Glands & Copper Terminals

TYPE	SUITABLE FOR USE WITH	IP RATING	TYPE OF COMPRESSION	REMARKS
BW	SWA & AWA cables	IP2X (Indoor only)	-	> Conforms to BS 6121:Part 1:2005, EN 62444. > Kit contains gland, locknut, earth tag and PVC or LSF shroud. > Available in Nickel Plating.
A2	Unarmoured cables	IP66/IP68	Single Compression	
CW	SWA cables	IP66		
E1W	All types of armoured cables		Double Compression	
Copper Terminal Lugs	All type of cables	-	-	> Conforms to IEC 61238-1 > Minimum 99.5% copper, tin plated.
Cleat	LV, MV & HV cables	-	-	Manufactured to BS EN 61238-1:2003

BICC Components Limited
28a, Langley Road, Watford,
WD17 4PT, Herts, England
Company #06630405

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

WARRANTY LETTER

BICC Components Ltd. warrants that our complete range of products will be free from defects in materials and workmanship for a period of 1 year from the date of supply.

Installation of the product outside of the intended use of the product or installed against the recommended installation instructions will void the manufacturing warranty.

A manufacturing defect is defined as one that will impair their usefulness provided they are used in the service for which they are recommended. Any fitting which proves to be defective will be replaced, but no incidental labor charges, expenses or damages will be allowed.

It is the end user's responsibility to confirm that items intended for use satisfy local codes and standards.

BICC Components Limited
28a, Langley Road, Watford,
WD4 17PT, Herts, England
Company 06630405#

Manufacturer of Brass and Aluminium Cable Glands,
Copper Terminals, Aluminium and PVC Cleats.

Designed and Engineered by BICC Components, U.K.
www.bicccomponents.uk.com

BW Industrial Cable Gland

BW Industrial Cable Gland

BW type brass gland, for indoor use with all kind of Steel Wire Armoured (SWA) cable and Aluminium Wire Armoured (AWA) cable.

- Provides mechanical cable retention & electrical continuity via armoured wire termination.
- Permanently crimped, low impendence earth termination.
- Cable gland complete kit includes: brass gland, locknut, earth tag and PVC shroud. For sizes upto M25 and lower, will contain two kits and for sizes M32 and above will include one kit of each component.

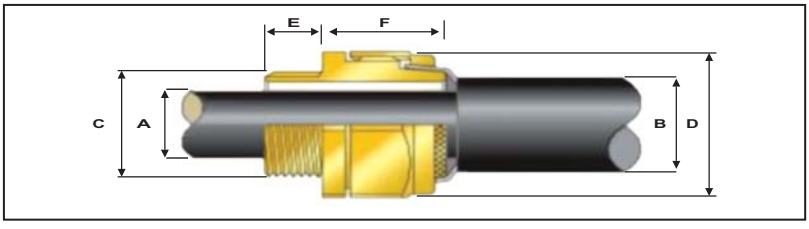
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP 2X
Cable Type	SWA and AWA
Protection Material	Brass CuZn39Pb3 (CW614N) to EN12168
Continuous Operating Temp	- 20° C to + 130° C
Accessories	Earth Tag, Locknut, PVC Shroud
Optional	Available in Brass Nickel Plating on Request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'	Overall Cable Diameter 'B'	Armour Range		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
			Max	Max	Min	Max	Max	Max		
20S	M20	10	11.7	16.1	0.9	1.25	22	24	18	20SBW1BI
20	M20	10	14	21.1	0.9	1.25	28	30	22	20BW1BI
25	M25	10	20	27.4	1.25	1.6	33.6	36	26	25BW1BI
32	M32	10	26.3	34.4	1.6	2	41	44.5	28	32BW1BI
40	M40	10	32.2	42.4	1.6	2	50	56.3	30	40BW1BI
50S	M50	15	38.2	50.1	2	2.5	57.1	63.4	30	50SBW1BI
50	M50	15	44.1	55.7	2	2.5	61	72.1	32	50BW1BI
63S	M63	15	50	62.4	2.5	2.5	75	83	38	63SBW1BI
63	M63	15	56	68.2	2.5	2.5	80	88.7	38	63BW1BI
75S	M75	15	62	76.8	2.5	2.5	90	99.8	40	75SBW1BI
75	M75	15	75	82.9	2.5	3.15	95	105.3	40	75BW1BI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



BICC COMPONENTS

BW LSF Industrial Cable Gland

BW LSF Industrial Cable Gland

BW type brass gland, for indoor use with all kind of Steel Wire Armoured (SWA) cable and Aluminium wire Armoured (AWA) cable.

- Provides mechanical cable retention & electrical continuity via armoured wire termination.
- Permanently crimped, low impendence earth termination.
- Cable gland complete kit includes: brass gland, locknut, earth tag and LSF shroud. For sizes upto M25 and lower, will contain two kits and for sizes M32 and above will include one kit of each component.

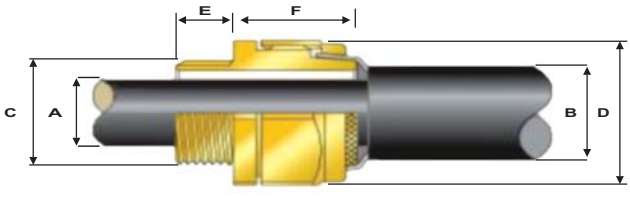
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP 2X
Cable Type	SWA and AWA
Protection Material	Brass CuZn39Pb3 (CW614N) to EN12168
Continuous Operating Temp	- 20° C to + 130° C
Accessories	Earth Tag, Locknut, LSF Shroud
Optional	Available in Brass Nickel Plating on Request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'	Overall Cable Diameter 'B'	Armour Range		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
			Max	Max	Min	Max	Max	Max		
20S	M20	10	11.7	16.1	0.9	1.25	22	24	18	20SBW1LSBI
20	M20	10	14	21.1	0.9	1.25	28	30	22	20BW1LSBI
25	M25	10	20	27.4	1.25	1.6	33.6	36	26	25BW1LSBI
32	M32	10	26.3	34.4	1.6	2	41	44.5	28	32BW1LSBI
40	M40	10	32.2	42.4	1.6	2	50	56.3	30	40BW1LSBI
50S	M50	15	38.2	50.1	2	2.5	57.1	63.4	30	50SBW1LSBI
50	M50	15	44.1	55.7	2	2.5	61	72.1	32	50BW1LSBI
63S	M63	15	50	62.4	2.5	2.5	75	83	38	63SBW1LSBI
63	M63	15	56	68.2	2.5	2.5	80	88.7	38	63BW1LSBI
75S	M75	15	62	76.8	2.5	2.5	90	99.8	40	75SBW1LSBI
75	M75	15	75	82.9	2.5	3.15	95	105.3	40	75BW1LSBI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



CW Single Compression Industrial Cable Gland

CW Single Compression Industrial Cable Gland

CW type brass cable gland for use with Steel Wire Armoured Cable (SWA).

- Single compression gland, providing mechanical cable retention and electrical continuity via armoured wire termination. Environmental seal on the outer sheath to IP 66.
- Controlled outer load retention seal.
- Cable gland complete kit includes: brass gland, locknut, earth tag and PVC shroud. For sizes upto M25 and lower, will contain two kits and for sizes M32 and above will include one kit of each component.

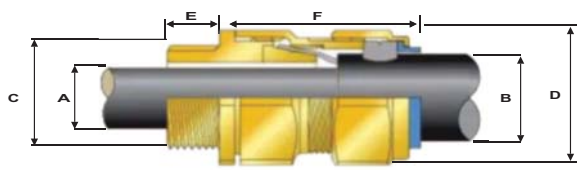
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP66
Cable Type	Steel Wire Armor (SWA)
Protection Material	Brass CuZn39Pb3 (CW614N) to EN12168
Continuous Operating Temp	- 20° C to + 130° C
Accessories	Earth Tag, Locknut, Entry Thread Seal, PVC Shroud
Optional	Available in Brass Nickel Plating on Request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'	Overall Cable Diameter 'B'		Armour Range		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
			Max	Min	Max	Min	Max	Max	Max		
20S/16	M20	10	8.7	6.1	11.5	0.9	1	24	26.6	43	20S16CW1BI
20S	M20	10	11.7	9.5	15.9	0.9	1.25	24	26	43	20SCW1BI
20	M20	10	14	12.5	20.9	0.9	1.25	30.5	33.3	50	20CW1BI
25	M25	10	20	18.2	26.2	1.25	1.6	36	40	55	25CW1BI
32	M32	10	26.3	23.7	33.9	1.6	2	46	51	55	32CW1BI
40	M40	10	32.2	27.9	40.4	1.6	2	55	61	55	40CW1BI
50S	M50	15	38.2	35.2	46.7	2	2.5	60	66.5	56	50SCW1BI
50	M50	15	44.1	40.4	53.1	2	2.5	70.1	78.6	70	50CW1BI
63S	M63	15	50	45.6	59.4	2	2.5	75	83.2	70	63SCW1BI
63	M63	15	56	54.6	65.9	2	2.5	80	89	80	63CW1BI
75S	M75	15	62	59	72.1	2	2.5	90	101.6	81	75SCW1BI
75	M75	15	68	66.7	78.5	2	2.5	100	111.1	96	75CW1BI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



BICC COMPONENTS

CW Single Compression LSF Industrial Cable Gland

CW Single Compression LSF Industrial Cable Gland

CW type brass cable gland for use with Steel Wire Armoured cable (SWA).

- Single compression gland, providing mechanical cable retention and electrical continuity via armoured wire termination. Environmental seal on the outer sheath to IP 66.
- Controlled outer load retention seal.
- Cable gland complete kit includes: brass gland, locknut, earth tag and LSF shroud. For sizes upto M25 and lower, will contain two kits and for sizes M32 and above will include one kit of each component.

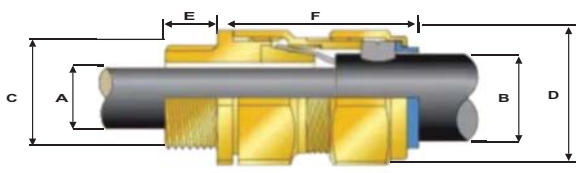
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP66
Cable Type	Steel Wire Armor (SWA)
Protection Material	Brass CuZn39Pb3 (CW614N) to EN12168
Continuous Operating Temp	- 20° C to + 130° C
Accessories	Earth Tag, Locknut, Entry Thread Seal, LSF Shroud
Optional	Available in Brass Nickel Plating on Request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'	Overall Cable Diameter 'B'		Armour Range		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
			Max	Min	Max	Min	Max	Max	Max		
20S/16	M20	10	8.7	6.1	11.5	0.9	1	24	26.6	43	20S16CW1LSBI
20S	M20	10	11.7	9.5	15.9	0.9	1.25	24	26	43	20SCW1LSBI
20	M20	10	14	12.5	20.9	0.9	1.25	30.5	33.3	50	20CW1LSBI
25	M25	10	20	18.2	26.2	1.25	1.6	36	40	55	25CW1LSBI
32	M32	10	26.3	23.7	33.9	1.6	2	46	51	55	32CW1LSBI
40	M40	10	32.2	27.9	40.4	1.6	2	55	61	55	40CW1LSBI
50S	M50	15	38.2	35.2	46.7	2	2.5	60	66.5	56	50SCW1LSBI
50	M50	15	44.1	40.4	53.1	2	2.5	70.1	78.6	70	50CW1LSBI
63S	M63	15	50	45.6	59.4	2	2.5	75	83.2	70	63SCW1LSBI
63	M63	15	56	54.6	65.9	2	2.5	80	89	80	63CW1LSBI
75S	M75	15	62	59	72.1	2	2.5	90	101.6	81	75SCW1LSBI
75	M75	15	68	66.7	78.5	2	2.5	100	111.1	96	75CW1LSBI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



A2 Single Compression Industrial Gland

A2 Single Compression Industrial Gland

A2 type brass cable gland for use with all types of unarmoured cable.

- Single compression gland, providing mechanical cable retention and an environmental seal on outer sheath to IP-66, 67 and 68.
- Displacement type seal.
- Cable gland complete kit includes: brass gland, locknut, earth tag and PVC shroud. For sizes upto M25 and lower, will contain two kits and for sizes M32 and above will include one kit of each component.

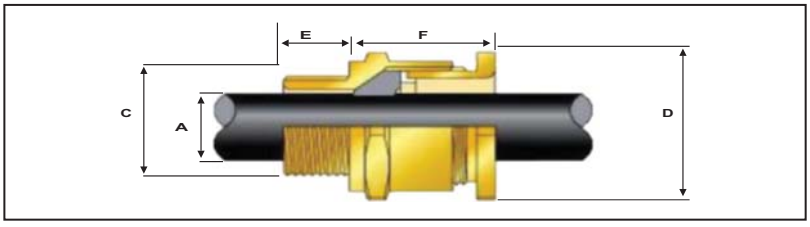
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP66, 67 and 68
Cable Type	Unarmoured
Protection Material	Brass CuZn39Pb3 (CW614N) to EN12168
Continuous Operating Temp	- 20° C to + 130° C
Accessories	Locknut, Entry Thread Seal, PVC Shroud
Optional	Available in Brass Nickel Plating on Request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'		Option	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
	Metric	NPT	NPT		Min	Max	Max	Max		
20S/16	M20	1/2"	3/4"	10	3.1	8.7	24	26.6	21	20S16A21BI
20S	M20	1/2"	3/4"	10	6.1	11.7	24	26.6	21	20SA21BI
20	M20	1/2"	3/4"	10	6.5	14	27	30	24	20A21BI
25	M25	3/4"	1"	10	11.1	20	36	39.9	26	25A21BI
32	M32	1"	1 1/4"	10	17	26.3	41	45.5	27	32A21BI
40	M40	1 1/4"	1 1/2"	10	23.5	32.2	50	55.4	28	40A21BI
50S	M50	1 1/2"	2"	15	31	38.2	55	61	29	50SA21BI
50	M50	2"	2 1/2"	15	35.6	44.1	60	66.5	30	50A21BI
63S	M63	2"	2 1/2"	15	41.5	50	70	77.6	30	63SA21BI
63	M63	2 1/2"	3"	15	47.2	56	75	83.2	30	63A21BI
75S	M75	2 1/2"	3"	15	54	62	80	88.7	32	75SA21BI
75	M75	3"	3 1/2"	15	61.1	68	85	94.2	32	75A21BI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



BICC COMPONENTS

A2 Single Compression LSF Industrial Cable Gland

A2 Single Compression LSF Industrial Cable Gland

A2 type brass cable gland for use with all types of unarmoured cable.

- Single compression gland, providing mechanical cable retention and an environmental seal on outer sheath to IP-66, 67 and 68.
- Displacement type seal.
- Cable gland complete kit includes: brass gland, locknut, earth tag and LSF shroud. For sizes upto M25 and lower, will contain two kits and for sizes M32 and above will include one kit of each component.

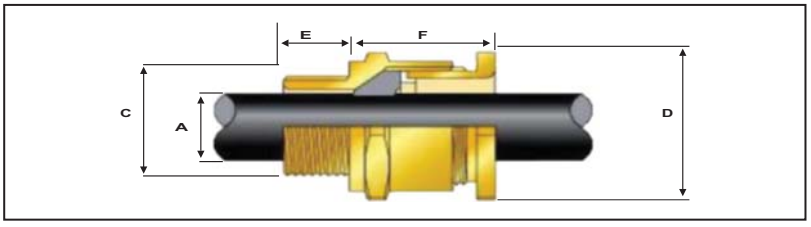
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP66, 67 and 68
Cable Type	Unarmoured
Protection Material	Brass CuZn39Pb3 (CW614N) to EN12168
Continuous Operating Temp	- 20° C to + 130° C
Accessories	Locknut, Entry Thread Seal, LSF Shroud
Optional	Available in Brass Nickel Plating on Request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'		Option	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
	Metric	NPT	NPT		Min	Max	Max	Max		
20S/16	M20	1/2"	3/4"	10	3.1	8.7	24	26.6	21	20S16A21LSBI
20S	M20	1/2"	3/4"	10	6.1	11.7	24	26.6	21	20SA21LSBI
20	M20	1/2"	3/4"	10	6.5	14	27	30	24	20A21LSBI
25	M25	3/4"	1"	10	11.1	20	36	39.9	26	25A21LSBI
32	M32	1"	1 1/4"	10	17	26.3	41	45.5	27	32A21LSBI
40	M40	1 1/4"	1 1/2"	10	23.5	32.2	50	55.4	28	40A21LSBI
50S	M50	1 1/2"	2"	15	31	38.2	55	61	29	50SA21LSBI
50	M50	2"	2 1/2"	15	35.6	44.1	60	66.5	30	50A21LSBI
63S	M63	2"	2 1/2"	15	41.5	50	70	77.6	30	63SA21LSBI
63	M63	2 1/2"	3"	15	47.2	56	75	83.2	30	63A21LSBI
75S	M75	2 1/2"	3"	15	54	62	80	88.7	32	75SA21LSBI
75	M75	3"	3 1/2"	15	61.1	68	85	94.2	32	75A21LSBI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



E1W Double Compression Industrial Cable Gland

E1W Double Compression Industrial Cable Gland

E1W type brass cable gland for use with all types of armoured cables.

- Double compression gland, providing mechanical cable retention and electric continuity via armoured wire termination. Environmental seal on the outer sheath to IP 66. Inner seal provides grip to inner layer of cable.
- Secure against self loosing.
- Cable gland complete kit includes: brass gland, locknut, earth tag and PVC shroud. For sizes upto M25 and lower, will contain two kits and for sizes M32 and above will include one kit of each component.

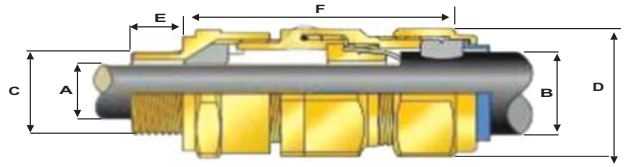
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP66
Cable Type	All types of armoured cables
Protection Material	Brass CuZn39Pb3 (CW614N) to EN12168
Continuous Operating Temp	- 20° C to + 130° C
Accessories	Earth Tag, Locknut, Entry Thread Seal, PVC Shroud
Optional	Available in Brass Nickel Plating on Request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'		Option	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'		Overall Cable Diameter 'B'		Armour Range		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
	Metric	NPT	NPT		Min	Max	Min	Max	Min	Max	Max	Max		
20S/16	M20	1/2"	3/4"	10	3.1	8.7	6.1	11.5	0.9	1	24	26.6	63	20S16E1W1BI
20S	M20	1/2"	3/4"	10	6.1	11.7	9.5	15.9	0.9	1.25	24	26	63	20SE1W1BI
20	M20	1/2"	3/4"	10	6.5	14	12.5	20.9	0.9	1.25	30.5	33.3	67	20E1W1BI
25	M25	3/4"	1"	10	11.1	20	18.2	26.2	1.25	1.6	37.5	40.5	78	25E1W1BI
32	M32	1"	1 1/4"	15	17	26.3	23.7	33.9	1.6	2	46	51	78	32E1W1BI
40	M40	1 1/4"	1 1/2"	10	22	32.2	27.9	40.4	1.6	2	55	61	83	40E1W1BI
50S	M50	1 1/2"	2"	15	29.5	38.2	35.2	46.7	2	2.5	60	66.5	78	50SE1W1BI
50	M50	2"	2 1/2"	15	35.6	44.1	40.4	53.1	2	2.5	70.1	78.6	81	50E1W1BI
63S	M63	2"	2 1/2"	15	40.1	50	45.6	59.4	2	2.5	75	83.2	93	63SE1W1BI
63	M63	2 1/2"	3"	15	47.2	56	54.6	65.9	2	2.5	80	89	95	63E1W1BI
75S	M75	2 1/2"	3"	15	52.8	62	59	72.1	2	2.5	89	101.6	103	75SE1W1BI
75	M75	3"	3 1/2"	15	59.1	68	66.7	78.5	2	2.5	99	111.1	110	75E1W1BI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



BICC COMPONENTS

E1W Double Compression LSF Industrial Cable Gland

E1W Double Compression LSF Industrial Cable Gland

E1W type brass cable gland for use with all types of armoured cables.

- Double compression gland, providing mechanical cable retention and electric continuity via armoured wire termination. Environmental seal on the outer sheath to IP 66. Inner seal provides grip to inner layer of cable.
- Secure against self loosing.
- Cable gland complete kit includes: brass gland, locknut, earth tag and LSF shroud. For sizes upto M25 and lower, will contain two kits and for sizes M32 and above will include one kit of each component.

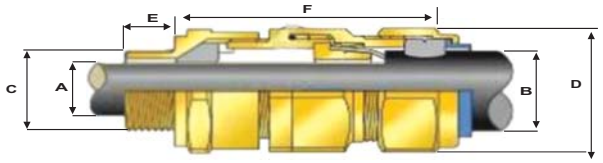
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP66
Cable Type	All types of armoured cables
Protection Material	Brass CuZn39Pb3 (CW614N) to EN12168
Continuous Operating Temp	- 20° C to + 130° C
Accessories	Earth Tag, Locknut, Entry Thread Seal, LSF Shroud
Optional	Available in Brass Nickel Plating on Request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C'		Option	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'		Overall Cable Diameter 'B'		Armour Range		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
	Metric	NPT	NPT		Min	Max	Min	Max	Min	Max	Max	Max		
20S/16	M20	1/2"	3/4"	10	3.1	8.7	6.1	11.5	0.9	1	24	26.6	63	20S16E1W1LSBI
20S	M20	1/2"	3/4"	10	6.1	11.7	9.5	15.9	0.9	1.25	24	26	63	20SE1W1LSBI
20	M20	1/2"	3/4"	10	6.5	14	12.5	20.9	0.9	1.25	30.5	33.3	67	20E1W1LSBI
25	M25	3/4"	1"	10	11.1	20	18.2	26.2	1.25	1.6	37.5	40.5	78	25E1W1LSBI
32	M32	1"	1 1/4"	15	17	26.3	23.7	33.9	1.6	2	46	51	78	32E1W1LSBI
40	M40	1 1/4"	1 1/2"	10	22	32.2	27.9	40.4	1.6	2	55	61	83	40E1W1LSBI
50S	M50	1 1/2"	2"	15	29.5	38.2	35.2	46.7	2	2.5	60	66.5	78	50SE1W1LSBI
50	M50	2"	2 1/2"	15	35.6	44.1	40.4	53.1	2	2.5	70.1	78.6	81	50E1W1LSBI
63S	M63	2"	2 1/2"	15	40.1	50	45.6	59.4	2	2.5	75	83.2	93	63SE1W1LSBI
63	M63	2 1/2"	3"	15	47.2	56	54.6	65.9	2	2.5	80	89	95	63E1W1LSBI
75S	M75	2 1/2"	3"	15	52.8	62	59	72.1	2	2.5	89	101.6	103	75SE1W1LSBI
75	M75	3"	3 1/2"	15	59.1	68	66.7	78.5	2	2.5	99	111.1	110	75E1W1LSBI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



CW Single Compression Aluminium Industrial Cable Gland

CW Single Compression Aluminium Industrial Cable Gland

CW type Aluminium cable gland for use with Aluminium Wire Armoured Cable (AWA).

- Single compression gland providing mechanical cable retention and electrical continuity via armoured wire termination. Environmental seal on the outer sheath to IP 66.
- Controlled outer load retention seal.
- Environmental friendly, aluminium alloy used for extra strength & performance. Cable gland kit includes: aluminium gland, locknut, earth tag and PVC shroud.

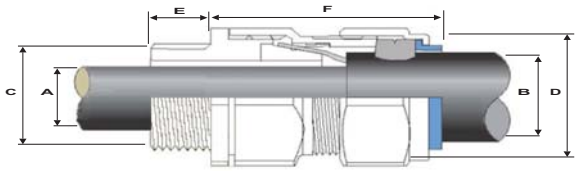
Technical Specification

Threading	Metric
Standard	BS 6121:2005, EN 62444:2013
Ingress Protection Rating	IP66
Cable Type	Aluminium Wire Armoured (AWA)
Protection Material	6082 Extruded Aluminium Alloy
Continuous Operating Temp	-20° C to +130° C
Accessories	Earth Tag, Locknut, Entry Thread Seal, Shroud
Optional	LSF shroud available on request

Cable Gland Selection Table

Cable Gland Size	Entry Thread 'C' Metric	Minimum Thread Length 'E'	Cable Bedding Diameter 'A'	Overall Cable Diameter 'B'		Armour Range		Across Flat 'D'	Across Corners 'D'	Nominal Protrusion Length 'F'	Ordering Reference
			Max	Min	Max	Min	Max	Max	Max		
50S	M50	15	38.2	35.2	46.7	2	2.5	60	66.5	56	AL50SCW1BI
50	M50	15	44.1	40.4	53.1	2	2.5	70.1	78.6	70	AL50CW1BI

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



BICC COMPONENTS

Copper Terminal – Bell Mouth Type (BM)

Copper Terminal – Bell Mouth Type (BM)

> **Bell Mouth Entry:**
Our bell mouth range allows cable insertion to be handled efficiently for the opening of the conductor.

> **Inspection Hole:**
The unique design of the inspection hole, helps the conductor to insert fully. The stopper at the end of the insertion allows the conductor to place itself rightly inside the surface area of the crimp.

> **Application:**
Suitable for low & medium voltage switch gear & control panel.

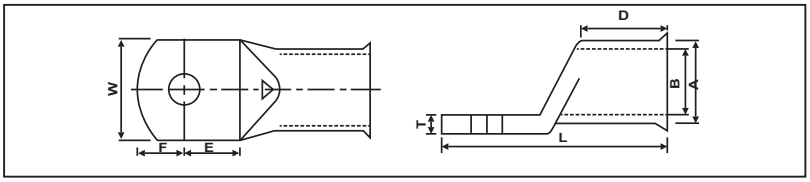
Technical Specification

Standard	IEC 61238-1
Material	Manufactured from seamless copper tube conforming to BS EN 12449:2012
Finish	Electro tin-plated conforming to BS EN 1872:1984

Terminal Selection Chart

Cond. Size	Barrel O.D. 'A'	Barrel I.D. 'B'	Stud Hole Center 'E'	Stud Hole Center To End of Palm 'F'	Palm Width 'W'	Barrel Length 'D'	Total Length 'L'	Thickness 'T'	Part No.
1.5	3.80	1.90	4.50	4.50	7.00	7.00	18.00	1.90	BCT-BM-1.5-3
1.5	3.80	1.90	7.50	4.50	7.00	7.00	21.00	1.90	BCT-BM-1.5-4
1.5	3.80	1.90	7.50	4.50	8.00	7.00	21.00	1.90	BCT-BM-1.5-5
1.5	3.80	1.90	7.50	4.50	9.00	7.00	22.00	1.90	BCT-BM-1.5-6
2.5	3.90	2.40	4.00	4.50	7.00	8.00	18.50	1.50	BCT-BM-2.5-3
2.5	3.90	2.40	7.50	4.50	7.00	8.00	22.00	1.50	BCT-BM-2.5-4
2.5	3.90	2.40	7.50	4.50	9.00	8.00	22.00	1.50	BCT-BM-2.5-5
2.5	3.90	2.40	7.50	5.50	9.50	8.00	23.00	1.50	BCT-BM-2.5-6
2.5	3.90	2.40	7.50	7.50	12.00	8.00	25.00	1.50	BCT-BM-2.5-8
4	4.70	2.80	4.50	4.50	7.00	8.00	19.00	1.90	BCT-BM-4-3
4	4.70	2.80	7.50	4.50	7.00	8.00	22.00	1.90	BCT-BM-4-4
4	4.70	2.80	7.50	4.50	8.50	8.00	22.00	1.90	BCT-BM-4-5
4	4.70	2.80	7.50	5.50	10.00	8.00	23.00	1.90	BCT-BM-4-6
4	4.70	2.80	10.50	6.50	13.00	8.00	27.00	1.90	BCT-BM-4-8
4	4.70	2.80	11.50	7.50	14.00	11.00	32.00	1.90	BCT-BM-4-10
6	5.30	3.40	7.50	4.50	7.50	8.50	23.50	1.90	BCT-BM-6-4

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



Copper Terminal - Straight Entry Type (SE)

Copper Terminal - Straight Entry Type (SE)

> **Straight Entry:**
Our straight entry range allows cable insertion to be handled efficiently for the opening of the conductor.

> **Inspection Hole:**
The unique design of the inspection hole, helps the conductor to insert fully. The stopper at the end of the insertion allows the conductor to place itself rightly inside the surface area of the crimp.

> **Application:**
Suitable for low & medium voltage switch gear & control panel.

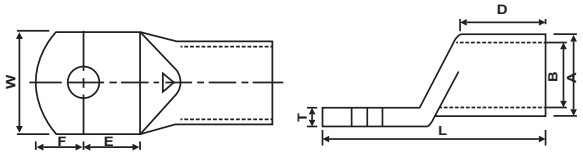
Technical Specification

Standard	IEC 61238-1
Material	Manufactured from seamless copper tube conforming to BS EN 12449:2012
Finish	Electro tin-plated conforming to BS EN 1872:1984

Terminal Selection Chart

Cond. Size	Barrel O.D. 'A'	Barrel I.D. 'B'	Stud Hole Center 'E'	Stud Hole Center To End of Palm 'F'	Palm Width 'W'	Barrel Length 'D'	Total Length 'L'	Thickness 'T'	Part No.
1.5	3.80	1.90	4.50	4.50	7.00	7.00	18.00	1.90	BCT-SE-1.5-3
1.5	3.80	1.90	7.50	4.50	7.00	7.00	21.00	1.90	BCT-SE-1.5-4
1.5	3.80	1.90	7.50	4.50	8.00	7.00	21.00	1.90	BCT-SE-1.5-5
1.5	3.80	1.90	7.50	4.50	9.00	7.00	22.00	1.90	BCT-SE-1.5-6
2.5	3.90	2.40	4.00	4.50	7.00	8.00	18.50	1.50	BCT-SE-2.5-3
2.5	3.90	2.40	7.50	4.50	7.00	8.00	22.00	1.50	BCT-SE-2.5-4
2.5	3.90	2.40	7.50	4.50	9.00	8.00	22.00	1.50	BCT-SE-2.5-5
2.5	3.90	2.40	7.50	5.50	9.50	8.00	23.00	1.50	BCT-SE-2.5-6
2.5	3.90	2.40	7.50	7.50	12.00	8.00	25.00	1.50	BCT-SE-2.5-8
4	4.70	2.80	4.50	4.50	7.00	8.00	19.00	1.90	BCT-SE-4-3
4	4.70	2.80	7.50	4.50	7.00	8.00	22.00	1.90	BCT-SE-4-4
4	4.70	2.80	7.50	4.50	8.50	8.00	22.00	1.90	BCT-SE-4-5
4	4.70	2.80	7.50	5.50	10.00	8.00	23.00	1.90	BCT-SE-4-6
4	4.70	2.80	10.50	6.50	13.00	8.00	27.00	1.90	BCT-SE-4-8
4	4.70	2.80	11.50	7.50	14.00	11.00	32.00	1.90	BCT-SE-4-10
6	5.30	3.40	7.50	4.50	7.50	8.50	23.50	1.90	BCT-SE-6-4

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



BICC COMPONENTS

Copper Terminal - BM

Terminal Selection Chart

Cond. Size	Barrel O.D. 'A'	Barrel I.D. 'B'	Stud Hole Center 'E'	Stud Hole Center To End of Palm 'F'	Palm Width 'W'	Barrel Length 'D'	Total Length 'L'	Thickness 'T'	Part No.
6	5.30	3.40	7.50	4.50	8.50	8.50	23.50	1.90	BCT-BM-6-5
6	5.30	3.40	7.50	5.50	9.50	9.00	25.00	1.90	BCT-BM-6-6
6	5.30	3.40	10.00	7.00	12.00	9.00	29.00	1.90	BCT-BM-6-8
6	5.30	3.40	12.00	8.00	15.00	11.00	34.00	1.90	BCT-BM-6-10
10	6.60	4.70	6.40	6.00	10.00	8.00	24.00	1.70	BCT-BM-10-6
10	6.60	4.70	8.00	7.00	13.00	9.50	30.00	1.20	BCT-BM-10-8
10	7.10	4.40	12.00	10.00	16.00	12.00	39.00	1.40	BCT-BM-10-10
10	7.10	4.40	12.00	10.00	18.00	10.00	39.00	1.20	BCT-BM-10-12
16	7.50	5.50	8.80	6.20	10.80	9.50	30.00	2.00	BCT-BM-16-6
16	7.50	5.50	8.80	6.20	13.50	9.50	30.00	1.60	BCT-BM-16-8
16	7.50	5.50	10.90	9.60	15.00	9.50	36.00	1.50	BCT-BM-16-10
16	8.00	5.60	12.00	10.00	18.00	11.50	42.00	1.30	BCT-BM-16-12
25	9.40	7.00	8.80	6.50	13.80	12.00	32.50	2.40	BCT-BM-25-6
25	9.40	7.00	8.00	7.00	13.80	12.00	32.50	2.40	BCT-BM-25-8
25	9.40	7.00	10.90	9.60	16.00	13.00	39.50	2.10	BCT-BM-25-10
25	9.40	7.00	10.50	10.00	18.00	12.00	38.00	1.70	BCT-BM-25-12
35	10.60	8.20	8.70	6.30	15.30	14.00	36.00	2.40	BCT-BM-35-6
35	10.60	8.20	7.60	7.30	15.30	14.00	35.00	2.40	BCT-BM-35-8
35	10.60	8.20	10.90	9.60	15.30	14.00	40.50	2.40	BCT-BM-35-10
35	10.60	8.20	10.00	10.40	18.00	14.00	40.50	2.40	BCT-BM-35-12
50	11.90	9.50	8.80	6.20	17.40	14.90	37.00	2.50	BCT-BM-50-6
50	11.90	9.50	8.00	7.00	17.40	14.90	37.00	2.50	BCT-BM-50-8
50	11.90	9.50	10.90	9.60	17.40	15.50	42.50	2.50	BCT-BM-50-10
50	11.90	9.50	10.70	9.80	17.40	15.50	42.50	2.50	BCT-BM-50-12
70	14.50	11.50	9.00	6.40	20.90	17.00	41.50	3.00	BCT-BM-70-6
70	14.50	11.50	8.60	6.40	20.90	17.00	40.50	3.00	BCT-BM-70-8
70	14.50	11.50	10.90	9.60	20.90	17.00	46.00	3.00	BCT-BM-70-10
70	14.50	11.50	10.70	9.80	20.90	17.00	46.00	3.00	BCT-BM-70-12
70	14.50	11.50	13.00	13.00	20.90	17.00	51.00	3.00	BCT-BM-70-16
95	16.70	13.50	10.00	9.20	24.40	19.00	49.50	3.20	BCT-BM-95-6
95	16.70	13.50	10.10	9.90	24.40	19.00	49.50	3.20	BCT-BM-95-8
95	16.70	13.50	10.90	9.60	24.40	19.00	49.50	3.20	BCT-BM-95-10
95	16.70	13.50	10.50	10.00	24.40	19.00	49.50	3.20	BCT-BM-95-12
95	16.70	13.50	13.00	13.00	24.40	19.00	58.00	3.20	BCT-BM-95-14
95	16.70	13.50	13.00	13.00	24.40	19.00	59.00	3.20	BCT-BM-95-16
120	19.00	15.00	14.40	9.60	27.30	20.00	55.50	4.00	BCT-BM-120-8

Dimensions are displayed in millimeters unless otherwise stated.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.

Copper Terminal - BM

BICC COMPONENTS

Terminal Selection Chart

Cond. Size	Barrel O.D. 'A'	Barrel I.D. 'B'	Stud Hole Center 'E'	Stud Hole Center To End of Palm 'F'	Palm Width 'W'	Barrel Length 'D'	Total Length 'L'	Thickness 'T'	Part No.
120	19.00	15.00	14.40	9.60	27.30	20.00	55.50	4.00	BCT-BM-120-10
120	19.00	15.00	14.00	10.00	27.30	20.00	55.50	4.00	BCT-BM-120-12
120	19.00	15.00	14.00	14.00	27.30	20.00	64.00	4.00	BCT-BM-120-16
150	21.00	16.50	14.00	10.00	30.20	23.00	61.00	4.50	BCT-BM-150-10
150	21.00	16.50	13.00	13.00	30.20	23.00	61.00	4.50	BCT-BM-150-12
150	21.00	16.50	13.00	13.00	30.20	23.00	61.00	4.50	BCT-BM-150-14
150	21.00	16.50	13.00	13.00	30.20	23.00	65.00	4.50	BCT-BM-150-16
185	23.00	18.50	14.80	9.20	33.30	29.00	66.50	4.36	BCT-BM-185-10
185	23.00	18.50	15.50	9.20	33.30	29.00	68.00	4.50	BCT-BM-185-12
185	23.00	18.50	15.50	9.20	33.30	29.00	67.00	4.50	BCT-BM-185-14
185	23.00	18.50	13.00	13.00	33.30	29.00	70.00	4.50	BCT-BM-185-16
240	26.00	21.00	18.00	17.00	37.70	39.00	88.00	5.00	BCT-BM-240-10
240	26.00	21.00	18.00	17.00	37.70	40.00	88.00	5.00	BCT-BM-240-12
240	26.00	21.00	18.00	17.00	37.70	40.00	88.00	5.00	BCT-BM-240-14
240	26.00	21.00	18.00	17.00	37.70	40.00	88.00	5.00	BCT-BM-240-16
240	26.00	21.00	18.00	17.00	37.70	40.00	88.00	5.00	BCT-BM-240-20
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-BM-300-10
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-BM-300-12
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-BM-300-14
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-BM-300-16
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-BM-300-20
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-BM-400-10
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-BM-400-12
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-BM-400-14
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-BM-400-16
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-BM-400-20
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-BM-500-10
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-BM-500-12
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-BM-500-14
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-BM-500-16
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-BM-500-20
630	45.00	34.00	23.00	25.10	63.30	48.00	129.00	10.00	BCT-BM-630-20
800	49.00	38.00	-	-	70.00	65.00	172.00	11.00	BCT-BM-800

Dimensions are displayed in millimeters unless otherwise stated.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.

BICC COMPONENTS

Copper Terminal - SE

Terminal Selection Chart

Cond. Size	Barrel O.D. 'A'	Barrel I.D. 'B'	Stud Hole Center 'E'	Stud Hole Center To End of Palm 'F'	Palm Width 'W'	Barrel Length 'D'	Total Length 'L'	Thickness 'T'	Part No.
6	5.30	3.40	7.50	4.50	8.50	8.50	23.50	1.90	BCT-SE-6-5
6	5.30	3.40	7.50	5.50	9.50	9.00	25.00	1.90	BCT-SE-6-6
6	5.30	3.40	10.00	7.00	12.00	9.00	29.00	1.90	BCT-SE-6-8
6	5.30	3.40	12.00	8.00	15.00	11.00	34.00	1.90	BCT-SE-6-10
10	6.60	4.70	6.40	6.00	10.00	8.00	24.50	1.70	BCT-SE-10-6
10	6.60	4.70	8.00	7.00	13.00	9.50	30.50	1.20	BCT-SE-10-8
10	7.10	4.40	12.00	10.00	16.00	12.00	39.50	1.40	BCT-SE-10-10
10	7.10	4.40	12.00	10.00	18.00	10.00	10.50	1.20	BCT-SE-10-12
16	7.50	5.50	8.80	6.20	10.80	9.50	30.00	2.00	BCT-SE-16-6
16	7.50	5.50	8.80	6.20	13.50	9.50	30.00	1.60	BCT-SE-16-8
16	7.50	5.50	10.90	9.60	15.00	9.50	36.00	1.50	BCT-SE-16-10
16	8.00	5.60	12.00	10.00	18.00	11.50	42.00	1.30	BCT-SE-16-12
25	9.40	7.00	8.80	6.50	13.80	12.00	32.50	2.40	BCT-SE-25-6
25	9.40	7.00	8.00	7.00	13.80	12.00	32.50	2.40	BCT-SE-25-8
25	9.40	7.00	10.90	9.60	16.00	13.00	39.50	2.10	BCT-SE-25-10
25	9.40	7.00	10.50	10.00	18.00	12.50	39.00	1.70	BCT-SE-25-12
35	10.60	8.20	8.70	6.30	15.30	15.00	36.50	2.40	BCT-SE-35-6
35	10.60	8.20	7.60	7.30	15.30	15.00	36.50	2.40	BCT-SE-35-8
35	10.60	8.20	10.90	9.60	15.30	15.00	41.00	2.40	BCT-SE-35-10
35	10.60	8.20	10.00	10.40	18.00	15.00	41.00	2.40	BCT-SE-35-12
50	11.90	9.50	8.80	6.20	17.40	14.90	37.50	2.50	BCT-SE-50-6
50	11.90	9.50	8.00	7.00	17.40	14.90	37.50	2.50	BCT-SE-50-8
50	11.90	9.50	10.90	9.60	17.40	15.50	42.50	2.50	BCT-SE-50-10
50	11.90	9.50	10.70	9.80	17.40	15.50	42.50	2.50	BCT-SE-50-12
70	14.50	11.50	9.00	6.40	20.90	17.00	41.50	3.00	BCT-SE-70-6
70	14.50	11.50	8.60	6.40	20.90	17.00	40.50	3.00	BCT-SE-70-8
70	14.50	11.50	10.90	9.60	20.90	17.50	47.00	3.00	BCT-SE-70-10
70	14.50	11.50	10.70	9.80	20.90	17.50	46.50	3.00	BCT-SE-70-12
70	14.50	11.50	13.00	13.00	20.90	17.00	51.00	3.00	BCT-SE-70-16
95	16.70	13.50	10.00	9.20	24.40	19.00	50.00	3.20	BCT-SE-95-6
95	16.70	13.50	10.10	9.90	24.40	19.00	50.00	3.20	BCT-SE-95-8
95	16.70	13.50	10.90	9.60	24.40	19.00	50.00	3.20	BCT-SE-95-10
95	16.70	13.50	10.50	10.00	24.40	19.00	50.00	3.20	BCT-SE-95-12
95	16.70	13.50	13.00	13.00	24.40	19.00	58.00	3.20	BCT-SE-95-14
95	16.70	13.50	13.00	13.00	24.40	19.00	59.00	3.20	BCT-SE-95-16
120	19.00	15.00	14.40	9.60	27.30	20.00	55.50	4.00	BCT-SE-120-8

Dimensions are displayed in millimeters unless otherwise stated.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.

Copper Terminal - SE

BICC COMPONENTS

Terminal Selection Chart

Cond. Size	Barrel O.D. 'A'	Barrel I.D. 'B'	Stud Hole Center 'E'	Stud Hole Center To End of Palm 'F'	Palm Width 'W'	Barrel Length 'D'	Total Length 'L'	Thickness 'T'	Part No.
120	19.00	15.00	14.40	9.60	27.30	20.00	55.50	4.00	BCT-SE-120-10
120	19.00	15.00	14.00	10.00	27.30	20.00	56.50	4.00	BCT-SE-120-12
120	19.00	15.00	14.00	14.00	27.30	20.00	64.00	4.00	BCT-SE-120-16
150	21.00	16.50	14.00	10.00	30.20	23.00	61.00	4.50	BCT-SE-150-10
150	21.00	16.50	13.00	13.00	30.20	23.00	61.00	4.50	BCT-SE-150-12
150	21.00	16.50	13.00	13.00	30.20	23.00	61.00	4.50	BCT-SE-150-14
150	21.00	16.50	13.00	13.00	30.20	23.00	65.00	4.50	BCT-SE-150-16
185	23.00	18.50	14.80	9.20	33.30	29.00	66.50	4.36	BCT-SE-185-10
185	23.00	18.50	15.50	9.20	33.30	29.00	68.00	4.50	BCT-SE-185-12
185	23.00	18.50	15.50	9.20	33.30	29.00	67.00	4.50	BCT-SE-185-14
185	23.00	18.50	13.00	13.00	33.30	29.00	70.00	4.50	BCT-SE-185-16
240	26.00	21.00	18.00	17.00	37.70	39.00	88.00	5.00	BCT-SE-240-10
240	26.00	21.00	18.00	17.00	37.70	40.00	88.50	5.00	BCT-SE-240-12
240	26.00	21.00	18.00	17.00	37.70	40.00	88.00	5.00	BCT-SE-240-14
240	26.00	21.00	18.00	17.00	37.70	40.00	88.00	5.00	BCT-SE-240-16
240	26.00	21.00	18.00	17.00	37.70	40.00	88.00	5.00	BCT-SE-240-20
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-SE-300-10
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-SE-300-12
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-SE-300-14
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-SE-300-16
300	28.00	23.00	18.00	17.00	41.00	37.00	97.00	5.00	BCT-SE-300-20
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-SE-400-10
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-SE-400-12
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-SE-400-14
400	32.00	27.00	22.00	22.00	47.30	38.00	108.50	5.00	BCT-SE-400-16
400	32.00	27.00	22.00	22.00	47.30	38.00	108.00	5.00	BCT-SE-400-20
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-SE-500-10
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-SE-500-12
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-SE-500-14
500	36.00	30.00	28.00	24.00	53.00	38.00	117.50	6.90	BCT-SE-500-16
500	36.00	30.00	28.00	24.00	53.00	38.00	117.00	6.90	BCT-SE-500-20
630	45.00	34.00	23.00	25.10	63.30	48.00	130.50	10.00	BCT-SE-630-20
800	49.00	38.00	-	-	70.00	65.00	172.00	11.00	BCT-SE-800

Dimensions are displayed in millimeters unless otherwise stated.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.

Tele Cable Cleat (Single Way)

Tele Cable Cleat (Single Way)

Single fixing cable cleats to fix power cables in indoor and outdoor applications.

- Designed to assure cable retention and support, without causing damage or deformation to the cable.
- Excellent resistance to ultraviolet and weather.
- Single piece design
- The curvature of the cleats mounting surface is appropriate for cable diameters 10mm to 51mm.

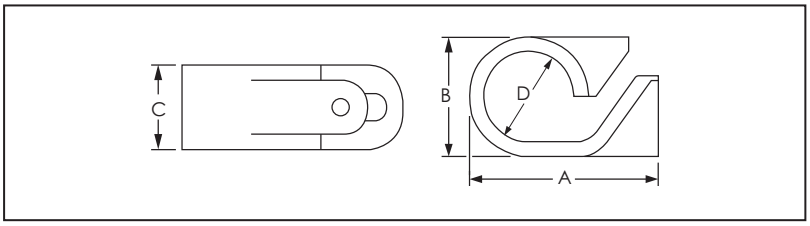
Technical Specification

Standard	BS EN 50368
Cable Type	Designed for all types of cables
Material	Low Density Polyethylene (LDPE)
Continuous Operating Temperature	-40°C to +60°C

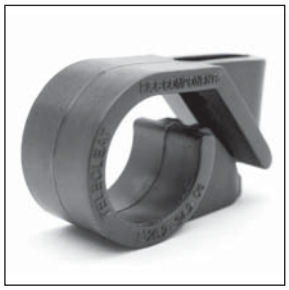
Cable Cleat Selection Table

Cable Diameter 'D'		Cleat Details				Order Reference
		B		A	C	
Min	Max	Min	Max			
10.5	14.5	15	18	32	12	TCC01
12.2	16.7	17	22	36	14	TCC02
14.6	19.8	21	26	43	16	TCC03
17.7	24.0	25	31	51	18	TCC04
21.7	28.5	30	37	57	20	TCC05
26.2	34.2	35	43	65	22	TCC06
31.9	41.6	42	52	78	25	TCC07
39.3	51.1	50	62	91	26	TCC08

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



LSOH Tele Cable Cleat



LSOH Tele Cable Cleat (Single Way)

Single fixing LSOH cable cleats to fix power cables in indoor and outdoor applications.

- Designed to assure cable retention and support, without causing damage or deformation to the cable.
- Excellent resistance to ultraviolet and weather.
- Single piece design.
- The curvature of the cleat mounting surface is appropriate for cable diameters 10mm to 51mm.

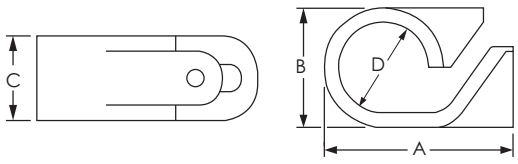
Technical Specification

Standard	BS EN 50368
Cable Type	Designed for all types of cables
Material	Low Smoke Zero Halogen Polymer
Continuous Operating Temperature	-40°C to +60°C

Cable Cleat Selection Table

Cable Diameter 'D'		Cleat Details				Order Reference
		B		A	C	
Min	Max	Min	Max			
10.5	14.5	15	18	32	12	TCCLSF01
12.2	16.7	17	22	36	14	TCCLSF02
14.6	19.8	21	26	43	16	TCCLSF03
17.7	24.0	25	31	51	18	TCCLSF04
21.7	28.5	30	37	57	20	TCCLSF05
26.2	34.2	35	43	65	22	TCCLSF06
31.9	41.6	42	52	78	25	TCCLSF07
39.3	51.1	50	62	91	26	TCCLSF08

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



Two Bolt Cable Cleat

Two Bolt Cable Cleat

Two bolt cable cleat, for use with all types of LV cables.

- Designed to assure cable retention and support, without causing damage or deformation to the cable.
- Excellent resistance to ultraviolet and weather.
- Two bolt, two piece design.
- Appropriate for cable diameters ranging from 50mm to 94mm.

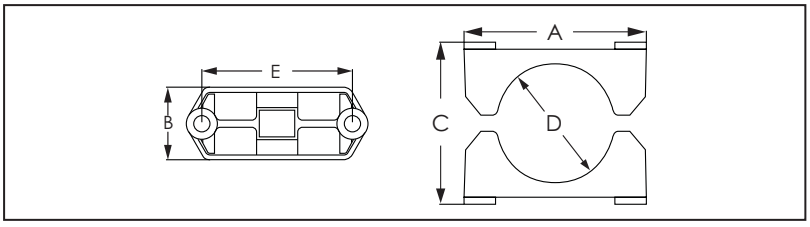
Technical Specification

Standard	BS EN 50368
Cable Type	Designed for all types of cables
Material	High Density Polypropylene
Continuous Operating Temperature	-40°C to +60°C

Cable Cleat Selection Table

Cable Diameter 'D'		Cleat Details				Order Reference
Min	Max	C	A	B	E	
50	58	89	102	45	80	TB01
56	64	93	102	45	80	TB02
62	70	98	114	45	92	TB03
68	76	104	114	50	92	TB04
74	82	110	126	50	104	TB05
80	88	118	126	50	104	TB06
86	94	121	136	60	114	TB07

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



LSOH Two Bolt Cable Cleat

LSOH Two Bolt Cable Cleat

Two bolt LSOH cable cleat, for use with LV LSOH cables.

- Designed to assure cable retention and support, without causing damage or deformation to the cable.
- Excellent resistance to ultraviolet and weather.
- Two bolt, two piece design.
- Appropriate for cable diameters ranging from 50mm to 94mm.

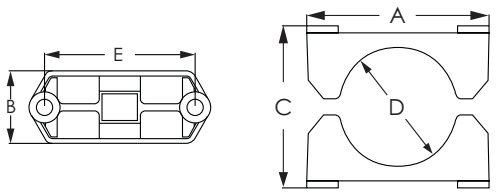
Technical Specification

Standard	BS EN 50368
Cable Type	Designed for all types of LSOH cables
Material	Low Smoke Zero Halogen Polymer
Continuous Operating Temperature	-40°C to +60°C

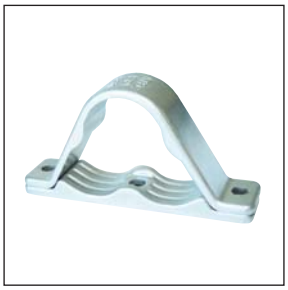
Cable Cleat Selection Table

Cable Diameter 'D'		Cleat Details				Order Reference
Min	Max	C	A	B	E	
50	58	89	102	45	80	TBLSF01
56	64	93	102	45	80	TBLSF02
62	70	98	114	45	92	TBLSF03
68	76	104	114	50	92	TBLSF04
74	82	110	126	50	104	TBLSF05
80	88	118	126	50	104	TBLSF06
86	94	121	136	60	114	TBLSF07

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



Aluminium Cable Cleat Trefoil Type ATFC (SP)



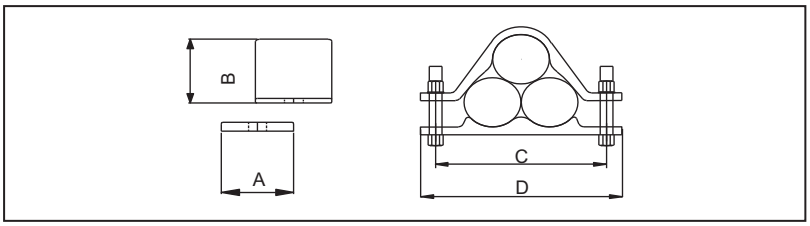
Aluminium Cable Cleat Trefoil Type ATFC (SP)

- Suitable for use with LV, MV and HV cables.
- Few range accommodates wide range of cable dia.
- Operating temperature -60°C to +100°C

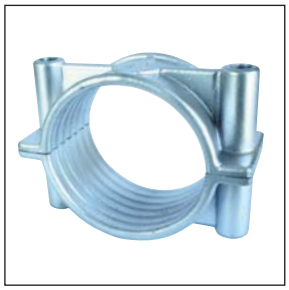
Cable Gland Selection Table

Cable Diameter	Cleat Details				Order Reference
	A	B	C	D	
15-30	30	45	108	80	ATFCSP15-30
30-45	30	66	151	120	ATFCSP30-45
45-60	40	85	184	151	ATFCSP45-60
60-75	40	114	226	193	ATFCSP60-75
75-90	40	142	267	235	ATFCSP75-90
90-107	50	171	319	282	ATFCSP90-107
107-129	57	203	390	352	ATFCSP107-129
129-155	57	244	455	397	ATFCSP129-155

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.



Aluminium Cable Cleats Industrial



Aluminium Cable Cleat (Two Bolt)

Suitable for use with cables from diameter 51mm to 114mm

- Two piece two fixing design
- Can be double stacked on common fixing
- Operating temperature – 60° C to + 100° C
- Two bolt fixing type (ATC)
- Plain finish - for indoor dry normal industrial use or outdoor unpolluted areas. Epoxy coated for more hostile conditions.

Cable Cleat Selection Table

Cable Diameter Range	Cleat Details				Fixing Hole	Order Reference
	W	H	D	P		
51-57	96	68	59	76	M10	ATC-51-57
57-64	6	75	49	76	M10	ATC-57-64
64-70	96	84	64	118	M10	ATC-64-70
70-76	134	90	64	114	M10	ATC-70-76
76-83	142	96	64	114	M12	ATC-76-83
83-89	142	102	64	114	M12	ATC-83-89
89-95	154	114	64	114	M12	ATC-89-95
95-101	154	120	76	126	M12	ATC-95-101
101-108	169	134	76	140	M12	ATC-101-108
108-114	169	140	76	149	M12	ATC-108-114

Dimensions are displayed in millimeters unless otherwise stated.
Photographs are not a true representation of the product above.
Disclaimer: The dimensions provided are for guidance only and BICC Components Ltd reserves the right to change these without prior notification. For any critical application please contact the sales office to check the latest data.