

# ***SUBSTATION EQUIPMENT***

**HIGH VOLTAGE CONNECTIONS  
GROUNDING CONNECTIONS  
EARTHING & SAFETY EQUIPMENT**



## THE COMPANY

About SBI Connectors	4
----------------------	---

## KNOWLEDGE & EXPERTISE

Innovation	6
Service & Capabilities	8
Main projects & Customers	10

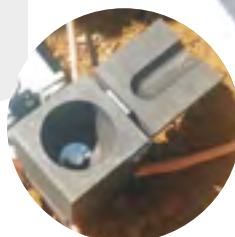
## TECHNICAL INFORMATION

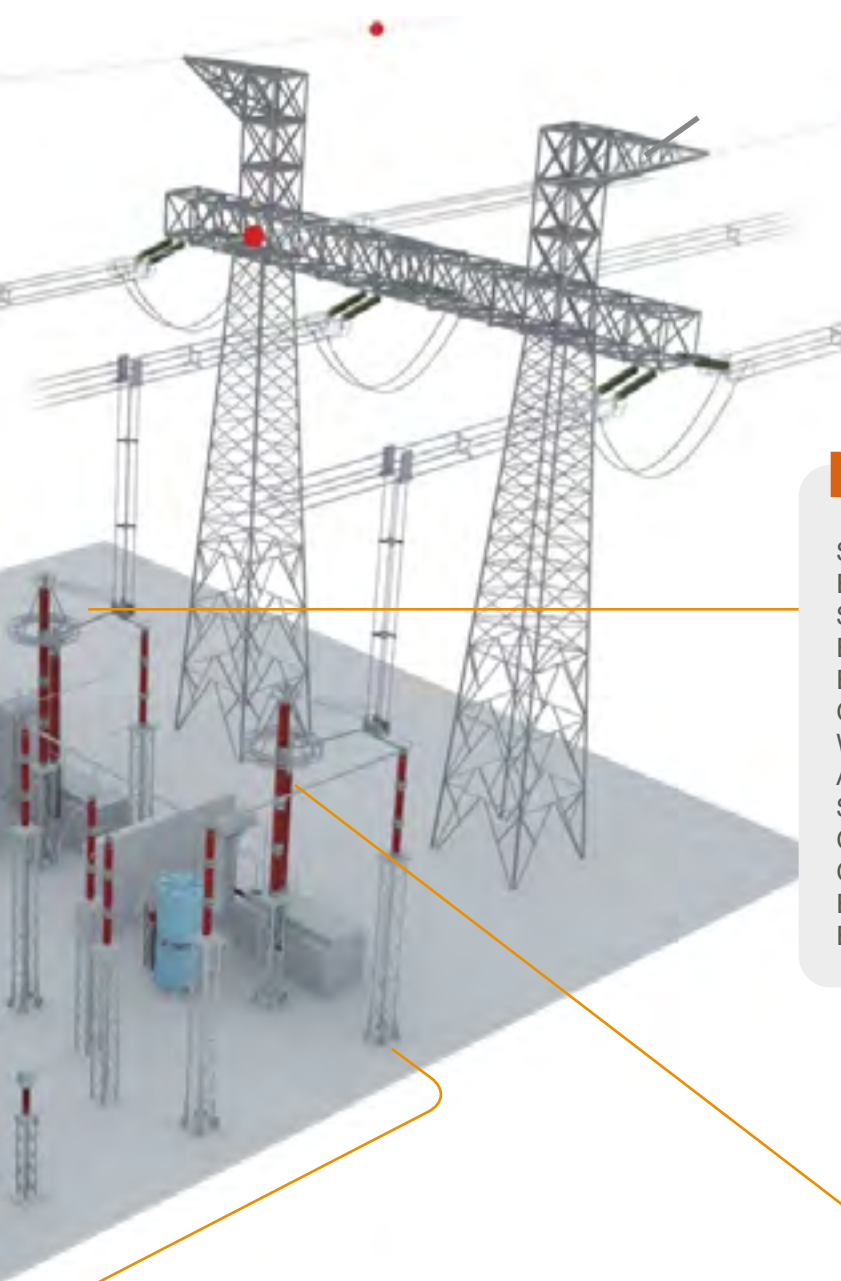
Material & Design Standards	12
Type testing	16
Installation	18



## GROUNDING CONNECTORS RANGE

Compression connectors	156
Compression tooling	168
Mechanical connectors	177
Exothermic welding	200





**HV CONNECTORS RANGE**

Single connectors	26
Bundle connectors	68
Supports	93
Expansion connectors	108
Earthing stirrups	126
Compression Connectors & Tooling	130
Welded Connectors	132
Accessories	136
Special applications	139
Connectors upper than 500kV	142
Connectors for GIS (Gas Insulated Substation)	144
Bubar Vibration Damper & adjustable connector	146
Bushing connectors for transformers	151



**ORDER REQUEST FORM**

**210**

**PART NUMBER INDEX**

**212**

**PRODUCT NDEX**

**214**

**OTHER COMPLEMENTARY PRODUCTS**

Conductors (Cable & Tubes)	204
Earthing & Safety Equipment	206

### ABOUT SBI CONNECTORS

SBI CONNECTORS designs and manufactures low, medium and high-voltage connectors. The company specializes in electrical connections for energy and traction substations, electrical equipment, power distribution networks and the electrification of railway infrastructures.

It is located in BARCELONA, (near SEAT factory in Martorell) with site of almost 12.000m<sup>2</sup>. SBI was created in 1963 as subsidiary of the multinational Burndy and acquired by Sicame Group in 2006.



SBI CONNECTORS has been a leader in the design and manufacture of High Voltage equipment for more than 50 years.

We are a company of the French Group Sicame, a global leader in the electricity market, with more than 55 subsidiaries worldwide. SBI is keenly aware of the importance of research in new technologies and continues to invest in the sector.

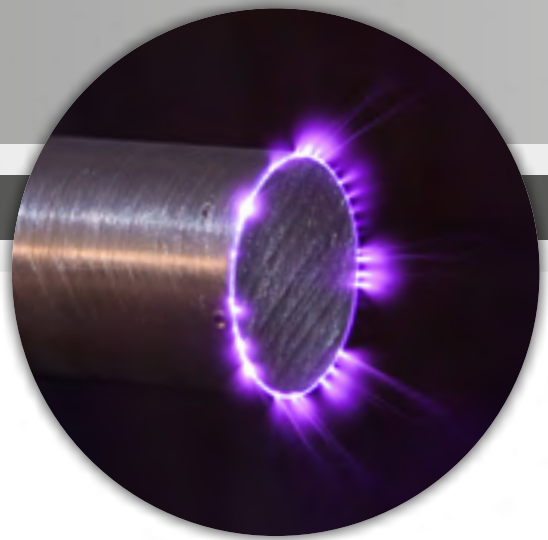
We offer a wide range of high quality mechanical, compression & welded high voltage connectors for specific needs such as electrical substations up to 800kV, HDCV applications, FACTS (Flexible Alternating Current Transmissions Systems), pantographs, or circuit breakers.

High quality standards are achieved thanks to a large team of engineers in constant development to improve the quality of our products and manufacturing processes.





## INNOVATION



### Developing the new generation of 1200 kV AC and 800 kV DC

SBI's engineering Team have acquired internationally recognised expertise in customized substation configuration design, enabling us to provide full technical evaluation for:

- 3D designs
- Laboratory Testing
- Thermal simulations
- Antivibration studies
- Corona simulations:

Personalized solutions (LSS connectors line for the disconnection in effect. Lighter corona protections, device line to damper vibrations in the substation tubes,...)

Our Research & Development Engineering Teams focus on:

- Identification of UHV performance factors
- Investigation of new materials
- Exploration of new designs



Corona in the base of the support, as expected from corona simulation.



No corona detected, as expected from corona simulation.

#### Approvals

Our products meet and are approved by the main international standards IEC, NEMA, ASTM, UL, VDE, AENOR and DIN.





**AMBER**<sup>o</sup>  
UHV Test & Research Center

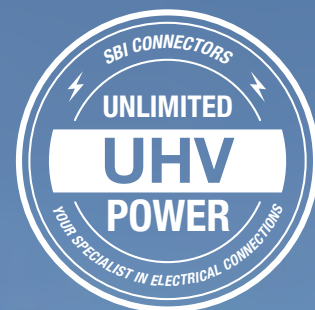
### High & Ultra High Voltage Research and Development Center

SBI CONNECTORS S.A.U. & The MCIA center (Motion Control & Industrial Applications) collaborate in the creation of the High & Ultra High Voltage Research and Development center. It is a unique center in Europe because of its characteristics, equipment and facilities. MCIA is an affiliated center of the Polytechnic University of Catalonia, which focuses on research, innovation and product development.

The state-of-the-art center provides the SBI R&D team with the opportunity to constantly expand its knowledge by conducting several types of tests and simulations, with the aim of offering its customers the most efficient and innovative solutions.

In addition, SBI collaborates with the MCIA center and the Polytechnic University of Catalonia, funding several theses to ensure continuous research in HV system applications.

All new developments are tested and validated at the Investigation Center and High Voltage Test through: Electrical tests, Mechanical tests, Chemical and metallographic tests and controls, Outside tests for Corona / RIV, Corrosion tests in salt fog chamber.



## SERVICE & CAPABILITIES

Our objective is to offer an excellent service to provide the utmost customer satisfaction. Our signature trait is our personal service which creates strong bonds with our customers around the world, to whom we attend in a personalized way providing answers to satisfy their needs and exceed their expectations.

### From design to manufacturing

Line equipped with CAD-CAM tool design programs, numerical control machining centers for the construction of such tools and for the machining of the connectors, cable cut line, testing and assembly zones, equipped with tools to assure the quality of the product.

### Reliability

Equipped with electronic elements for the scanning of bar codes to assure the reliability of our operations.





For the international exposure of our company and our readiness to determine the best solution for our customers, the communication and the knowledge of languages is fundamental, which is why at SBI we have a team of multilingual professionals which favours and strengthens a close customer relationship and a better understanding.



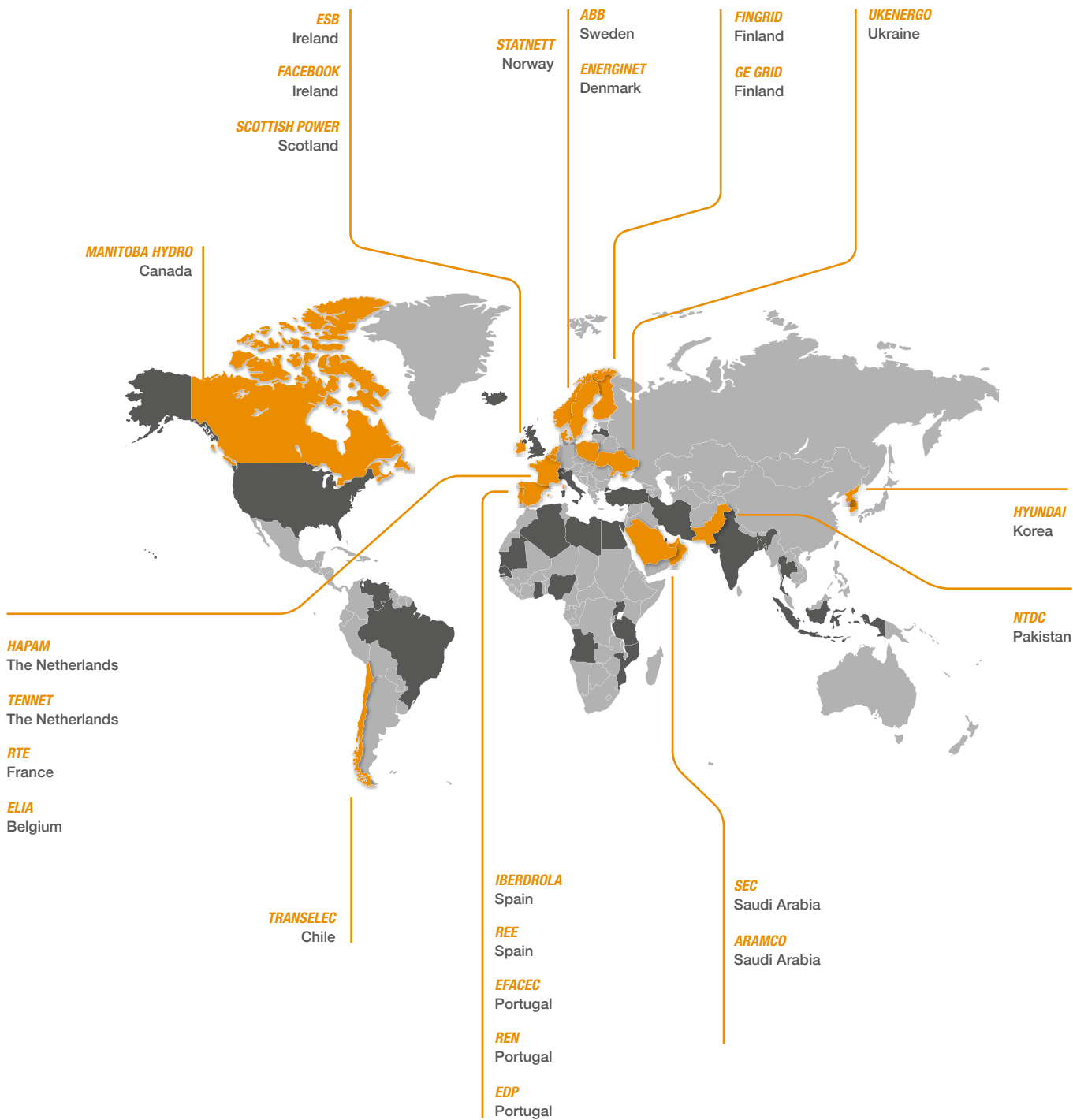
## Traceability

Lean Manufacturing is managed in all areas by steps identified by barcode that allow full manufacturing monitoring and ensure full traceability on the final product.



## MAIN PROJECTS & CUSTOMERS

Our main customers are utilities, engineering, installers and electrical equipment manufacturers worldwide. Our team of professionals has gained international recognition on customized studies conducted in different projects worldwide.



## REFERENCE LIST

PROJECT	INSTALLATION COUNTRY	VOLTAGE
Trindel substation	<b>Algeria</b>	63/225 kV
Luachimo substation	<b>Angola</b>	230 kV
Karnafuli substation	<b>Bangladesh</b>	63/230 kV
Gramme substation	<b>Belgium</b>	380 kV
Bipole III Riel & Keewatinhok substations	<b>Canada</b>	345 kV
Cumbre & Changos substations	<b>Chile</b>	500 kV
Odense wind farm substation	<b>Denmark</b>	220 kV
Assiut substation	<b>Egypt</b>	34,5 kV
Busbar vibration dampers installed in several substations in Finland	<b>Finland</b>	400 kV
Techiman & Akosombo substations	<b>Ghana</b>	161 kV
Seoni substation	<b>India</b>	765/400/220 kV
Penawaran substation	<b>Indonesia</b>	150 kV
Ghom substation	<b>Iran</b>	63/230 kV
Clonee data center substation	<b>Ireland</b>	220 kV
Poggio a Caiano substation	<b>Italy</b>	380 kV
Daugavpils & Grobina substations	<b>Latvia</b>	380 kV
Jardim substation	<b>Mozambique</b>	66 kV
Jhimpr wind farm & Quaid-e-Azam solar farm substations	<b>Pakistan</b>	150/220/500 kV
GPZ Makow substation	<b>Poland</b>	110 kV
Tavira substation	<b>Portugal</b>	400/150/60 kV
Ras Abu Fontas substation	<b>Qatar</b>	63/230 kV
Abqaig substation	<b>Saudi Arabia</b>	380 kV
CMS (Caithness-Moray HVDC link) Blackhillock & Spittal station converters	<b>Scotland</b>	450 kV
Kaolack substation	<b>Senegal</b>	245 kV
Cartelle substation	<b>Spain</b>	400 kV
Hemsjo substation	<b>Sweden</b>	380 kV
Bukoba substation	<b>Tanzania</b>	132 kV
Borssele substation	<b>The Netherlands</b>	380 kV
Birecik substation	<b>Turkey</b>	400 kV
Al Taweelah & Al Ain substations	<b>UAE-Abu Dhabi</b>	400 kV
Krakovskaya substation	<b>Ukraine</b>	330 kV
NEMO HVDC link - Richborough, Bolney & Ninfield substations	<b>United Kingdom</b>	400 kV
Celilo HVDC converter	<b>USA</b>	570 kV
El Furrial & Palital substations	<b>Venezuela</b>	230/400 kV

## STANDARDS

### MATERIAL STANDARDS HV CONNECTORS

#### HARDWARE

We recommend A2-70 in accordance with EN ISO 3506-1 standard.

#### CHARACTERISTICS OF A2-70 STEEL IN ACCORDANCE WITH ISO 3506-1

CHEMICAL COMPOSITION MASS FRACTION (%)								TENSILE RESISTANCE Rm / [MPa] / min.	CONVENTIONAL ELASTIC LIMIT Rp0.2 / [MPa] / min.
C	Si	Mn	P	S	Cr	Ni	Cu	-	-
0,1	1	2	0,05	0,03	15÷20	8÷19	4	700	450

Our nuts are coated with an anti-seize special treatment.

**Description:** This special treatment is a suspension of high-molecular polymers in water. To optimize the lubrication properties this special treatment contains specially selected PTFE. The treatment is used as a coating agent and develops this a well adhering, touch-proof lubricating film after drying. It has been developed to achieve define low friction coefficients with a minimum variation range.

**Field of application:** This special treatment is used for mass part lubrication. A typical application example is the coating of stainless-steel screws/bolts and nuts, self-tapping or self-forming screws, rivets, sheet-metal screws, and chipboard screws.

#### ALUMINIUM

**EN 1706:1998** Aluminium and aluminium alloys. Castings. Chemical composition and mechanical characteristics.

**EN 10002-1:2001** Metallic materials. Tensile test. Part 1: Test method (at room temperature).

**ISO 8062:1994** Dimensional tolerances for castings.

#### ALUMINIUM ALLOY EN 1706 AC-42100

#### CHEMICAL COMPOSITION MASS FRACTION (%)

Si	Fe	Cu	Mn	Mg	Zn	Ti	Al
6,5÷7,5	0,19	0,05	0,10	0,25÷0,45	0,07	0,25	Remainder

#### ALUMINIUM ALLOY EN 1706 AC-42100 MECHANICAL PROPERTIES OF THE ALLOY CASTED IN SAND FOR SEPARATELY CAST TEST BAR

HEAT TREATMENT	TENSILE RESISTANCE Rm / [MPa] / min.	CONVENTIONAL ELASTIC LIMIT Rp0.2 / [MPa] / min.	ELONGATION A50mm / [%] / min.
F	140	80	4
T6	230	190	4

1N/mm<sup>2</sup> = 1MPa

#### ALUMINIUM ALLOY EN 1706 AC-42100 CONDUCTIVITY PROPERTIES OF THE ALLOY CASTED IN SAND FOR SEPARATELY CAST TEST BAR

MATERIAL	ELECTRICAL CONDUCTIVITY MEASURED AT 20°C [MS/m] [1/μΩm]	THERMAL CONDUCTIVITY [W/mK]
EN 1706 AC-42100	20÷27	40÷48

## COPPER

**UNE EN 1982** Copper and Copper alloys

**EN 10002-1:2001** Metallic materials. Tensile test. Part 1: Test method (at room temperature).

**ISO 8062:1994** Dimensional tolerances for castings.

### Alloy and chemical properties for ingots and castings.

NUMERIC DESIGNATION: EN 1982-CC491K CHEMICAL COMPOSITION EXPRESSED IN % OF MASS.		
ELEMENT	EN 1982-CB491K (INGOT)	EN 1982-CC491K (CASTING)
Cu*	83.0÷86.5	83.0÷87.0
Zn	4.5÷6.5	4.00÷6.0
Sn	4.2÷6.0	4.00÷6.0
Pb	4.2÷5.8	4.00÷6.0
Ni	2.0	2.0
P	0.03	0.10
Fe	0.25	0.30
Sb	0.25	0.25
S	0.08	0.10
Al	0.01	0.01
Si	0.01	0.01

INDIVIDUAL VALUES INDICATE MAXIMUM CONTENT.  
\*NIQUEL INCLUDED

NUMERIC DESIGNATION: EN 1982-CC330G CHEMICAL COMPOSITION EXPRESSED IN % OF MASS.		
ELEMENT	EN 1982-CB330G (INGOT)	EN 1982-CC330C (CASTING)
Cu1	88.0÷91.5	88.0÷92.0
Al	8.2÷10.5	8.0÷10.5
Fe	1.0	1.2
Ni	1.0	1.0
Mn	0.5	0.5
Zn	0.4	0.5
Sn	0.25	0.30
Pb	0.25	0.30
Si	0.15	0.20

INDIVIDUAL VALUES INDICATE MAXIMUM CONTENT.  
\*NIQUEL INCLUDED

### Alloy and mechanical properties.

MECHANICAL PROPERTIES OF THE ALLOY CASTED IN SAND.			
NUMERIC DESIGNATION	CONVENTIONAL ELASTIC LIMIT Rp0.2 [MPa] min.	TENSILE RESISTANCE Rm [MPa] min.	ELONGATION A50mm / [%] / min.
EN 1982-CC491K-GS	90	200	13
EN 1982-CC330G-GS	180	500	20

1N/mm<sup>2</sup> = 1MPa

## STANDARDS

### DESIGN STANDARDS HV CONNECTORS

Correlation studies on various existing connector lines, as well as mechanical and electrical engineering considerations in the early seventies, resulted in the establishing of a few simple design rules. Basic idea for all SBI connectors is that the connector, at full load, has to run cooler as the conductor(s) to be connected. In order to guarantee this, these rules were applied to shape the SBI connector lines. Hereafter we will set these basic design rules and describe in more detail the various peculiarities of the designs.

#### CONTACT FORCE

It is well established that the contact resistance of a mechanical connection depends upon the contact force between the surfaces in contact (and not upon contact pressure). As a result of various correlation studies, as well as from laboratory tests SBI decided to link the contact force to the amperage of the connection.

A simple rule was set:

$$F=k*I$$

F : Contact Force ( N )

I : Current ( A )

K : constant ( N/A )

**For the constant k, a minimum value of 40 Newton/Ampere is chosen**

#### CONTACT SURFACE

The aluminum material has the propensity to undergo plastic (permanent) deformation when submitted to stress (pressure or traction). This permanent deformation is called “cold flow” and it depends upon pressure, temperature and time.

Studies during the many years of experience, as well taking physical properties in consideration, has led to the definition for the maximum contact force (N/mm). At every specific temperature, there exists a threshold pressure, which is such that up to this limit, there is practically no cold flow. At 110 °C, this limit is in the vicinity of 27 N/mm. This is the maximum limit contact pressure adopted for the design of this connector line, which was chosen as the highest steady-state temperature of an Aluminium connection. A short period of overheating during fault currents do not adversely affect a well-designed connection.

Exceeding the maximum force or temperature for a long period of time it will lead to cold flow and loss of the connection quality.

#### Amperage

Studies during the many years of experience , as well taking physical properties in consideration, has lead to the definition for the allowed maximum Amperage per mm<sup>2</sup> is < 0,4 to 1 A / mm<sup>2</sup> depending on the type of connector. The dimensioning of the connectors is based on the above mentioned definitions with, as a result, for all product lines a “ run cooler as conductor ” performance as result. This SBI philosophy is established in all variations of the SBI substation connectors.

### CONNECTOR DESIGN

The objective here is to engineer a connector device following the basic rules of adequate force, contact surface and amperage, as given by the rules established previously. A good design should be compact in size. As the force generating mechanism was of major importance, and should be under control, we decided to go for a bolt-nut-washer configuration (no threaded holes).

In order to minimize the possible malfunction of the bolt-nut-washer mechanism, it was also decided to apply the bolting torque to the nut (and not to the bolt head). This is important when tightening on a cylindrical conductor, as there is always a resulting wedge effect, when the components are put under stress. When tightening on the bolt head, the wedge effect would impart to the bolt shaft an alternating bending stress, which is detrimental to the assembly.

Connector grooves to accommodate cables or buses are cast to size of the nominal diameter of the conductor. This diameter is marked on the clamping element. At the end of the groove a cavity is provided for the cutting burs of the conductor ending.

#### Basic multi-cap design

The connector design is based on the multi-cap principle. The body of the connector carries the current, and caps are used to transmit the contact force to the conductor and the body. A cap carries 2 bolts (and not more). The choice of the “2 bolts per cap” is for mechanical and reliability considerations. Mechanically, each cap transmits its force to a well defined part of the conductor, and guarantees a contact pressure between the conductor and the current carrying body, at the location of the cap. In a single-cap design, when 6 bolts are used, it may happen that only the extremities of the cap transmit pressure to the conductor (deformed cap). This would result in too high pressure on the extremities, and low pressure at all at the centre of the cap.

#### Compactness of Design

Compactness was achieved by placing the bolt shafts as close as possible to the conductor. Doing so also decreased the bending moment at the centre - line of Cap and Body, giving a second-effect lowering of the bulkiness of the connector.

# **TYPE TEST**

# **APPLICABLE**

# **STANDARDS AND**

# **SPECIFICATIONS**

SBI Connectors have over 50 years' experience in design and manufacture of HV and EHV substation connectors. The Company designs its HV connectors in line with best practice and to internationally recognized industry standards. The standard we adhere to, where appropriate, and that are internationally recognized are:

#### **ANSI/NEMA CC1 Standard**

Electric Power Connection for Substation from American National Standard and National Electrical Manufacturers Association.

#### **IEC Standards**

International standard from the International Electrotechnical Commission.

#### **BS EN Standards**

British Standard European Standard.

*\* The type test required can be studied*



### **PULLOUT STRENGTH TEST ANSI/NEMA CC1 §2.7-3.2**

The connectors for stranding conductor(s) are designed to withstand the mechanical loads which can be applied on the conductor(s). The minimum pullout strength of the connector is a tensile load of 8896 N applied. No failure to be observed during the test.

### **CANTILEVER STRENGTH TEST - ANSI/NEMA CC1 §2.8-3.4**

Support devices are designed to withstand the mechanical loads which can be applied to the supports fixed in structures or post insulators.

The minimum cantilever strength of support is a transverse load of 8896 N is applied. This mechanical value is representative of the forces applied to the connections in case of short-circuit and external loads, like wind, applied to the bus bar and beard for whole structure system. No failure to be observed during the test.

### **TORQUE STRENGTH TEST - ANSI/NEMA CC1 §3.5**

The conductor(s) are assembled in the connector and the bolts tightened uniformly and alternatively in accordance with their instruction manual (SBI Connectors document reference: IICS01), increments until 50% over the nominal torque value is achieved. No failure to be observed during the test.

### **TEMP. RISE TEST - ANSI/NEMA CC1 §2.6 §3.1**

Connectors must not provoke any temperature rise in a substation circuit and should not transfer any additional heating to other component or equipment of the substation layout. NEMA CC1 standard criteria's is as follows: The connectors tested have a temperature rise less than or equal to the hottest connected conductor for the same current. No damage or failure to be observed during the test. Included Resistance Test in the according to IEC 62271-1.

### **SHORT-CIRCUIT TEST – IEC 62271-1 §6.6**

The connectors are designed to carry-out the short-circuit current that may flow through the conductors on which it is installed. This short-circuits current must not cause any damage to the connector and neither burn on the contact surfaces nor welding between the parts must occur during the short-circuit. Included Resistance Test according IEC 62271-1.

### **RESISTANCE TEST - IEC 62271-1 §6.4**

This test shown the difference between the electrical resistances of the connector, before and after testing should be less than 20%.

This test can be done in Temperature Rise Test, Short Circuit test and Salt Spay Corrosion Test described in this document.

### **HEAT CYCLE TEST - ANSI C119.4**

This test consists for checking the stability of the electrical resistance after performing a number of cycles, which depends on the class of the connector.

This stability is achieved if all resistance measurement does not vary by more than  $\pm 5\%$  from the average of all the measurements at specified intervals during the course of the test.

### **CORONA & RIV TEST - IEC 62271-1 §6.9.1 & IEC 61284**

According IEC 62271-1 neither Positive Corona spark nor light are observed on the surface of the products with naked eyes at the nominal voltage equal to  $U_n = 1.1 \times U_r / \sqrt{3}$  where  $U_n$ : Phase-ground voltage,  $U_r$ : Phase-to-Phase Voltage.

The maximum Radio Interference Voltage (R.I.V.) level is less than  $2500 \mu V$  (68 dB) at  $1.1 \times U_r / \sqrt{3}$  with a  $300 \Omega$  test circuit impedance. According IEC 61284 the corona extinction (corrected values according to IEC 60060-1) shall exceed the specified minimum corona extinction. The RIV recorded at the specified test voltage shall not exceed the specified maximum RIV.

The curve indicating the RIV against the test voltage shall not present any sudden change between the specified test voltage or conductor voltage gradient and 110 % of the specified test voltage or conductor voltage gradient.

### **SALT SPRAY CORROSION TEST – IEC 60068-2-11**

The connector tested is assembled with the conductor(s) and/or palm required and the whole object is exposed to 500 hours of salt mist in a chamber.

The resistance shall not decrease more than 20% between the first and final measurement.

**Click Here!****INSTALLION CONSIDERATIONS****1. PREPARATION OF SURFACES****Copper (Cu)**

Copper conductors do not require any special preparation. Copper oxide is generally broken down by a reasonably low value of contact pressure. Unless the copper is badly oxidized, a good contact can be achieved with very little cleaning (see accessories).

**Aluminum (Al)**

Oxidation of aluminium conductors is inevitable. Aluminium oxide is hard, tenacious, and forms a high resistant film. The oxide film forms very rapidly on surfaces exposed to air. Failure to remove this oxide can produce a high electrical resistance and ultimately, a failure of the connection.

The steps are:

1. Clean the contact surface with a dry stainless steel wire brush (see accessories), until it is bright and clean.
2. Contact grease should then be applied immediately after cleaning, using another stainless steel wire brush and the surface scraped again through the contact grease. For cables, ensure that the contact grease penetrates between the wires as deeply as possible.
3. Mark an area 1/4" wider than the connector to brush and coat thoroughly with the contact grease to ensure the contact area is exceeded. Generous application of the contact grease is required.

If the connector includes a tinned surface, usually for bimetallic connections, it should not be brushed even if the conductor to connect is copper made. Only aluminium conductors should be brushed and contact grease applied.

**2. PREPARATION OF BOLTED CONNECTORS****Copper (Cu)**

Copper bolted connectors do not require any special preparation, except where there is excessive dirt or dust. This can be removed with a clean dry cloth or brush (see accessories).

**Aluminum (Al)**

For all aluminium bolted connectors, irrespective of the conductor material, it is essential that contact grease be applied to both surfaces that are in contact. Where both surfaces are aluminium:

1. Surfaces must be cleaned using a dry stainless steel wire brush (see accessories) to remove dirt and dust.
2. Contact grease should then be applied immediately after cleaning, using another stainless steel wire brush and the surface scraped again through the contact grease.
3. Ample contact grease must be applied so that it squeezes out of the sides as the final torque to the bolts is applied.

If the connector includes a tinned surface, usually for bimetallic connections, it should not be brushed even if the conductor to connect is copper made. Only aluminium conductors should be brushed and contact grease applied.





## 3. INSTALLATION INSTRUCTIONS FOR SUBSTATION CONNECTORS

### 3.1 Handling of connectors

- Connectors should be handled with care. Even slight damage to the outer surface of a connector can create corona.
- Be particularly careful with cables of expansion connectors, damage of the cable can cause cable breakage as well as local corona.
- Avoid dropping or placing the connector on sandy soil. Soil particles can lodge in the threading and damage the bolt. In such cases the connector should be cleaned with a soft brush.
- Check that the conductor diameter is in the correct range of diameters for the connector being used.



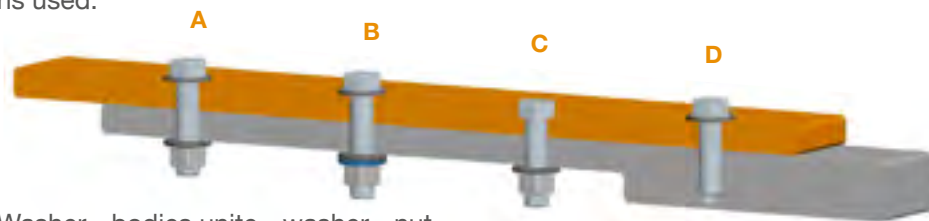
### 3.2 Installation

- Ensure that the conductor is fully inserted into the connector, ensuring it goes to the end of the cavity.
- When assembling make sure the cap is the same distance from both sides. Introduce the screw or nut into the hex hole, depending on the connector and layout, and apply the appropriate torque.

## 4. MECHANICAL JOINTS

### 4.1 Placing the elements

For mechanical assemblies there are different provisions for securing the various elements. The basic elements of the assembly are: bolts, washers, washers and nuts. The following shows the four configurations used.



- Screw - Washer - bodies unite - washer - nut.
- Screw - Washer - bodies unite - washer - washer lock in place - nut.
- Recessed screw - body unite - washer - nut.
- Screw - Washer - body unite - unite body with threaded hole.

SBI Connectors do not recommend any change in the standard hardware and installing a hardware not delivered by SBI Connectors or under their authorization. Similarly, SBI Connectors do not recommend to install any type of grease for the bolts and nuts assembled in the connectors, since the standard hardware delivered has surface treatment to avoid the gripping in the mechanical union. These changes without the authorization of SBI Connectors, installing external hardware or using greases, can modify the behaviour of the assembly, upsetting the resultant torque and the forces applied. If in any case is required to use a different hardware and/or a grease in the hardware union, contact SBI Connectors with the technical datasheet of the hardware and/or grease used and will be the technician and engineers of SBI Connectors who warranty the correct installation of the connector.

*NOTE: For standard orders, SBI Connectors delivers hardware articles with surface treatment to avoid gripping problems in these union elements.*

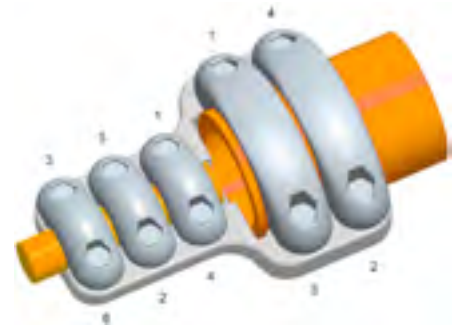


**Click Here!**

## 4.2 Tightening Sequence

Initially the screws should be tightened to 60% of the total torque, in the sequence described below.

Subsequently, tighten in the same sequence to the total recommended tightening torque. Always starting at the “end of the conductor” side of the connector and working to the other side of connector. We recommend you use the correct torque wrench and Sockets.



## 4.3 Recommended tightening

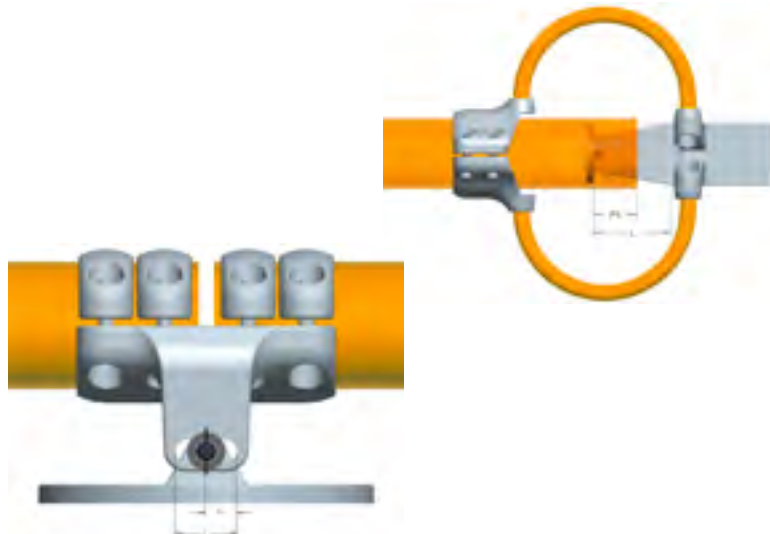
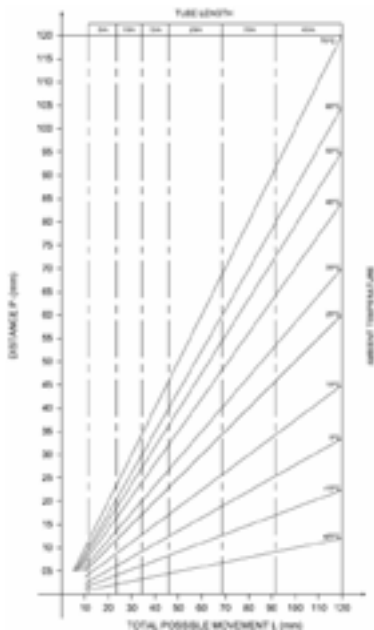
EQUIPMENT HARDWARE (Nm)	TORQUE				
	M8	M10	M12	M14	M16
Aluminium and aluminium alloys	10	20	40	60	90
Silicon bronze	12	24	55	75	115
Stainless steel A2	15	35	60	90	140
Necessary key (mm)	13	17	19	22	24

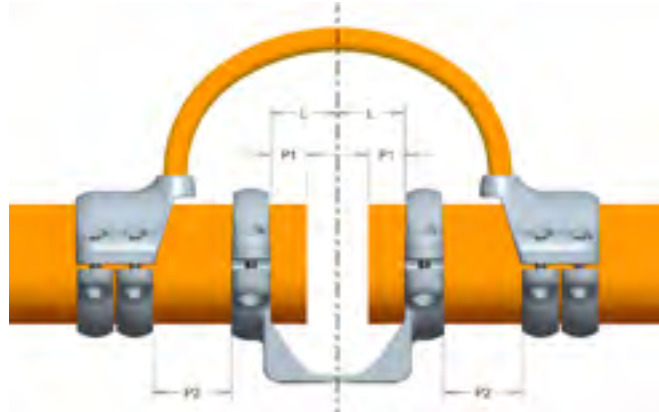
EQUIVALENT UNITS: 10 NM = 10J = 10 WS ≈ 1 KGM ≈ 1KPM

## 5. EXPANSION CONECTORS INSTALLATION

Expansion connectors allow for expansion and contraction of the conductors as the temperature varies. The Ideal temperature when mounting connectors is 20°C, for other temperatures, different spacing will be required, these spacing can be determined by following the chart below.

The dimension L is the total possible movement of the connector. At room temperature, 20°C,  $P1 = L / 2$  (see graph), while P2 is always the difference of length between L and P1.



**Click Here!**

$$P2 = L - P1$$

$T^a$  ambient 50°C  
L = 60mm

Look up the  
graph attached

P1 = 47mm

P2 = L - P1  
P2 = 13mm

## 6. CUPAL SHEETS

Cupal sheets are used when bimetallic connections are required, the following installation procedure should be adopted.

- Prepare the surfaces of the conductor and the surface of the sheet of cupal as described previously by treating the surfaces of the foil as that of a connector.
- Install the cupal sheet, in the cavity of the connector.
- It is important when installing the bimetallic sheets that the copper component is placed in the bottom of the connection, so that apparent salts corrosion does not affect the conductor / aluminum connector which could result in accelerated degradation of the contact.



[Click Here!](#)

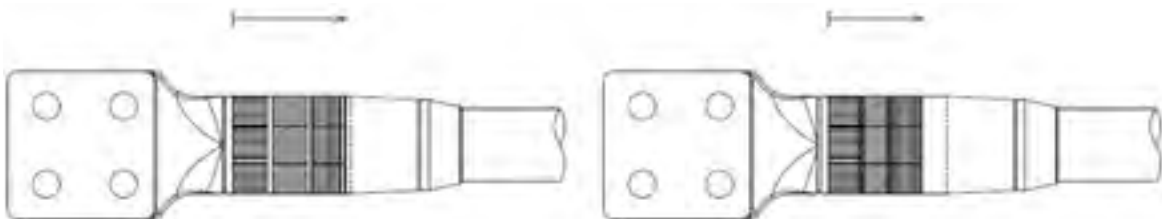
## 7. COMPRESSION CONNECTORS

The connectors can be assembled for compression with different forms depending on the requirement, example, circumferential, hexagonal...

There are two methodologies when crimping:

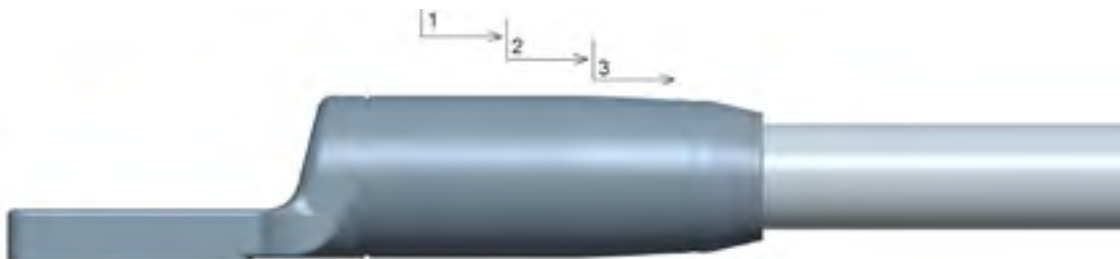
- Space compression
- Overlap compression (normally 1/3, 1/4, 1/5)

In the first instance a number of compression may be applied which are spaced a short distance apart. In the second case, the compressions will overlap by a fraction (see below) of the overall width from the edge of the previous compression.



To affect correct compression the following steps should be taken.

1. Banding the cable end before cutting (prevents fraying).
2. Thoroughly clean cable to be connected.
3. Apply the contact grease (see accessories) to both the conductor and the connector.
4. Insert the cable into the connector. Remember to remove the ring (band) from the cable end.
5. Selection and prepare the tool to perform the compression.



6. For multiple compressions begin the compression from the cable end of the assembly and ensure you withdraw towards the end of connector for subsequent compressions.

**Click Here!**

## 8. WELDED CONNECTORS

The welding methods recommended are the tungsten inert gas (TIG) and metallic inert gas (MIG), as set out in NEMA CC1 - 2009. Aluminium 4043 alloy rod shall be used as filler material for aluminium welded connections between sand castings, extruded aluminium shapes or cables. Alternating current shall be used for TIG welding, whereas reversed-polarity direct current shall be used for MIG welding. Argon or helium, or a mixture of the two shall be used as shielding gases. It is highly recommended that the welding operation would be performed by personnel with high skill level in aluminium welding, because of the difficulty of this process.

Before the welding, it is necessary to:

- Remove oil, oxides, soiling and moisture from the surfaces to be welded. The conductor and power connector welding areas have to be cleaned with a degreasing agent (solvent). Sufficient time must be allowed for evaporation of the solvent before welding. Moreover, after solvent cleaning, the oxides shall be removed by brushing with a stainless steel wire brush.
- Test the welding machine settings by making a test bead on an aluminium casting.
- Visually inspect the connection to determine proper edge preparation and alignment into the joint.

All the melt shall be made with clean metal. During the weld, a smooth and continuous flow of metal with parent metal should be maintained. When several passes are to be made, check the previous pass before laying down the next one, to detect the presence of poor fusion or cracks. The completed weld must have a smooth finish and indicate good fusion. After the welding it is recommended to accurately clean the weld, to ensure a smooth surface and avoid the corona appearance.

## 9. BIMETALLIC CONNECTORS

For the bimetallic mechanical connectors special care must be taken when handling to ensure that the layer of varnish on the joint between the aluminium and copper is not damaged. This varnish is an environmental protection to ensure no corrosion take place. If for any reason this layer is damaged the bimetallic connector should be replaced.

## 10. MAINTENANCE

Connectors delivered by SBI Connectors require no special maintenance. All products showed in this manual are used in substations and have not been designed for a reinstallation or reopening. In case it is required, please do not hesitate to contact SBI Connectors.

For each connection to be done, it is highly recommended to perform a previous visual inspection prior to installation to ensure products have not been damaged during transportation nor loose pieces are lost, thus requiring an eventual replacement. Do not hesitate to contact SBI Connectors should you have any queries in this regard. In any case, store your connectors in a dry and clean location before installation.

# HIGH VOLTAGE

## HV CONNECTORS RANGE

- Single connectors .....26
- Bundle connectors.....70
- Supports .....93
- Expansion connectors .....110
- Earthing stirrups.....126
- Compression Connectors & Tooling .....130
- Welded Connectors .....132
- Accessories.....136
- Special Applications (Corona ring, HVDC, pantographs, ) .....139
- Connectors upper than 500kV .....142
- Connectors for GIS (Gas Insulated Substation).....144
- Bubar Vibration Damper & adjustable connector .....146
- Bushing connectors for transformers .....151





# KEY

In this chapter you will find some pictograms to indicate standard or optional characteristics about our connectors

**A2-70** Standard bolts are DIN933 A2-70.  
If other hardware is required contact with our customer service department.

**UP TO 230kV** For higher voltages contact with our R&D department

**UP TO 400kV** For higher voltages contact with our R&D department

**BIMET**  
CUPAL or TIN Cupal plate or tin plated treatment are optional in case of bimetallic connections.

**PAD** Other dimensions and positions of the pad are available, contact with our R&D department.

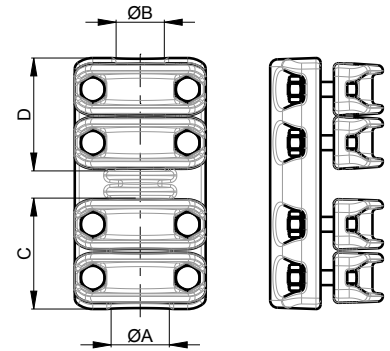
**x** For other distances between cables or different number of cables contact with our R&D department.

**BASE** For other base dimensions or number and holes position contact with our R&D department. Anti-vibration neoprene coating is an optional.



## JS01

STUD OR TUBE - CABLE



UP TO  
230kV

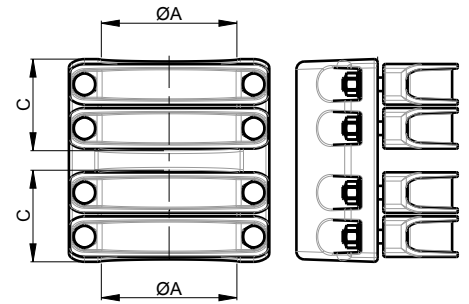
**BIMET**  
CUPAL or TIN

A2-70

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
JS.01.010	30 - 40	16,0 - 21,6	2	74	2	66	M10	M8
JS.01.020	30 - 40	21,6 - 29,6	2	74	2	74	M10	M10
JS.01.030	30 - 40	29,6 - 37,6	2	74	2	74	M10	M10
JS.01.040	50 - 60	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.050	50 - 60	21,6 - 29,6	2	80	2	74	M12	M10
JS.01.060	50 - 60	29,6 - 37,6	2	80	2	74	M12	M10
JS.01.070	70 - 80	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.080	70 - 80	21,6 - 29,6	2	80	2	74	M12	M10
JS.01.090	70 - 80	29,6 - 37,6	2	80	2	74	M12	M10
JS.01.100	90 - 100	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.110	90 - 100	21,6 - 29,6	2	80	2	74	M12	M10
JS.01.120	90 - 100	29,6 - 37,6	2	80	2	74	M12	M10
JS.01.130	120	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.140	120	21,6 - 29,6	2	80	2	74	M12	M10
JS.01.150	120	29,6 - 37,6	2	80	2	74	M12	M10
JS.01.160	140 - 150	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.170	140 - 150	21,6 - 29,6	2	80	2	74	M12	M10
JS.01.180	140 - 150	29,6 - 37,6	2	80	2	74	M12	M10
JS.01.500	2"IPS (60,3mm)	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.510	2"IPS (60,3mm)	21,6 - 29,6	2	80	2	74	M12	M8
JS.01.520	2"IPS (60,3mm)	29,6 - 37,6	2	80	2	74	M12	M8
JS.01.530	2,5"IPS (73mm)	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.540	2,5"IPS (73mm)	21,6 - 29,6	2	80	2	74	M12	M8
JS.01.550	2,5"IPS (73mm)	29,6 - 37,6	2	80	2	74	M12	M8
JS.01.560	3"IPS (88,9mm)	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.570	3"IPS (88,9mm)	21,6 - 29,6	2	80	2	74	M12	M8
JS.01.580	3"IPS (88,9mm)	29,6 - 37,6	2	80	2	74	M12	M8
JS.01.590	3,5"IPS (101,6mm)	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.600	3,5"IPS (101,6mm)	21,6 - 29,6	2	80	2	74	M12	M8
JS.01.610	3,5"IPS (101,6mm)	29,6 - 37,6	2	80	2	74	M12	M8
JS.01.620	4"IPS (114,3mm)	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.630	4"IPS (114,3mm)	21,6 - 29,6	2	80	2	74	M12	M8
JS.01.640	4"IPS (114,3mm)	29,6 - 37,6	2	80	2	74	M12	M8
JS.01.650	5"IPS (141,3mm)	16,0 - 21,6	2	80	2	66	M12	M8
JS.01.660	5"IPS (141,3mm)	21,6 - 29,6	2	80	2	74	M12	M8
JS.01.670	5"IPS (141,3mm)	29,6 - 37,6	2	80	2	74	M12	M8

## JS02

TUBE - TUBE



UP TO  
**230kV**

**BIMET**  
CUPAL OF TIN

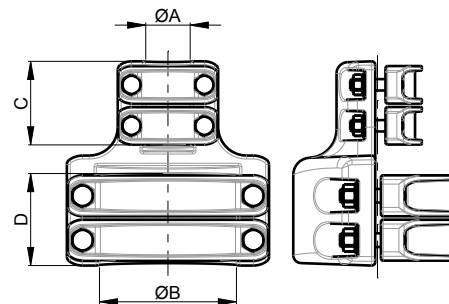
**A2-70**

PART NUMBER	A	COVERS A	C	BOLTS A
JS.02.010	30 - 40	2	74	M10
JS.02.020	50 - 60	2	80	M12
JS.02.030	70 - 80	2	80	M12
JS.02.040	90 - 100	2	80	M12
JS.02.050	120	2	80	M12
JS.02.060	140 - 150	2	80	M12
JS.02.500	2"IPS (60,3mm)	2	80	M12
JS.02.510	2,5"IPS (73mm)	2	80	M12
JS.02.520	3"IPS (88,9mm)	2	80	M12
JS.02.530	3,5"IPS (101,6mm)	2	80	M12
JS.02.540	4"IPS (114,3mm)	2	80	M12
JS.02.550	5"IPS (141,3mm)	2	80	M12



## JS03

STUD - TUBE



UP TO  
**230kV**

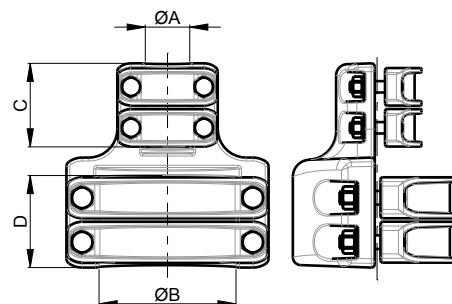
**BIMET**  
CUPAL or TIN

**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
JS.03.010	30	30 - 40	2	74	2	74	M10	M10
JS.03.020	30	50 - 60	2	74	2	80	M10	M12
JS.03.030	30	70 - 80	2	74	2	80	M10	M12
JS.03.040	30	90 - 100	2	74	2	80	M10	M12
JS.03.050	30	120	2	74	2	80	M10	M12
JS.03.060	30	140 -150	2	74	2	80	M10	M12
JS.03.110	40	30 - 40	2	74	2	74	M10	M10
JS.03.120	40	50 - 60	2	74	2	80	M10	M12
JS.03.130	40	70 - 80	2	74	2	80	M10	M12
JS.03.140	40	90 - 100	2	74	2	80	M10	M12
JS.03.150	40	120	2	74	2	80	M10	M12
JS.03.160	40	140 -150	2	74	2	80	M10	M12
JS.03.210	50	30 - 40	2	80	2	74	M12	M10
JS.03.220	50	50 - 60	2	80	2	80	M12	M12
JS.03.230	50	70 - 80	2	80	2	80	M12	M12
JS.03.240	50	90 - 100	2	80	2	80	M12	M12
JS.03.250	50	120	2	80	2	80	M12	M12
JS.03.260	50	140 -150	2	80	2	80	M12	M12
JS.03.310	60	30 - 40	2	80	2	74	M12	M10
JS.03.320	60	50 - 60	2	80	2	80	M12	M12
JS.03.330	60	70 - 80	2	80	2	80	M12	M12
JS.03.340	60	90 - 100	2	80	2	80	M12	M12
JS.03.350	60	120	2	80	2	80	M12	M12
JS.03.360	60	140 -150	2	80	2	80	M12	M12

# JS03

STUD - TUBE



UP TO  
**230kV**

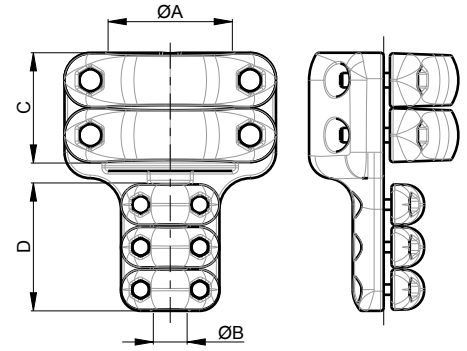
**BIMET**  
CUPAL or TIN

**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
JS.03.500	30	2"IPS (60,3mm)	2	74	2	80	M10	M12
JS.03.510	30	2,5"IPS (73mm)	2	74	2	80	M10	M12
JS.03.520	30	3"IPS (88,9mm)	2	74	2	80	M10	M12
JS.03.530	30	3,5"IPS (101,6mm)	2	74	2	80	M10	M12
JS.03.540	30	4"IPS (114,3mm)	2	74	2	80	M10	M12
JS.03.550	30	5"IPS (141,3mm)	2	74	2	80	M10	M12
JS.03.580	40	2"IPS (60,3mm)	2	74	2	80	M10	M12
JS.03.590	40	2,5"IPS (73mm)	2	74	2	80	M10	M12
JS.03.600	40	3"IPS (88,9mm)	2	74	2	80	M10	M12
JS.03.610	40	3,5"IPS (101,6mm)	2	74	2	80	M10	M12
JS.03.620	40	4"IPS (114,3mm)	2	74	2	80	M10	M12
JS.03.630	40	5"IPS (141,3mm)	2	74	2	80	M10	M12
JS.03.660	50	2"IPS (60,3mm)	2	80	2	80	M12	M12
JS.03.670	50	2,5"IPS (73mm)	2	80	2	80	M12	M12
JS.03.680	50	3"IPS (88,9mm)	2	80	2	80	M12	M12
JS.03.690	50	3,5"IPS (101,6mm)	2	80	2	80	M12	M12
JS.03.700	50	4"IPS (114,3mm)	2	80	2	80	M12	M12
JS.03.710	50	5"IPS (141,3mm)	2	80	2	80	M12	M12
JS.03.740	60	2"IPS (60,3mm)	2	80	2	80	M12	M12
JS.03.750	60	2,5"IPS (73mm)	2	80	2	80	M12	M12
JS.03.760	60	3"IPS (88,9mm)	2	80	2	80	M12	M12
JS.03.770	60	3,5"IPS (101,6mm)	2	80	2	80	M12	M12
JS.03.780	60	4"IPS (114,3mm)	2	80	2	80	M12	M12
JS.03.790	60	5"IPS (141,3mm)	2	80	2	80	M12	M12

## SS01

STUD OR TUBE - CABLE

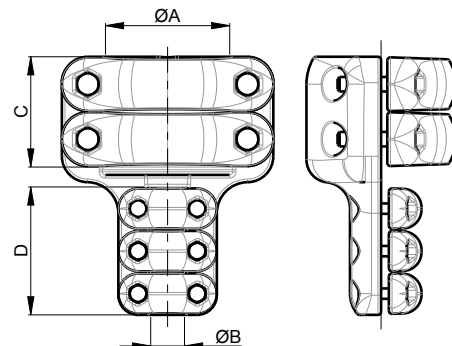


PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B	
SS.01.010	30 - 40	16 - 24	2	82	2	72	M10	M8	800
SS.01.110	30 - 40	24 - 33	2	82	2	82	M10	M10	1250
SS.01.210	30 - 40	33 - 45	2	82	3	123	M10	M10	1600
SS.01.310	30 - 40	45 - 50	2	82	3	123	M10	M10	2000
SS.01.020	50 - 60	16 - 24	2	92	2	72	M12	M8	800
SS.01.120	50 - 60	24 - 33	2	92	2	82	M12	M10	1250
SS.01.220	50 - 60	33 - 45	2	92	3	123	M12	M10	1600
SS.01.320	50 - 60	45 - 50	2	92	3	123	M12	M10	2000
SS.01.030	70 - 80	16 - 24	2	92	2	72	M12	M8	800
SS.01.130	70 - 80	24 - 33	2	92	2	82	M12	M10	1250
SS.01.230	70 - 80	33 - 45	2	92	3	123	M12	M10	1600
SS.01.330	70 - 80	45 - 50	2	92	3	123	M12	M10	2000
SS.01.040	90 - 100	16 - 24	2	92	2	72	M12	M8	800
SS.01.140	90 - 100	24 - 33	2	92	2	82	M12	M10	1250
SS.01.240	90 - 100	33 - 45	2	92	3	123	M12	M10	1600
SS.01.340	90 - 100	45 - 50	2	92	3	123	M12	M10	2000
SS.01.050	120	16 - 24	2	106	2	72	M14	M8	800
SS.01.150	120	24 - 33	2	106	2	82	M14	M10	1250
SS.01.250	120	33 - 45	2	106	3	123	M14	M10	1600
SS.01.350	120	45 - 50	2	106	3	123	M14	M10	2000
SS.01.060	140 - 150	16 - 24	2	106	2	72	M14	M8	800
SS.01.160	140 - 150	24 - 33	2	106	2	82	M14	M10	1250
SS.01.260	140 - 150	33 - 45	2	106	3	123	M14	M10	1600
SS.01.360	140 - 150	45 - 50	2	106	3	123	M14	M10	2000
SS.01.070	160-170	16 - 24	2	106	2	72	M14	M8	800
SS.01.170	160-170	24 - 33	2	106	2	82	M14	M10	1250
SS.01.270	160-170	33 - 45	2	106	3	123	M14	M10	1600
SS.01.370	160-170	45 - 50	2	106	3	123	M14	M10	2000
SS.01.080	200	16 - 24	2	116	2	72	M16	M8	800
SS.01.180	200	24 - 33	2	116	2	82	M16	M10	1250
SS.01.280	200	33 - 45	2	116	3	123	M16	M10	1600
SS.01.380	200	45 - 50	2	116	3	123	M16	M10	2000
SS.01.090	250	16 - 24	2	116	2	72	M16	M8	800
SS.01.190	250	24 - 33	2	116	2	82	M16	M10	1250
SS.01.290	250	33 - 45	2	116	3	123	M16	M10	1600
SS.01.390	250	45 - 50	2	116	3	123	M16	M10	2000
SS.01.100	300	16 - 24	2	116	2	72	M16	M8	800
SS.01.200	300	24 - 33	2	116	2	82	M16	M10	1250
SS.01.300	300	33 - 45	2	116	3	123	M16	M10	1600
SS.01.400	300	45 - 50	2	116	3	123	M16	M10	2000



## SS01

STUD OR TUBE - CABLE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B	
SS.01.500	2"IPS (60,3mm)	16 - 24	2	92	2	72	M12	M8	800
SS.01.580	2"IPS (60,3mm)	24 - 33	2	92	2	82	M12	M10	1250
SS.01.660	2"IPS (60,3mm)	33 - 45	2	92	3	123	M12	M10	1600
SS.01.740	2"IPS (60,3mm)	45 - 50	2	92	3	123	M12	M10	2000
SS.01.510	2,5"IPS (73mm)	16 - 24	2	92	2	72	M12	M8	800
SS.01.590	2,5"IPS (73mm)	24 - 33	2	92	2	82	M12	M10	1250
SS.01.670	2,5"IPS (73mm)	33 - 45	2	92	3	123	M12	M10	1600
SS.01.750	2,5"IPS (73mm)	45 - 50	2	92	3	123	M12	M10	2000
SS.01.520	3"IPS (88,9mm)	16 - 24	2	92	2	72	M12	M8	800
SS.01.600	3"IPS (88,9mm)	24 - 33	2	92	2	82	M12	M10	1250
SS.01.680	3"IPS (88,9mm)	33 - 45	2	92	3	123	M12	M10	1600
SS.01.760	3"IPS (88,9mm)	45 - 50	2	92	3	123	M12	M10	2000
SS.01.530	3,5"IPS (101,6mm)	16 - 24	2	92	2	72	M12	M8	800
SS.01.610	3,5"IPS (101,6mm)	24 - 33	2	92	2	82	M12	M10	1250
SS.01.690	3,5"IPS (101,6mm)	33 - 45	2	92	3	123	M12	M10	1600
SS.01.770	3,5"IPS (101,6mm)	45 - 50	2	92	3	123	M12	M10	2000
SS.01.540	4"IPS (114,3mm)	16 - 24	2	106	2	72	M14	M8	800
SS.01.620	4"IPS (114,3mm)	24 - 33	2	106	2	82	M14	M10	1250
SS.01.700	4"IPS (114,3mm)	33 - 45	2	106	3	123	M14	M10	1600
SS.01.780	4"IPS (114,3mm)	45 - 50	2	106	3	123	M14	M10	2000
SS.01.550	5"IPS (141,3mm)	16 - 24	2	106	2	72	M14	M8	800
SS.01.630	5"IPS (141,3mm)	24 - 33	2	106	2	82	M14	M10	1250
SS.01.710	5"IPS (141,3mm)	33 - 45	2	106	3	123	M14	M10	1600
SS.01.790	5"IPS (141,3mm)	45 - 50	2	106	3	123	M14	M10	2000
SS.01.560	6"IPS (168,2mm)	16 - 24	2	106	2	72	M14	M8	800
SS.01.640	6"IPS (168,2mm)	24 - 33	2	106	2	82	M14	M10	1250
SS.01.720	6"IPS (168,2mm)	33 - 45	2	106	3	123	M14	M10	1600
SS.01.800	6"IPS (168,2mm)	45 - 50	2	106	3	123	M14	M10	2000
SS.01.570	8"IPS (219mm)	16 - 24	2	116	2	72	M16	M8	800
SS.01.650	8"IPS (219mm)	24 - 33	2	116	2	82	M16	M10	1250
SS.01.730	8"IPS (219mm)	33 - 45	2	116	3	123	M16	M10	1600
SS.01.810	8"IPS (219mm)	45 - 50	2	116	3	123	M16	M10	2000



# SS02

TUBE - TUBE

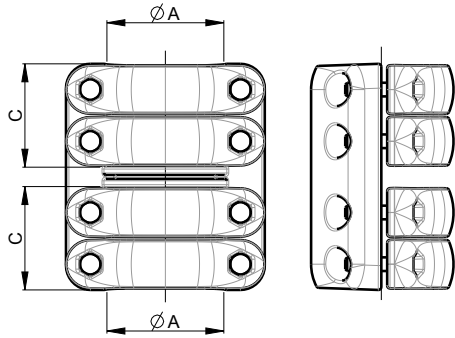


FIG.1

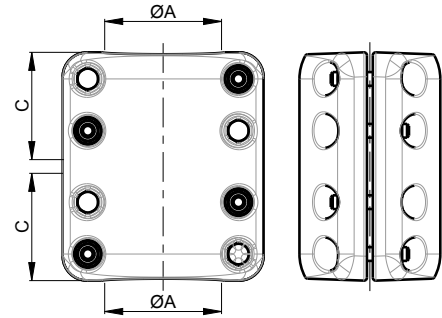


FIG.2



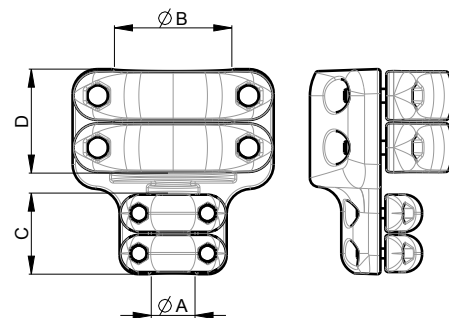
UP TO 400kV **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	COVERS A	C	BOLTS A	FIGURE
SS.02.010	30 - 40	2	82	M10	1
SS.02.020	50 - 60	2	92	M12	1
SS.02.030	70 - 80	2	92	M12	1
SS.02.040	90 - 100	2	92	M12	2
SS.02.050	120	2	106	M14	2
SS.02.060	140 -150	2	106	M14	2
SS.02.070	160-170	2	106	M14	2
SS.02.080	200	3	174	M16	2
SS.02.090	250	3	174	M16	2
SS.02.100	300	3	174	M16	2
SS.02.500	2"IPS (60,3mm)	2	92	M12	1
SS.02.510	2,5"IPS (73mm)	2	92	M12	1
SS.02.520	3"IPS (88,9mm)	2	92	M12	1
SS.02.530	3,5"IPS (101,6mm)	2	92	M12	2
SS.02.540	4"IPS (114,3mm)	2	106	M14	2
SS.02.550	5"IPS (141,3mm)	2	106	M14	2
SS.02.560	6"IPS (168,2mm)	2	106	M14	2
SS.02.570	8"IPS (219mm)	3	174	M16	2



## SS03

STUD - TUBE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

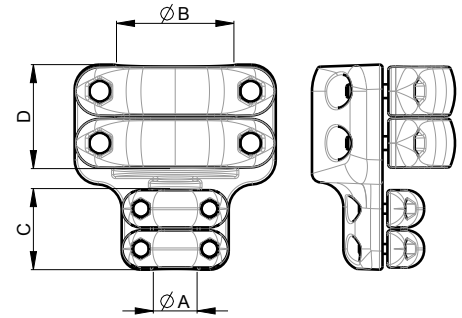
**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
SS.03.010	30	30 - 40	2	82	2	82	M10	M10
SS.03.020	30	50 - 60	2	82	2	92	M10	M12
SS.03.030	30	70 - 80	2	82	2	92	M10	M12
SS.03.040	30	90 - 100	2	82	2	92	M10	M12
SS.03.050	30	120	2	82	2	106	M10	M14
SS.03.060	30	140 -150	2	82	2	106	M10	M14
SS.03.070	30	160-170	2	82	2	106	M10	M14
SS.03.080	30	200	2	82	2	116	M10	M16
SS.03.100	30	250	2	82	2	116	M10	M16
SS.03.110	30	300	2	82	2	116	M10	M16
SS.03.120	40	30 - 40	2	82	2	82	M10	M10
SS.03.130	40	50 - 60	2	82	2	92	M10	M12
SS.03.140	40	70 - 80	2	82	2	92	M10	M12
SS.03.150	40	90 - 100	2	82	2	92	M10	M12
SS.03.160	40	120	2	82	2	106	M10	M14
SS.03.170	40	140 -150	2	82	2	106	M10	M14
SS.03.180	40	160-170	2	82	2	106	M10	M14
SS.03.190	40	200	2	82	2	116	M10	M16
SS.03.210	40	250	2	82	2	116	M10	M16
SS.03.220	40	300	2	82	2	116	M10	M16
SS.03.230	50	30 - 40	2	92	2	82	M12	M10
SS.03.240	50	50 - 60	2	92	2	92	M12	M12
SS.03.250	50	70 - 80	2	92	2	92	M12	M12
SS.03.260	50	90 - 100	2	92	2	92	M12	M12
SS.03.270	50	120	2	92	2	106	M12	M14
SS.03.280	50	140 -150	2	92	2	106	M12	M14
SS.03.290	50	160-170	2	92	2	106	M12	M14
SS.03.300	50	200	2	92	2	116	M12	M16
SS.03.320	50	250	2	92	2	116	M12	M16
SS.03.330	50	300	2	92	2	116	M12	M16
SS.03.340	60	30 - 40	2	92	2	82	M12	M10
SS.03.350	60	50 - 60	2	92	2	92	M12	M12
SS.03.360	60	70 - 80	2	92	2	92	M12	M12
SS.03.370	60	90 - 100	2	92	2	92	M12	M12
SS.03.380	60	120	2	92	2	106	M12	M14
SS.03.390	60	140 -150	2	92	2	106	M12	M14
SS.03.400	60	160-170	2	92	2	106	M12	M14
SS.03.410	60	200	2	92	2	116	M12	M16
SS.03.430	60	250	2	92	2	116	M12	M16
SS.03.440	60	300	2	92	2	116	M12	M16



## SS03

STUD - TUBE



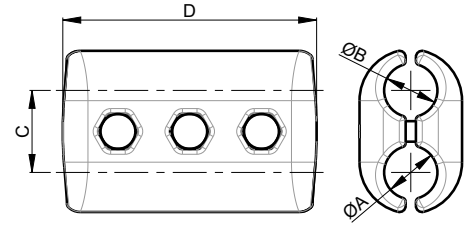
PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
SS.03.500	30	2"IPS (60,3mm)	2	82	2	92	M10	M12
SS.03.510	30	2,5"IPS (73mm)	2	82	2	92	M10	M12
SS.03.520	30	3"IPS (88,9mm)	2	82	2	92	M10	M12
SS.03.530	30	3,5"IPS (101,6mm)	2	82	2	92	M10	M12
SS.03.540	30	4"IPS (114,3mm)	2	82	2	106	M10	M14
SS.03.550	30	5"IPS (141,3mm)	2	82	2	106	M10	M14
SS.03.560	30	6"IPS (168,2mm)	2	82	2	106	M10	M14
SS.03.570	30	8"IPS (219mm)	2	82	2	116	M10	M16
SS.03.580	40	2"IPS (60,3mm)	2	82	2	92	M10	M12
SS.03.590	40	2,5"IPS (73mm)	2	82	2	92	M10	M12
SS.03.600	40	3"IPS (88,9mm)	2	82	2	92	M10	M12
SS.03.610	40	3,5"IPS (101,6mm)	2	82	2	92	M10	M12
SS.03.620	40	4"IPS (114,3mm)	2	82	2	106	M10	M14
SS.03.630	40	5"IPS (141,3mm)	2	82	2	106	M10	M14
SS.03.640	40	6"IPS (168,2mm)	2	82	2	106	M10	M14
SS.03.650	40	8"IPS (219mm)	2	82	2	116	M10	M16
SS.03.660	50	2"IPS (60,3mm)	2	92	2	92	M12	M12
SS.03.670	50	2,5"IPS (73mm)	2	92	2	92	M12	M12
SS.03.680	50	3"IPS (88,9mm)	2	92	2	92	M12	M12
SS.03.690	50	3,5"IPS (101,6mm)	2	92	2	92	M12	M12
SS.03.700	50	4"IPS (114,3mm)	2	92	2	106	M12	M14
SS.03.710	50	5"IPS (141,3mm)	2	92	2	106	M12	M14
SS.03.720	50	6"IPS (168,2mm)	2	92	2	106	M12	M14
SS.03.730	50	8"IPS (219mm)	2	92	2	116	M12	M16
SS.03.740	60	2"IPS (60,3mm)	2	92	2	92	M12	M12
SS.03.750	60	2,5"IPS (73mm)	2	92	2	92	M12	M12
SS.03.760	60	3"IPS (88,9mm)	2	92	2	92	M12	M12
SS.03.770	60	3,5"IPS (101,6mm)	2	92	2	92	M12	M12
SS.03.780	60	4"IPS (114,3mm)	2	92	2	106	M12	M14
SS.03.790	60	5"IPS (141,3mm)	2	92	2	106	M12	M14
SS.03.800	60	6"IPS (168,2mm)	2	92	2	106	M12	M14
SS.03.810	60	8"IPS (219mm)	2	92	2	116	M12	M16





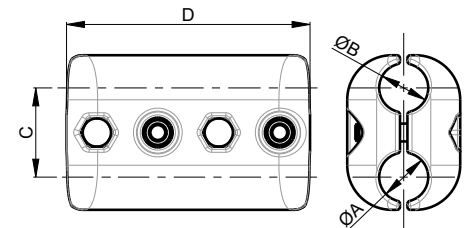
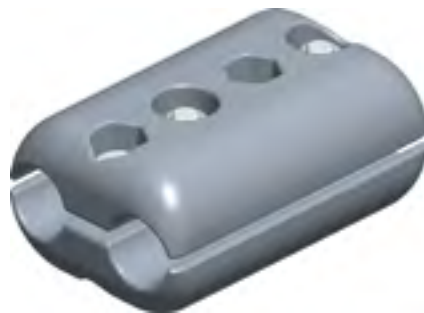
# SP01

CABLE - CABLE



UP TO 400kV **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	B	C	D	BOLTS B
SP.01.010	10 - 24	10 - 24	43	108	M10
SP.01.020	10 - 24	24 - 33	57	108	M10
SP.01.030	10 - 24	33 - 45	60	108	M10
SP.01.040	10 - 24	45 - 52	60	108	M10
SP.01.080	24 - 28	33 - 40	60	108	M10
SP.01.090	24 - 28	40 - 52	60	108	M10
SP.01.100	24 - 33	24 - 33	60	123	M12

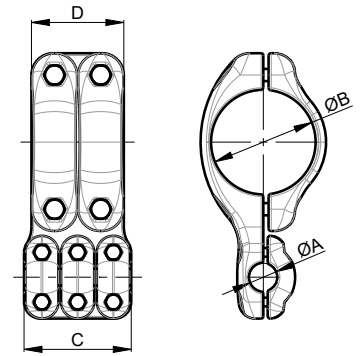


UP TO 400kV **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	B	C	D	BOLTS B
SP.01.120	28 - 33	33 - 40	65	164	M12
SP.01.130	28 - 33	45 - 52	70	164	M12
SP.01.140	29 - 45	29 - 45	73	164	M12
SP.01.150	33 - 45	45 - 52	70	164	M12
SP.01.160	45 - 52	45 - 52	78	164	M12

## SP02

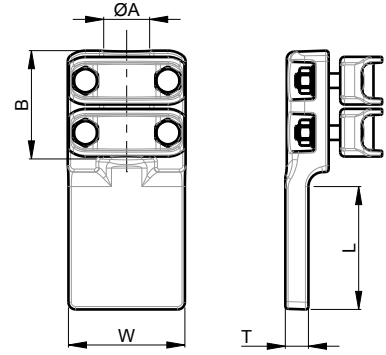
TUBE - CABLE



PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B	CURRENT [A]
SP02.010	16 - 24	30 - 40	2	72	2	82	M8	M10	800
SP02.020	16 - 24	50 - 60	2	72	2	92	M8	M12	800
SP02.030	16 - 24	70 - 80	2	72	2	92	M8	M12	800
SP02.040	16 - 24	90 - 100	2	72	2	92	M8	M12	800
SP02.050	16 - 24	120	2	72	2	106	M8	M14	800
SP02.060	16 - 24	140 -150	2	72	2	106	M8	M14	800
SP02.070	16 - 24	160-170	2	72	2	106	M8	M14	800
SP02.080	16 - 24	200	2	72	2	116	M8	M16	800
SP02.090	16 - 24	250	2	72	2	116	M8	M16	800
SP02.100	16 - 24	300	2	72	2	116	M8	M16	800
SP02.110	24 - 33	30 - 40	2	82	2	82	M10	M10	1250
SP02.120	24 - 33	50 - 60	2	82	2	92	M10	M12	1250
SP02.130	24 - 33	70 - 80	2	82	2	92	M10	M12	1250
SP02.140	24 - 33	90 - 100	2	82	2	92	M10	M12	1250
SP02.150	24 - 33	120	2	82	2	106	M10	M14	1250
SP02.160	24 - 33	140 -150	2	82	2	106	M10	M14	1250
SP02.170	24 - 33	160-170	2	82	2	106	M10	M14	1250
SP02.180	24 - 33	200	2	82	2	116	M10	M16	1250
SP02.190	24 - 33	250	2	82	2	116	M10	M16	1250
SP02.200	24 - 33	300	2	82	2	116	M10	M16	1250
SP02.210	33 - 45	30 - 40	3	123	2	82	M10	M10	1600
SP02.220	33 - 45	50 - 60	3	123	2	92	M10	M12	1600
SP02.230	33 - 45	70 - 80	3	123	2	92	M10	M12	1600
SP02.240	33 - 45	90 - 100	3	123	2	92	M10	M12	1600
SP02.250	33 - 45	120	3	123	2	106	M10	M14	1600
SP02.260	33 - 45	140 -150	3	123	2	106	M10	M14	1600
SP02.270	33 - 45	160-170	3	123	2	106	M10	M14	1600
SP02.280	33 - 45	200	3	123	2	116	M10	M16	1600
SP02.290	33 - 45	250	3	123	2	116	M10	M16	1600
SP02.300	33 - 45	300	3	123	2	116	M10	M16	1600
SP02.310	45 - 50	30 - 40	3	123	2	82	M10	M10	2000
SP02.320	45 - 50	50 - 60	3	123	2	92	M10	M12	2000
SP02.330	45 - 50	70 - 80	3	123	2	92	M10	M12	2000
SP02.340	45 - 50	90 - 100	3	123	2	92	M10	M12	2000
SP02.350	45 - 50	120	3	123	2	106	M10	M14	2000
SP02.360	45 - 50	140 -150	3	123	2	106	M10	M14	2000
SP02.370	45 - 50	160-170	3	123	2	106	M10	M14	2000
SP02.380	45 - 50	200	3	123	2	116	M10	M16	2000
SP02.390	45 - 50	250	3	123	2	116	M10	M16	2000
SP02.400	45 - 50	300	3	123	2	116	M10	M16	2000

# JA01

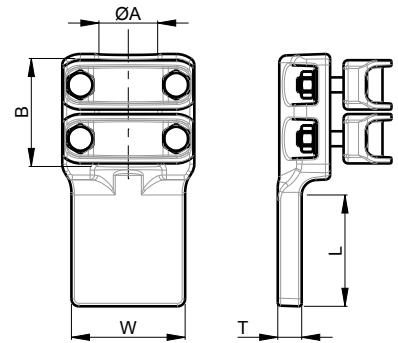
CABLE - PAD



PART NUMBER	A	COVERS A	B	L	W	T	BOLTS A	CURRENT [A]
JA.01.010	16,0 - 21,6	2	66	76	76	16	M8	750
JA.01.020	16,0 - 21,6	2	66	100	100	16	M8	750
JA.01.030	16,0 - 21,6	2	66	125	125	16	M8	750
JA.01.050	21,6 - 29,6	2	74	76	76	16	M10	1000
JA.01.060	21,6 - 29,6	2	74	100	100	16	M10	1000
JA.01.070	21,6 - 29,6	2	74	125	125	16	M10	1000
JA.01.090	29,6 - 37,6	2	74	76	76	16	M10	1250
JA.01.100	29,6 - 37,6	2	74	100	100	16	M10	1250
JA.01.110	29,6 - 37,6	2	74	125	125	16	M10	1250

# JA02

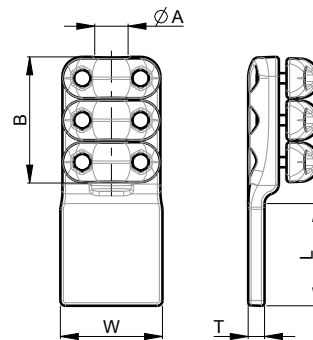
STUD - PAD



PART NUMBER	A	COVERS A	B	L	W	T	BOLTS A	CURRENT [A]
JA.02.010	30	2	74	76	76	16	M10	1000
JA.02.020	30	2	74	100	100	16	M10	1000
JA.02.030	30	2	74	125	125	16	M10	1000
JA.02.050	40	2	74	76	76	16	M10	1200
JA.02.060	40	2	74	100	100	16	M10	1600
JA.02.070	40	2	74	125	125	16	M10	1600
JA.02.090	50	2	80	76	76	16	M12	1200
JA.02.100	50	2	80	100	100	16	M12	1600
JA.02.110	50	2	80	125	125	16	M12	1600

## SA01

CABLE - PAD



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

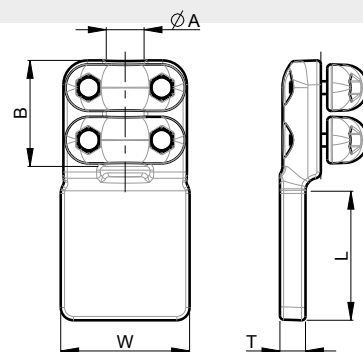
**A2-70**

**PAD**

PART NUMBER	A	COVERS	B	L	W	T	BOLTS A	CURRENT [A]
SA.01.010	16 - 24	2	72	76	76	16	M8	800
SA.01.020	16 - 24	2	72	100	100	16	M8	800
SA.01.030	16 - 24	2	72	125	125	16	M8	800
SA.01.040	16 - 24	2	72	100	200	16	M8	800
SA.01.050	24 - 33	2	82	76	76	20	M10	1250
SA.01.060	24 - 33	2	82	100	100	16	M10	1250
SA.01.070	24 - 33	2	82	125	125	16	M10	1250
SA.01.080	24 - 33	2	82	100	200	16	M10	1250
SA.01.090	33 - 45	3	123	76	76	20	M10	1600
SA.01.100	33 - 45	3	123	100	100	20	M10	1600
SA.01.110	33 - 45	3	123	125	125	16	M10	1600
SA.01.120	33 - 45	3	123	100	200	16	M10	1600
SA.01.130	45 - 50	3	123	76	76	25	M10	2000
SA.01.140	45 - 50	3	123	100	100	20	M10	2000
SA.01.150	45 - 50	3	123	125	125	16	M10	2000
SA.01.160	45 - 50	3	123	100	200	16	M10	2000

## SA03

STUD - PAD



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

**PAD**

PART NUMBER	A	COVERS	B	L	W	T	BOLTS A	CURRENT [A]
SA.03.010	30	2	82	76	76	16	M10	1000
SA.03.020	30	2	82	100	100	16	M10	1000
SA.03.030	30	2	82	125	125	16	M10	1000
SA.03.040	30	2	82	100	200	16	M10	1000
SA.03.050	40	2	82	76	76	20	M10	1600
SA.03.060	40	2	82	100	100	16	M10	1600
SA.03.070	40	2	82	125	125	16	M10	1600
SA.03.080	40	2	82	100	200	16	M10	1600
SA.03.090	50	2	92	76	76	20	M12	1600
SA.03.100	50	2	92	100	100	25	M12	2500
SA.03.110	50	2	92	125	125	20	M12	2500
SA.03.120	50	2	92	100	200	16	M12	2500
SA.03.130	60	2	92	76	76	20	M12	1600
SA.03.140	60	2	92	100	100	30	M12	3200
SA.03.150	60	2	92	125	125	25	M12	3200
SA.03.160	60	2	92	100	200	16	M12	3200

## SA02

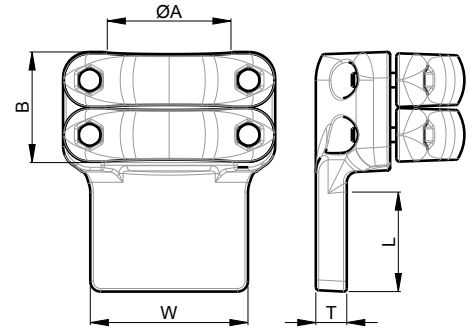
TUBE - PAD

UP TO  
400kV

**BIMET**  
CUPAL or TIN

A2-70

PAD

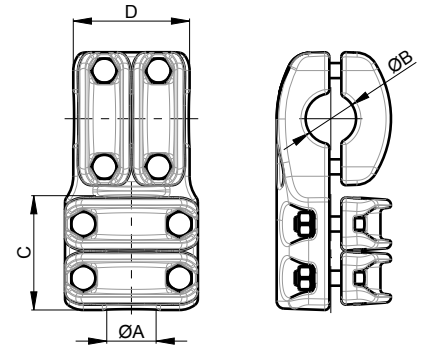


PART NUMBER	A	COVERS A	B	L	W	T	BOLTS A	CURRENT [A]
SA.02.010	50 - 60	2	92	100	100	20	M12	2000
SA.02.020	50 - 60	2	92	125	125	16	M12	2000
SA.02.030	50 - 60	2	92	100	200	16	M12	2000
SA.02.040	70 - 80	2	92	100	100	25	M12	2500
SA.02.050	70 - 80	2	92	125	125	20	M12	2500
SA.02.060	70 - 80	2	92	100	200	16	M12	3200
SA.02.070	90 - 100	2	92	100	100	30	M12	3200
SA.02.080	90 - 100	2	92	125	125	25	M12	3200
SA.02.090	90 - 100	2	92	100	200	16	M12	3200
SA.02.100	120	2	106	100	100	30	M14	3200
SA.02.110	120	2	106	125	125	35	M14	4000
SA.02.120	120	2	106	100	200	20	M14	4000
SA.02.130	140 -150	2	106	100	100	30	M14	3200
SA.02.140	140 -150	2	106	125	125	35	M14	4000
SA.02.150	140 -150	2	106	100	200	20	M14	4000
SA.02.160	160-170	2	106	100	100	30	M14	3200
SA.02.170	160-170	2	106	125	125	35	M14	4000
SA.02.180	160-170	2	106	100	200	20	M14	4000
SA.02.190	200	2	116	100	100	35	M16	3600
SA.02.200	200	2	116	125	125	35	M16	4000
SA.02.210	200	2	116	100	200	20	M16	4000
SA.02.220	250	2	116	100	100	35	M16	3600
SA.02.230	250	2	116	125	125	35	M16	4000
SA.02.240	250	2	116	100	200	20	M16	4000
SA.02.510	2"IPS (60,3mm)	2	92	100	100	20	M12	2000
SA.02.520	2"IPS (60,3mm)	2	92	125	125	16	M12	2000
SA.02.530	2"IPS (60,3mm)	2	92	100	200	16	M12	2000
SA.02.540	2,5"IPS (73mm)	2	92	100	100	20	M12	2000
SA.02.550	2,5"IPS (73mm)	2	92	125	125	16	M12	2000
SA.02.560	2,5"IPS (73mm)	2	92	100	200	16	M12	2000
SA.02.570	3"IPS (88,9mm)	2	92	100	100	25	M12	2500
SA.02.580	3"IPS (88,9mm)	2	92	125	125	20	M12	2500
SA.02.590	3"IPS (88,9mm)	2	92	100	200	16	M12	2500
SA.02.600	3,5"IPS (101,6mm)	2	92	100	100	30	M12	3200
SA.02.610	3,5"IPS (101,6mm)	2	92	125	125	25	M12	3200
SA.02.620	3,5"IPS (101,6mm)	2	92	100	200	16	M12	3200
SA.02.630	4"IPS (114,3mm)	2	106	100	100	30	M14	3200
SA.02.640	4"IPS (114,3mm)	2	106	125	125	25	M14	3200
SA.02.650	4"IPS (114,3mm)	2	106	100	200	16	M14	3200
SA.02.660	5"IPS (141,3mm)	2	106	100	100	30	M14	3200
SA.02.670	5"IPS (141,3mm)	2	106	125	125	35	M14	4000
SA.02.680	5"IPS (141,3mm)	2	106	100	200	20	M14	4000
SA.02.690	6"IPS (168,2mm)	2	106	100	100	30	M14	3200
SA.02.700	6"IPS (168,2mm)	2	106	125	125	35	M14	4000
SA.02.710	6"IPS (168,2mm)	2	106	100	200	20	M14	4000
SA.02.720	8"IPS (219mm)	2	116	100	100	30	M16	3200
SA.02.730	8"IPS (219mm)	2	116	125	125	35	M16	4000
SA.02.740	8"IPS (219mm)	2	116	100	200	20	M16	4000



## JT01

CABLE-CABLE



UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

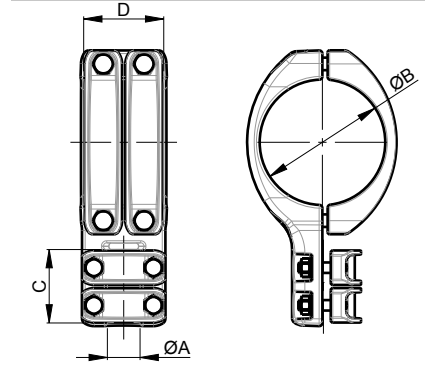
**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
JT.01.010	16,0 - 21,6	16,0 - 21,6	2	66	2	68	M8	M8
JT.01.020	16,0 - 21,6	21,6 - 29,6	2	66	2	76	M8	M10
JT.01.030	16,0 - 21,6	29,6 - 37,6	2	66	2	76	M8	M10
JT.01.040	21,6 - 29,6	16,0 - 21,6	2	74	2	68	M10	M8
JT.01.050	21,6 - 29,6	21,6 - 29,6	2	74	2	76	M10	M10
JT.01.060	21,6 - 29,6	29,6 - 37,6	2	74	2	76	M10	M10
JT.01.070	29,6 - 37,6	16,0 - 21,6	2	74	2	68	M10	M8
JT.01.080	29,6 - 37,6	21,6 - 29,6	2	74	2	76	M10	M10
JT.01.090	29,6 - 37,6	29,6 - 37,6	2	74	2	76	M10	M10



## JT02

CABLE - TUBE

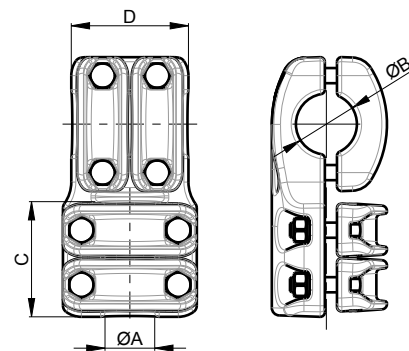


UP TO **230kV** **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
JT.02.010	16,0 - 21,6	30 - 40	2	66	2	76	M8	M10
JT.02.020	16,0 - 21,6	50 - 60	2	66	2	82	M8	M12
JT.02.030	16,0 - 21,6	70 - 80	2	66	2	82	M8	M12
JT.02.040	16,0 - 21,6	90 - 100	2	66	2	82	M8	M12
JT.02.050	16,0 - 21,6	120	2	66	2	82	M8	M12
JT.02.060	16,0 - 21,6	140 -150	2	66	2	82	M8	M12
JT.02.110	21,6 - 29,6	30 - 40	2	74	2	76	M10	M10
JT.02.120	21,6 - 29,6	50 - 60	2	74	2	82	M10	M12
JT.02.130	21,6 - 29,6	70 - 80	2	74	2	82	M10	M12
JT.02.140	21,6 - 29,6	90 - 100	2	74	2	82	M10	M12
JT.02.150	21,6 - 29,6	120	2	74	2	82	M10	M12
JT.02.160	21,6 - 29,6	140 -150	2	74	2	82	M10	M12
JT.02.210	29,6 - 37,6	30 - 40	2	74	2	76	M10	M10
JT.02.220	29,6 - 37,6	50 - 60	2	74	2	82	M10	M12
JT.02.230	29,6 - 37,6	70 - 80	2	74	2	82	M10	M12
JT.02.240	29,6 - 37,6	90 - 100	2	74	2	82	M10	M12
JT.02.250	29,6 - 37,6	120	2	74	2	82	M10	M12
JT.02.260	29,6 - 37,6	140 -150	2	74	2	82	M10	M12
JT.02.500	16,0 - 21,6	2"IPS (60,3mm)	2	66	2	82	M8	M12
JT.02.510	16,0 - 21,6	2,5"IPS (73mm)	2	66	2	82	M8	M12
JT.02.520	16,0 - 21,6	3"IPS (88,9mm)	2	66	2	82	M8	M12
JT.02.530	16,0 - 21,6	3,5"IPS (101,6mm)	2	66	2	82	M8	M12
JT.02.540	16,0 - 21,6	4"IPS (114,3mm)	2	66	2	82	M8	M12
JT.02.550	16,0 - 21,6	5"IPS (141,3mm)	2	66	2	82	M8	M12
JT.02.580	21,6 - 29,6	2"IPS (60,3mm)	2	74	2	82	M8	M12
JT.02.590	21,6 - 29,6	2,5"IPS (73mm)	2	74	2	82	M8	M12
JT.02.600	21,6 - 29,6	3"IPS (88,9mm)	2	74	2	82	M8	M12
JT.02.610	21,6 - 29,6	3,5"IPS (101,6mm)	2	74	2	82	M8	M12
JT.02.620	21,6 - 29,6	4"IPS (114,3mm)	2	74	2	82	M8	M12
JT.02.630	21,6 - 29,6	5"IPS (141,3mm)	2	74	2	82	M8	M12
JT.02.660	29,6 - 37,6	2"IPS (60,3mm)	2	74	2	82	M8	M12
JT.02.670	29,6 - 37,6	2,5"IPS (73mm)	2	74	2	82	M8	M12
JT.02.680	29,6 - 37,6	3"IPS (88,9mm)	2	74	2	82	M8	M12
JT.02.690	29,6 - 37,6	3,5"IPS (101,6mm)	2	74	2	82	M8	M12
JT.02.700	29,6 - 37,6	4"IPS (114,3mm)	2	74	2	82	M8	M12
JT.02.710	29,6 - 37,6	5"IPS (141,3mm)	2	74	2	82	M8	M12

## JT03

STUD OR TUBE - CABLE



UP TO  
**230kV**

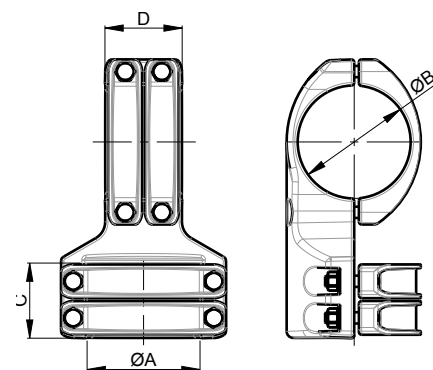
**BIMET**  
CUPAL or TIN

**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
JT.03.010	30	16,0 - 21,6	2	74	2	68	M10	M8
JT.03.020	30	21,6 - 29,6	2	74	2	68	M10	M10
JT.03.030	30	29,6 - 37,6	2	74	2	68	M10	M10
JT.03.040	40	16,0 - 21,6	2	74	2	76	M10	M8
JT.03.050	40	21,6 - 29,6	2	74	2	76	M10	M10
JT.03.060	40	29,6 - 37,6	2	74	2	76	M10	M10
JT.03.070	50	16,0 - 21,6	2	80	2	76	M12	M8
JT.03.080	50	21,6 - 29,6	2	80	2	76	M12	M10
JT.03.090	50	29,6 - 37,6	2	80	2	76	M12	M10
JT.03.100	60	16,0 - 21,6	2	80	2	76	M12	M8
JT.03.110	60	21,6 - 29,6	2	80	2	76	M12	M10
JT.03.120	60	29,6 - 37,6	2	80	2	76	M12	M10

## JT04

TUBE - TUBE



UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
JT.04.010	30 - 40	30 - 40	2	74	2	76	M10	M10
JT.04.020	50 - 60	50 - 60	2	80	2	82	M12	M12
JT.04.030	70 - 80	70 - 80	2	80	2	82	M12	M12
JT.04.040	90 - 100	90 - 100	2	80	2	82	M12	M12
JT.04.050	120	120	2	80	2	82	M12	M12
JT.04.060	140 - 150	140 - 150	2	80	2	82	M12	M12
JT.04.500	2"IPS (60,3mm)	2"IPS (60,3mm)	2	80	2	82	M12	M12
JT.04.510	2,5"IPS (73mm)	2,5"IPS (73mm)	2	80	2	82	M12	M12
JT.04.520	3"IPS (88,9mm)	3"IPS (88,9mm)	2	80	2	82	M12	M12
JT.04.530	3,5"IPS (101,6mm)	3,5"IPS (101,6mm)	2	80	2	82	M12	M12
JT.04.540	4"IPS (114,3mm)	4"IPS (114,3mm)	2	80	2	82	M12	M12
JT.04.550	5"IPS (141,3mm)	5"IPS (141,3mm)	2	80	2	82	M12	M12

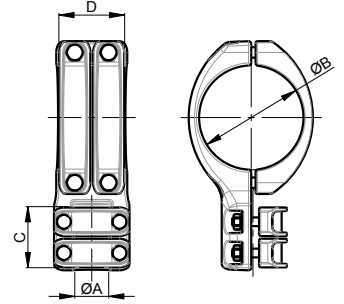
## JT05

STUD - TUBE

UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

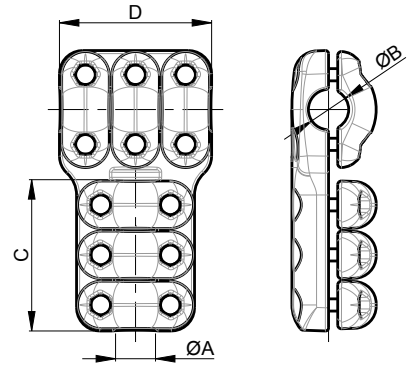
**A2-70**



PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
JT.05.010	30	30 - 40	2	74	2	74	M10	M10
JT.05.020	30	50 - 60	2	74	2	80	M10	M12
JT.05.030	30	70 - 80	2	74	2	80	M10	M12
JT.05.040	30	90 - 100	2	74	2	80	M10	M12
JT.05.050	30	120	2	74	2	80	M10	M12
JT.05.060	30	140 -150	2	74	2	80	M10	M12
JT.05.110	40	30 - 40	2	74	2	74	M10	M10
JT.05.120	40	50 - 60	2	74	2	80	M10	M12
JT.05.130	40	70 - 80	2	74	2	80	M10	M12
JT.05.140	40	90 - 100	2	74	2	80	M10	M12
JT.05.150	40	120	2	74	2	80	M10	M12
JT.05.160	40	140 -150	2	74	2	80	M10	M12
JT.05.210	50	30 - 40	2	80	2	74	M12	M10
JT.05.220	50	50 - 60	2	80	2	80	M12	M12
JT.05.230	50	70 - 80	2	80	2	80	M12	M12
JT.05.240	50	90 - 100	2	80	2	80	M12	M12
JT.05.250	50	120	2	80	2	80	M12	M12
JT.05.260	50	140 -150	2	80	2	80	M12	M12
JT.05.310	60	30 - 40	2	80	2	74	M12	M10
JT.05.320	60	50 - 60	2	80	2	80	M12	M12
JT.05.330	60	70 - 80	2	80	2	80	M12	M12
JT.05.340	60	90 - 100	2	80	2	80	M12	M12
JT.05.350	60	120	2	80	2	80	M12	M12
JT.05.360	60	140 -150	2	80	2	80	M12	M12
JT.05.500	30	2"IPS (60,3mm)	2	80	2	82	M10	M12
JT.05.510	30	2,5"IPS (73mm)	2	80	2	82	M10	M12
JT.05.520	30	3"IPS (88,9mm)	2	80	2	82	M10	M12
JT.05.530	30	3,5"IPS (101,6mm)	2	80	2	82	M10	M12
JT.05.540	30	4"IPS (114,3mm)	2	80	2	82	M10	M12
JT.05.550	30	5"IPS (141,3mm)	2	80	2	82	M10	M12
JT.05.580	40	2"IPS (60,3mm)	2	80	2	82	M10	M12
JT.05.590	40	2,5"IPS (73mm)	2	80	2	82	M10	M12
JT.05.600	40	3"IPS (88,9mm)	2	80	2	82	M10	M12
JT.05.610	40	3,5"IPS (101,6mm)	2	80	2	82	M10	M12
JT.05.620	40	4"IPS (114,3mm)	2	80	2	82	M10	M12
JT.05.630	40	5"IPS (141,3mm)	2	80	2	82	M10	M12
JT.05.660	50	2"IPS (60,3mm)	2	80	2	82	M12	M12
JT.05.670	50	2,5"IPS (73mm)	2	80	2	82	M12	M12
JT.05.680	50	3"IPS (88,9mm)	2	80	2	82	M12	M12
JT.05.690	50	3,5"IPS (101,6mm)	2	80	2	82	M12	M12
JT.05.700	50	4"IPS (114,3mm)	2	80	2	82	M12	M12
JT.05.710	50	5"IPS (141,3mm)	2	80	2	82	M12	M12
JT.05.740	60	2"IPS (60,3mm)	2	80	2	82	M12	M12
JT.05.750	60	2,5"IPS (73mm)	2	80	2	82	M12	M12
JT.05.760	60	3"IPS (88,9mm)	2	80	2	82	M12	M12
JT.05.770	60	3,5"IPS (101,6mm)	2	80	2	82	M12	M12
JT.05.780	60	4"IPS (114,3mm)	2	80	2	82	M12	M12
JT.05.790	60	5"IPS (141,3mm)	2	80	2	82	M12	M12

## ST01

CABLE - CABLE

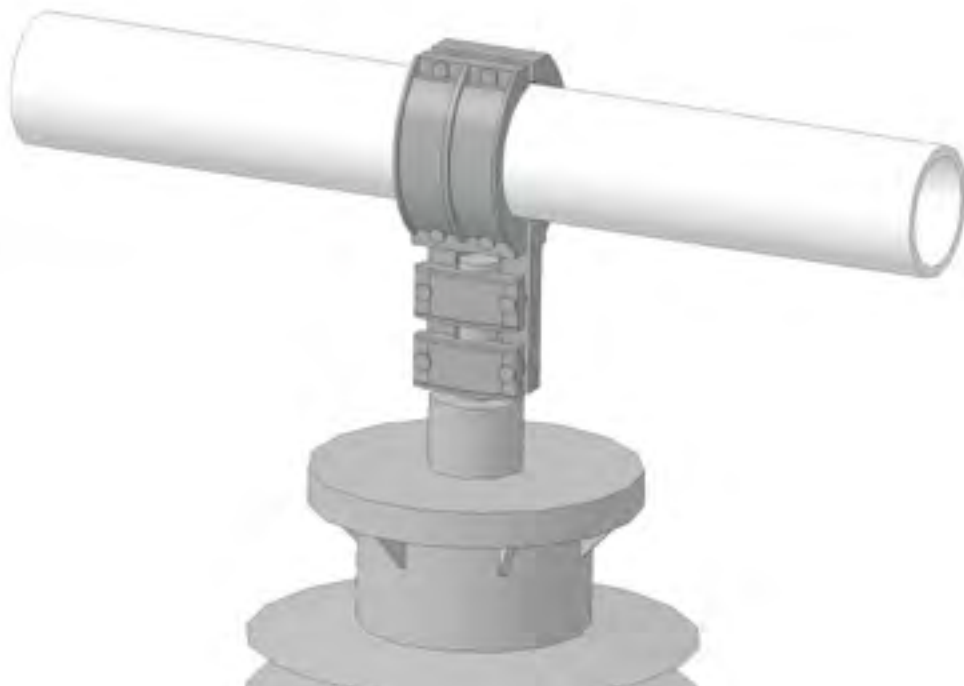


UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

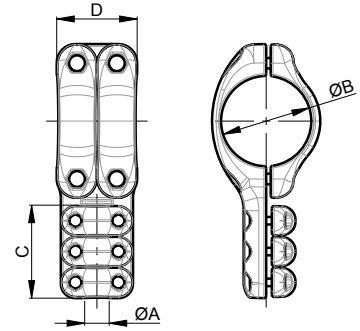
**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B	CURRENT [A]
ST.01.010	16 - 24	16 - 24	2	72	2	72	M8	M8	800
ST.01.020	16 - 24	24 - 33	2	72	2	82	M8	M10	800
ST.01.030	16 - 24	33 - 45	2	72	2	82	M8	M10	800
ST.01.040	16 - 24	45 - 50	2	72	2	82	M8	M10	800
ST.01.050	24 - 33	16 - 24	2	82	2	72	M10	M8	800
ST.01.060	24 - 33	24 - 33	2	82	2	82	M10	M10	1250
ST.01.070	24 - 33	33 - 45	2	82	2	82	M10	M10	1250
ST.01.080	24 - 33	45 - 50	2	82	2	82	M10	M10	1250
ST.01.090	33 - 45	16 - 24	2	82	2	72	M10	M8	800
ST.01.100	33 - 45	24 - 33	2	82	2	82	M10	M10	1250
ST.01.110	33 - 45	33 - 45	3	123	3	123	M10	M10	1600
ST.01.120	33 - 45	45 - 50	3	123	3	123	M10	M10	1600
ST.01.130	45 - 50	16 - 24	2	82	2	72	M10	M8	800
ST.01.140	45 - 50	24 - 33	2	82	2	82	M10	M10	1250
ST.01.150	45 - 50	33 - 45	3	123	3	123	M10	M10	1600
ST.01.160	45 - 50	45 - 50	3	123	3	123	M10	M10	2000



## ST02

CABLE - TUBE

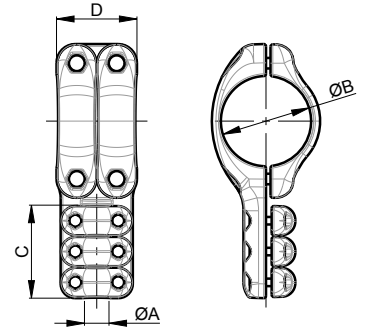


PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B	FIG/CURRENT
ST.02.010	16 - 24	30 - 40	2	72	2	82	M8	M10	800
ST.02.020	16 - 24	50 - 60	2	72	2	92	M8	M12	800
ST.02.030	16 - 24	70 - 80	2	72	2	92	M8	M12	800
ST.02.040	16 - 24	90 - 100	2	72	2	92	M8	M12	800
ST.02.050	16 - 24	120	2	72	2	106	M8	M14	800
ST.02.060	16 - 24	140 -150	2	72	2	106	M8	M14	800
ST.02.070	16 - 24	160-170	2	72	2	106	M8	M14	800
ST.02.080	16 - 24	200	2	72	2	116	M8	M16	800
ST.02.090	16 - 24	250	2	72	2	116	M8	M16	800
ST.02.100	16 - 24	300	2	72	2	116	M8	M16	800
ST.02.110	24 - 33	30 - 40	2	82	2	82	M10	M10	1250
ST.02.120	24 - 33	50 - 60	2	82	2	92	M10	M12	1250
ST.02.130	24 - 33	70 - 80	2	82	2	92	M10	M12	1250
ST.02.140	24 - 33	90 - 100	2	82	2	92	M10	M12	1250
ST.02.150	24 - 33	120	2	82	2	106	M10	M14	1250
ST.02.160	24 - 33	140 -150	2	82	2	106	M10	M14	1250
ST.02.170	24 - 33	160-170	2	82	2	106	M10	M14	1250
ST.02.180	24 - 33	200	2	82	2	116	M10	M16	1250
ST.02.190	24 - 33	250	2	82	2	116	M10	M16	1250
ST.02.200	24 - 33	300	2	82	2	116	M10	M16	1250
ST.02.210	33 - 45	30 - 40	3	123	2	82	M10	M10	1600
ST.02.220	33 - 45	50 - 60	3	123	2	92	M10	M12	1600
ST.02.230	33 - 45	70 - 80	3	123	2	92	M10	M12	1600
ST.02.240	33 - 45	90 - 100	3	123	2	92	M10	M12	1600
ST.02.250	33 - 45	120	3	123	2	106	M10	M14	1600
ST.02.260	33 - 45	140 -150	3	123	2	106	M10	M14	1600
ST.02.270	33 - 45	160-170	3	123	2	106	M10	M14	1600
ST.02.280	33 - 45	200	3	123	2	116	M10	M16	1600
ST.02.290	33 - 45	250	3	123	2	116	M10	M16	1600
ST.02.300	33 - 45	300	3	123	2	116	M10	M16	1600
ST.02.310	45 - 50	30 - 40	3	123	2	82	M10	M10	2000
ST.02.320	45 - 50	50 - 60	3	123	2	92	M10	M12	2000
ST.02.330	45 - 50	70 - 80	3	123	2	92	M10	M12	2000
ST.02.340	45 - 50	90 - 100	3	123	2	92	M10	M12	2000
ST.02.350	45 - 50	120	3	123	2	106	M10	M14	2000
ST.02.360	45 - 50	140 -150	3	123	2	106	M10	M14	2000
ST.02.370	45 - 50	160-170	3	123	2	106	M10	M14	2000
ST.02.380	45 - 50	200	3	123	2	116	M10	M16	2000
ST.02.390	45 - 50	250	3	123	2	116	M10	M16	2000
ST.02.400	45 - 50	300	3	123	2	116	M10	M16	2000



## ST02

CABLE - TUBE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

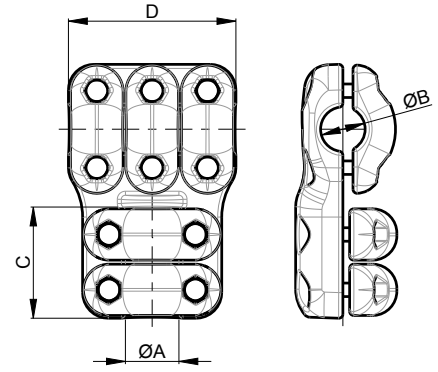
**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B	FIG/CURRENT
ST.02.500	16 - 24	2"IPS (60,3mm)	2	72	2	92	M8	M12	800
ST.02.510	16 - 24	2,5"IPS (73mm)	2	72	2	92	M8	M12	800
ST.02.520	16 - 24	3"IPS (88,9mm)	2	72	2	92	M8	M12	800
ST.02.530	16 - 24	3,5"IPS (101,6mm)	2	72	2	92	M8	M12	800
ST.02.540	16 - 24	4"IPS (114,3mm)	2	72	2	106	M8	M14	800
ST.02.550	16 - 24	5"IPS (141,3mm)	2	72	2	106	M8	M14	800
ST.02.560	16 - 24	6"IPS (168,2mm)	2	72	2	106	M8	M14	800
ST.02.570	16 - 24	8"IPS (219mm)	2	72	2	116	M8	M16	800
ST.02.580	24 - 33	2"IPS (60,3mm)	3	123	2	92	M10	M12	1250
ST.02.590	24 - 33	2,5"IPS (73mm)	3	123	2	92	M10	M12	1250
ST.02.600	24 - 33	3"IPS (88,9mm)	3	123	2	92	M10	M12	1250
ST.02.610	24 - 33	3,5"IPS (101,6mm)	3	123	2	92	M10	M12	1250
ST.02.620	24 - 33	4"IPS (114,3mm)	3	123	2	106	M10	M14	1250
ST.02.630	24 - 33	5"IPS (141,3mm)	3	123	2	106	M10	M14	1250
ST.02.640	24 - 33	6"IPS (168,2mm)	3	123	2	106	M10	M14	1250
ST.02.650	24 - 33	8"IPS (219mm)	3	123	2	116	M10	M16	1250
ST.02.660	33 - 45	2"IPS (60,3mm)	3	123	2	92	M10	M12	1600
ST.02.670	33 - 45	2,5"IPS (73mm)	3	123	2	92	M10	M12	1600
ST.02.680	33 - 45	3"IPS (88,9mm)	3	123	2	92	M10	M12	1600
ST.02.690	33 - 45	3,5"IPS (101,6mm)	3	123	2	92	M10	M12	1600
ST.02.700	33 - 45	4"IPS (114,3mm)	3	123	2	106	M10	M14	1600
ST.02.710	33 - 45	5"IPS (141,3mm)	3	123	2	106	M10	M14	1600
ST.02.720	33 - 45	6"IPS (168,2mm)	3	123	2	106	M10	M14	1600
ST.02.730	33 - 45	8"IPS (219mm)	3	123	2	116	M10	M16	1600
ST.02.740	45 - 50	2"IPS (60,3mm)	3	123	2	92	M10	M12	2000
ST.02.750	45 - 50	2,5"IPS (73mm)	3	123	2	92	M10	M12	2000
ST.02.760	45 - 50	3"IPS (88,9mm)	3	123	2	92	M10	M12	2000
ST.02.770	45 - 50	3,5"IPS (101,6mm)	3	123	2	92	M10	M12	2000
ST.02.780	45 - 50	4"IPS (114,3mm)	3	123	2	106	M10	M14	2000
ST.02.790	45 - 50	5"IPS (141,3mm)	3	123	2	106	M10	M14	2000
ST.02.800	45 - 50	6"IPS (168,2mm)	3	123	2	106	M10	M14	2000
ST.02.810	45 - 50	8"IPS (219mm)	3	123	2	116	M10	M16	2000



## ST03

STUD - CABLE

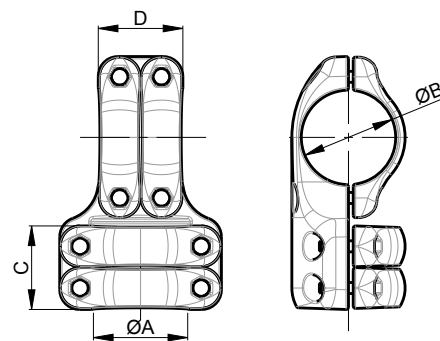


PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
ST.03.010	30	16 - 24	2	82	2	72	M10	M8
ST.03.020	30	24 - 33	2	82	2	82	M10	M10
ST.03.030	30	33 - 45	2	82	3	123	M10	M10
ST.03.040	30	45 - 50	2	82	3	123	M10	M10
ST.03.050	40	16 - 24	2	82	2	72	M10	M8
ST.03.060	40	24 - 33	2	82	2	82	M10	M10
ST.03.070	40	33 - 45	2	82	3	123	M10	M10
ST.03.080	40	45 - 50	2	82	3	123	M10	M10
ST.03.090	50	16 - 24	2	92	2	72	M12	M8
ST.03.100	50	24 - 33	2	92	2	82	M12	M10
ST.03.110	50	33 - 45	2	92	3	123	M12	M10
ST.03.120	50	45 - 50	2	92	3	123	M12	M10
ST.03.130	60	16 - 24	2	92	2	72	M12	M8
ST.03.140	60	24 - 33	2	92	2	82	M12	M10
ST.03.150	60	33 - 45	2	92	3	123	M12	M10
ST.03.160	60	45 - 50	2	92	3	123	M12	M10



# ST04

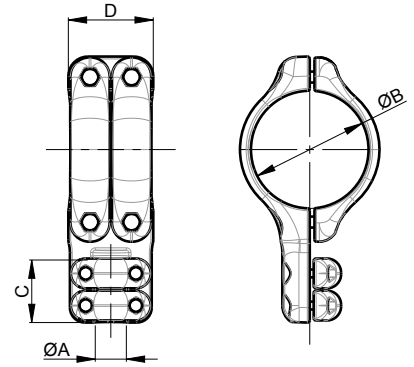
TUBE - TUBE



PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
ST.04.010	30 - 40	30 - 40	2	82	2	82	M10	M10
ST.04.020	50 - 60	50 - 60	2	92	2	92	M12	M12
ST.04.030	70 - 80	70 - 80	2	92	2	92	M12	M12
ST.04.040	90 - 100	90 - 100	2	92	2	92	M12	M12
ST.04.050	120	120	2	106	2	106	M14	M14
ST.04.060	140 -150	140 -150	2	106	2	106	M14	M14
ST.04.070	160-170	160-170	2	106	2	106	M14	M14
ST.04.080	200	200	3	174	3	174	M16	M16
ST.04.090	250	250	3	174	3	174	M16	M16
ST.04.100	300	300	3	174	3	174	M16	M16
ST.04.500	2"IPS (60,3mm)	2"IPS (60,3mm)	2	92	2	92	M12	M12
ST.04.510	2,5"IPS (73mm)	2,5"IPS (73mm)	2	92	2	92	M12	M12
ST.04.520	3"IPS (88,9mm)	3"IPS (88,9mm)	2	92	2	92	M12	M12
ST.04.530	3,5"IPS (101,6mm)	3,5"IPS (101,6mm)	2	92	2	92	M12	M12
ST.04.540	4"IPS (114,3mm)	4"IPS (114,3mm)	2	106	2	106	M14	M14
ST.04.550	5"IPS (141,3mm)	5"IPS (141,3mm)	2	106	2	106	M14	M14
ST.04.560	6"IPS (168,2mm)	6"IPS (168,2mm)	2	106	2	106	M14	M14
ST.04.570	8"IPS (219mm)	8"IPS (219mm)	3	174	3	174	M16	M16

## ST05

STUD - TUBE



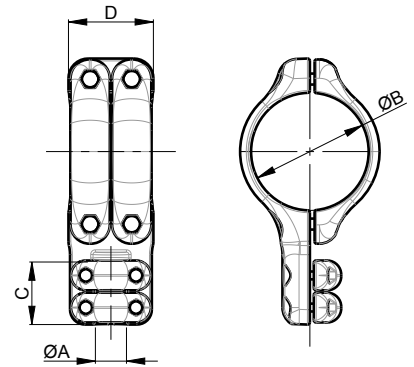
UP TO **400kV** **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
ST.05.010	30	30 - 40	2	82	2	82	M10	M10
ST.05.020	30	50 - 60	2	82	2	92	M10	M12
ST.05.030	30	70 - 80	2	82	2	92	M10	M12
ST.05.040	30	90 - 100	2	82	2	92	M10	M12
ST.05.050	30	120	2	82	2	106	M10	M14
ST.05.060	30	140 -150	2	82	2	106	M10	M14
ST.05.070	30	160-170	2	82	2	106	M10	M14
ST.05.080	30	200	2	82	2	116	M10	M16
ST.05.090	30	250	2	82	2	116	M10	M16
ST.05.100	30	300	2	82	2	116	M10	M16
ST.05.110	40	30 - 40	2	82	2	82	M10	M10
ST.05.120	40	50 - 60	2	82	2	92	M10	M12
ST.05.130	40	70 - 80	2	82	2	92	M10	M12
ST.05.140	40	90 - 100	2	82	2	92	M10	M12
ST.05.150	40	120	2	82	2	106	M10	M14
ST.05.160	40	140 -150	2	82	2	106	M10	M14
ST.05.170	40	160-170	2	82	2	106	M10	M14
ST.05.180	40	200	2	82	2	116	M10	M16
ST.05.190	40	250	2	82	2	116	M10	M16
ST.05.200	40	300	2	82	2	116	M10	M16
ST.05.210	50	30 - 40	2	92	2	82	M12	M10
ST.05.220	50	50 - 60	2	92	2	92	M12	M12
ST.05.230	50	70 - 80	2	92	2	92	M12	M12
ST.05.240	50	90 - 100	2	92	2	92	M12	M12
ST.05.250	50	120	2	92	2	106	M12	M14
ST.05.260	50	140 -150	2	92	2	106	M12	M14
ST.05.270	50	160-170	2	92	2	106	M12	M14
ST.05.280	50	200	2	92	2	116	M12	M16
ST.05.290	50	250	2	92	2	116	M12	M16
ST.05.300	50	300	2	92	2	116	M12	M16
ST.05.310	60	30 - 40	2	92	2	82	M12	M10
ST.05.320	60	50 - 60	2	92	2	92	M12	M12
ST.05.330	60	70 - 80	2	92	2	92	M12	M12
ST.05.340	60	90 - 100	2	92	2	92	M12	M12
ST.05.350	60	120	2	92	2	106	M12	M14
ST.05.360	60	140 -150	2	92	2	106	M12	M14
ST.05.370	60	160-170	2	92	2	106	M12	M14
ST.05.380	60	200	2	92	2	116	M12	M16
ST.05.390	60	250	2	92	2	116	M12	M16
ST.05.400	60	300	2	92	2	116	M12	M16



## ST05

STUD - TUBE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

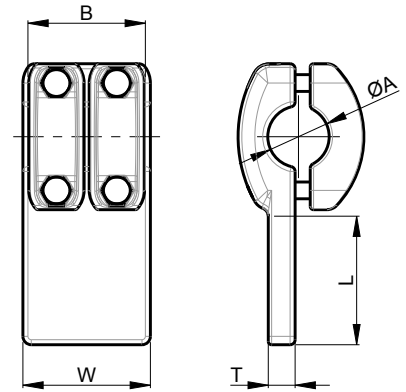
**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	BOLTS A	BOLTS B
ST.05.500	30	2"IPS (60,3mm)	2	82	2	92	M10	M12
ST.05.510	30	2,5"IPS (73mm)	2	82	2	92	M10	M12
ST.05.520	30	3"IPS (88,9mm)	2	82	2	92	M10	M12
ST.05.530	30	3,5"IPS (101,6mm)	2	82	2	92	M10	M12
ST.05.540	30	4"IPS (114,3mm)	2	82	2	106	M10	M14
ST.05.550	30	5"IPS (141,3mm)	2	82	2	106	M10	M14
ST.05.560	30	6"IPS (168,2mm)	2	82	2	106	M10	M14
ST.05.570	30	8"IPS (219mm)	2	82	2	116	M10	M16
ST.05.580	40	2"IPS (60,3mm)	2	82	2	92	M10	M12
ST.05.590	40	2,5"IPS (73mm)	2	82	2	92	M10	M12
ST.05.600	40	3"IPS (88,9mm)	2	82	2	92	M10	M12
ST.05.610	40	3,5"IPS (101,6mm)	2	82	2	92	M10	M12
ST.05.620	40	4"IPS (114,3mm)	2	82	2	106	M10	M14
ST.05.630	40	5"IPS (141,3mm)	2	82	2	106	M10	M14
ST.05.640	40	6"IPS (168,2mm)	2	82	2	106	M10	M14
ST.05.650	40	8"IPS (219mm)	2	82	2	116	M10	M16
ST.05.660	50	2"IPS (60,3mm)	2	92	2	92	M12	M12
ST.05.670	50	2,5"IPS (73mm)	2	92	2	92	M12	M12
ST.05.680	50	3"IPS (88,9mm)	2	92	2	92	M12	M12
ST.05.690	50	3,5"IPS (101,6mm)	2	92	2	92	M12	M12
ST.05.700	50	4"IPS (114,3mm)	2	92	2	106	M12	M14
ST.05.710	50	5"IPS (141,3mm)	2	92	2	106	M12	M14
ST.05.720	50	6"IPS (168,2mm)	2	92	2	106	M12	M14
ST.05.730	50	8"IPS (219mm)	2	92	2	116	M12	M16
ST.05.740	60	2"IPS (60,3mm)	2	92	2	92	M12	M12
ST.05.750	60	2,5"IPS (73mm)	2	92	2	92	M12	M12
ST.05.760	60	3"IPS (88,9mm)	2	92	2	92	M12	M12
ST.05.770	60	3,5"IPS (101,6mm)	2	92	2	92	M12	M12
ST.05.780	60	4"IPS (114,3mm)	2	92	2	106	M12	M14
ST.05.790	60	5"IPS (141,3mm)	2	92	2	106	M12	M14
ST.05.800	60	6"IPS (168,2mm)	2	92	2	106	M12	M14
ST.05.810	60	8"IPS (219mm)	2	92	2	116	M12	M16



# JF01

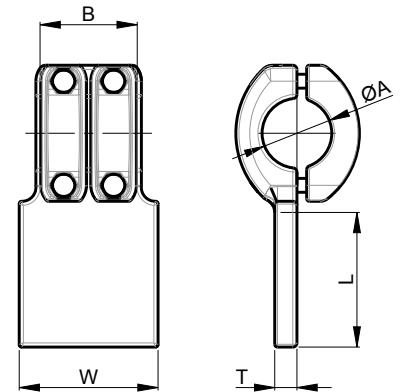
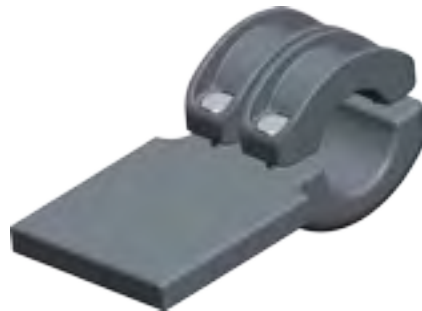
CABLE - PAD



PART NUMBER	A	COVERS A	B	L	W	T	BOLTS A	CURRENT [A]
JF01.010	16,0 - 21,6	2	66	76	76	16	M8	750
JF01.020	16,0 - 21,6	2	66	100	100	16	M8	750
JF01.030	16,0 - 21,6	2	66	125	125	16	M8	750
JF01.050	21,6 - 29,6	2	74	76	76	16	M10	1000
JF01.060	21,6 - 29,6	2	74	100	100	16	M10	1000
JF01.070	21,6 - 29,6	2	74	125	125	16	M10	1000
JF01.090	29,6 - 37,6	2	74	76	76	16	M10	1250
JF01.100	29,6 - 37,6	2	74	100	100	16	M10	1250
JF01.110	29,6 - 37,6	2	74	125	125	16	M10	1250

# JF02

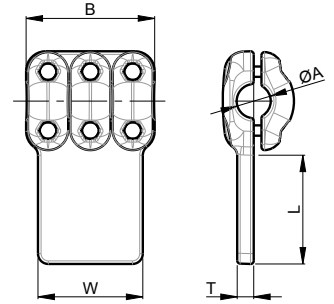
STUD - PAD



PART NUMBER	A	COVERS A	B	L	W	T	BOLTS A	CURRENT [A]
JF02.010	30	2	74	76	76	16	M10	1000
JF02.020	30	2	74	100	100	16	M10	1000
JF02.030	30	2	74	125	125	16	M10	1000
JF02.050	40	2	74	76	76	16	M10	1200
JF02.060	40	2	74	100	100	16	M10	1600
JF02.070	40	2	74	125	125	16	M10	1600
JF02.090	50	2	80	76	76	16	M12	1200
JF02.100	50	2	80	100	100	16	M12	1600
JF02.110	50	2	80	125	125	16	M12	1600

## SF01

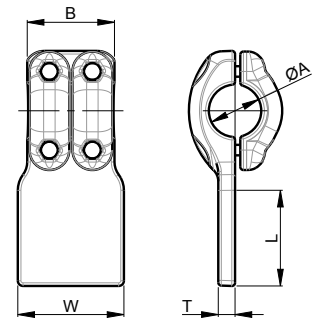
CABLE - PAD



PART NUMBER	A	COVERS A	B	L	W	T	BOLTS A	CURRENT [A]
SF01.010	16 - 24	2	72	76	76	16	M8	800
SF01.020	16 - 24	2	72	100	100	16	M8	800
SF01.030	16 - 24	2	72	125	125	16	M8	800
SF01.040	16 - 24	2	72	100	200	16	M8	800
SF01.050	24 - 33	2	82	76	76	20	M10	1250
SF01.060	24 - 33	2	82	100	100	16	M10	1250
SF01.070	24 - 33	2	82	125	125	16	M10	1250
SF01.080	24 - 33	2	82	100	200	16	M10	1250
SF01.090	33 - 45	3	123	76	76	20	M10	1600
SF01.100	33 - 45	3	123	100	100	20	M10	1600
SF01.110	33 - 45	3	123	125	125	16	M10	1600
SF01.120	33 - 45	3	123	100	200	16	M10	1600
SF01.130	45 - 50	3	123	76	76	25	M10	2000
SF01.140	45 - 50	3	123	100	100	20	M10	2000
SF01.150	45 - 50	3	123	125	125	16	M10	2000
SF01.160	45 - 50	3	123	100	200	16	M10	2000

## SF03

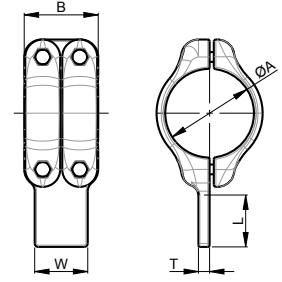
STUD - PAD



PART NUMBER	A	COVERS A	B	L	W	T	BOLTS A	CURRENT [A]
SF03.010	30	2	82	76	76	16	M10	1000
SF03.020	30	2	82	100	100	16	M10	1000
SF03.030	30	2	82	125	125	16	M10	1000
SF03.040	30	2	82	100	200	16	M10	1000
SF03.050	40	2	82	76	76	20	M10	1600
SF03.060	40	2	82	100	100	16	M10	1600
SF03.070	40	2	82	125	125	16	M10	1600
SF03.080	40	2	82	100	200	16	M10	1600
SF03.090	50	2	92	76	76	20	M12	1600
SF03.100	50	2	92	100	100	25	M12	2500
SF03.110	50	2	92	125	125	20	M12	2500
SF03.120	50	2	92	100	200	16	M12	2500
SF03.130	60	2	92	76	76	20	M12	1600
SF03.140	60	2	92	100	100	30	M12	3200
SF03.150	60	2	92	125	125	25	M12	3200
SF03.160	60	2	92	100	200	16	M12	3200

## SF02

TUBE - PAD



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

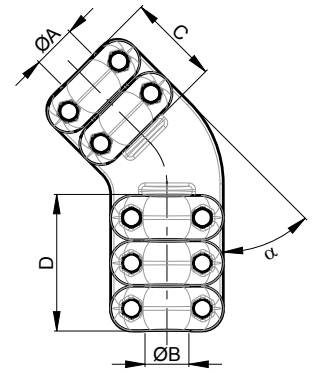
**A2-70**

**PAD**

PART NUMBER	A	COVERS A	B	L	W	T	BOLTS A	CURRENT [A]
SF.02.010	50 - 60	2	92	100	100	20	M12	2000
SF.02.020	50 - 60	2	92	125	125	16	M12	2000
SF.02.030	50 - 60	2	92	100	200	16	M12	2000
SF.02.040	70 - 80	2	92	100	100	25	M12	2500
SF.02.050	70 - 80	2	92	125	125	20	M12	2500
SF.02.060	70 - 80	2	92	100	200	16	M12	3200
SF.02.070	90 - 100	2	92	100	100	30	M12	3200
SF.02.080	90 - 100	2	92	125	125	25	M12	3200
SF.02.090	90 - 100	2	92	100	200	16	M12	3200
SF.02.100	120	2	106	100	100	30	M14	3200
SF.02.110	120	2	106	125	125	35	M14	4000
SF.02.120	120	2	106	100	200	20	M14	4000
SF.02.130	140 -150	2	106	100	100	30	M14	3200
SF.02.140	140 -150	2	106	125	125	35	M14	4000
SF.02.150	140 -150	2	106	100	200	20	M14	4000
SF.02.160	160-170	2	106	100	100	30	M14	3200
SF.02.170	160-170	2	106	125	125	35	M14	4000
SF.02.180	160-170	2	106	100	200	20	M14	4000
SF.02.190	200	2	116	100	100	35	M16	3600
SF.02.200	200	2	116	125	125	35	M16	4000
SF.02.210	200	2	116	100	200	20	M16	4000
SF.02.220	250	2	116	100	100	35	M16	3600
SF.02.230	250	2	116	125	125	35	M16	4000
SF.02.240	250	2	116	100	200	20	M16	4000
SF.02.510	2"IPS (60,3mm)	2	92	100	100	20	M12	2000
SF.02.520	2"IPS (60,3mm)	2	92	125	125	16	M12	2000
SF.02.530	2"IPS (60,3mm)	2	92	100	200	16	M12	2000
SF.02.540	2,5"IPS (73mm)	2	92	100	100	20	M12	2000
SF.02.550	2,5"IPS (73mm)	2	92	125	125	16	M12	2000
SF.02.560	2,5"IPS (73mm)	2	92	100	200	16	M12	2000
SF.02.570	3"IPS (88,9mm)	2	92	100	100	25	M12	2500
SF.02.580	3"IPS (88,9mm)	2	92	125	125	20	M12	2500
SF.02.590	3"IPS (88,9mm)	2	92	100	200	16	M12	2500
SF.02.600	3,5"IPS (101,6mm)	2	92	100	100	30	M12	3200
SF.02.610	3,5"IPS (101,6mm)	2	92	125	125	25	M12	3200
SF.02.620	3,5"IPS (101,6mm)	2	92	100	200	16	M12	3200
SF.02.630	4"IPS (114,3mm)	2	106	100	100	30	M14	3200
SF.02.640	4"IPS (114,3mm)	2	106	125	125	25	M14	3200
SF.02.650	4"IPS (114,3mm)	2	106	100	200	16	M14	3200
SF.02.660	5"IPS (141,3mm)	2	106	100	100	30	M14	3200
SF.02.670	5"IPS (141,3mm)	2	106	125	125	35	M14	4000
SF.02.680	5"IPS (141,3mm)	2	106	100	200	20	M14	4000
SF.02.690	6"IPS (168,2mm)	2	106	100	100	30	M14	3200
SF.02.700	6"IPS (168,2mm)	2	106	125	125	35	M14	4000
SF.02.710	6"IPS (168,2mm)	2	106	100	200	20	M14	4000
SF.02.720	8"IPS (219mm)	2	116	100	100	30	M16	3200
SF.02.730	8"IPS (219mm)	2	116	125	125	35	M16	4000
SF.02.740	8"IPS (219mm)	2	116	100	200	20	M16	4000

## SK45

STUD OR TUBE - CABLE



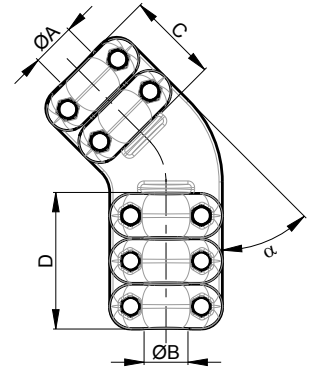
UP TO **400kV** **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	α	BOLTS A	BOLTS B	CURRENT [A]
SK.01.45.010	30 - 40	16 - 24	2	82	2	72	45	M10	M8	800
SK.01.45.020	30 - 40	24 - 33	2	82	2	82	45	M10	M10	1250
SK.01.45.030	30 - 40	33 - 45	2	82	3	123	45	M10	M10	1600
SK.01.45.040	30 - 40	45 - 50	2	82	3	123	45	M10	M10	2000
SK.01.45.050	50 - 60	16 - 24	2	92	2	72	45	M12	M8	800
SK.01.45.060	50 - 60	24 - 33	2	92	2	82	45	M12	M10	1250
SK.01.45.070	50 - 60	33 - 45	2	92	3	123	45	M12	M10	1600
SK.01.45.080	50 - 60	45 - 50	2	92	3	123	45	M12	M10	2000
SK.01.45.090	70 - 80	16 - 24	2	92	2	72	45	M12	M8	800
SK.01.45.100	70 - 80	24 - 33	2	92	2	82	45	M12	M10	1250
SK.01.45.110	70 - 80	33 - 45	2	92	3	123	45	M12	M10	1600
SK.01.45.120	70 - 80	45 - 50	2	92	3	123	45	M12	M10	2000
SK.01.45.130	90 - 100	16 - 24	2	92	2	72	45	M12	M8	800
SK.01.45.140	90 - 100	24 - 33	2	92	2	82	45	M12	M10	1250
SK.01.45.150	90 - 100	33 - 45	2	92	3	123	45	M12	M10	1600
SK.01.45.160	90 - 100	45 - 50	2	92	3	123	45	M12	M10	2000
SK.01.45.170	120	16 - 24	2	106	2	72	45	M14	M8	800
SK.01.45.180	120	24 - 33	2	106	2	82	45	M14	M10	1250
SK.01.45.190	120	33 - 45	2	106	3	123	45	M14	M10	1600
SK.01.45.200	120	45 - 50	2	106	3	123	45	M14	M10	2000
SK.01.45.210	140 - 150	16 - 24	2	106	2	72	45	M14	M8	800
SK.01.45.220	140 - 150	24 - 33	2	106	2	82	45	M14	M10	1250
SK.01.45.230	140 - 150	33 - 45	2	106	3	123	45	M14	M10	1600
SK.01.45.240	140 - 150	45 - 50	2	106	3	123	45	M14	M10	2000
SK.01.45.250	160 - 170	16 - 24	2	106	2	72	45	M14	M8	800
SK.01.45.260	160 - 170	24 - 33	2	106	2	82	45	M14	M10	1250
SK.01.45.270	160 - 170	33 - 45	2	106	3	123	45	M14	M10	1600
SK.01.45.280	160 - 170	45 - 50	2	106	3	123	45	M14	M10	2000
SK.01.45.290	200	16 - 24	2	116	2	72	45	M16	M8	800
SK.01.45.300	200	24 - 33	2	116	2	82	45	M16	M10	1250
SK.01.45.310	200	33 - 45	2	116	3	123	45	M16	M10	1600
SK.01.45.320	200	45 - 50	2	116	3	123	45	M16	M10	2000
SK.01.45.330	250	16 - 24	2	116	2	72	45	M16	M8	800
SK.01.45.340	250	24 - 33	2	116	2	82	45	M16	M10	1250
SK.01.45.350	250	33 - 45	2	116	3	123	45	M16	M10	1600
SK.01.45.360	250	45 - 50	2	116	3	123	45	M16	M10	2000
SK.01.45.370	300	16 - 24	2	116	2	72	45	M16	M8	800
SK.01.45.380	300	24 - 33	2	116	2	82	45	M16	M10	1250
SK.01.45.390	300	33 - 45	2	116	3	123	45	M16	M10	1600
SK.01.45.400	300	45 - 50	2	116	3	123	45	M16	M10	2000



## SK45

STUD OR TUBE - CABLE



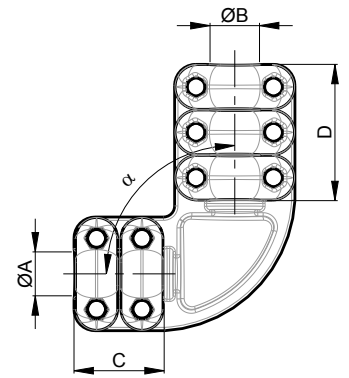
PART NUMBER	A	B	COVERS A	C	COVERS B	D	α	BOLTS A	BOLTS B	CURRENT [A]
SK.01.45.500	2"IPS (60,3mm)	16 - 24	2	92	2	72	45	M12	M8	800
SK.01.45.510	2"IPS (60,3mm)	24 - 33	2	92	2	82	45	M12	M10	1250
SK.01.45.520	2"IPS (60,3mm)	33 - 45	2	92	3	123	45	M12	M10	1600
SK.01.45.530	2"IPS (60,3mm)	45 - 50	2	92	3	123	45	M12	M10	2000
SK.01.45.540	2,5"IPS (73mm)	16 - 24	2	92	2	72	45	M12	M8	800
SK.01.45.550	2,5"IPS (73mm)	24 - 33	2	92	2	82	45	M12	M10	1250
SK.01.45.560	2,5"IPS (73mm)	33 - 45	2	92	3	123	45	M12	M10	1600
SK.01.45.570	2,5"IPS (73mm)	45 - 50	2	92	3	123	45	M12	M10	2000
SK.01.45.580	3"IPS (88,9mm)	16 - 24	2	92	2	72	45	M12	M8	800
SK.01.45.590	3"IPS (88,9mm)	24 - 33	2	92	2	82	45	M12	M10	1250
SK.01.45.600	3"IPS (88,9mm)	33 - 45	2	92	3	123	45	M12	M10	1600
SK.01.45.610	3"IPS (88,9mm)	45 - 50	2	92	3	123	45	M12	M10	2000
SK.01.45.620	3,5"IPS (101,6mm)	16 - 24	2	92	2	72	45	M12	M8	800
SK.01.45.630	3,5"IPS (101,6mm)	24 - 33	2	92	2	82	45	M12	M10	1250
SK.01.45.640	3,5"IPS (101,6mm)	33 - 45	2	92	3	123	45	M12	M10	1600
SK.01.45.650	3,5"IPS (101,6mm)	45 - 50	2	92	3	123	45	M12	M10	2000
SK.01.45.660	4"IPS (114,3mm)	16 - 24	2	106	2	72	45	M14	M8	800
SK.01.45.670	4"IPS (114,3mm)	24 - 33	2	106	2	82	45	M14	M10	1250
SK.01.45.680	4"IPS (114,3mm)	33 - 45	2	106	3	123	45	M14	M10	1600
SK.01.45.690	4"IPS (114,3mm)	45 - 50	2	106	3	123	45	M14	M10	2000
SK.01.45.700	5"IPS (141,3mm)	16 - 24	2	106	2	72	45	M14	M8	800
SK.01.45.710	5"IPS (141,3mm)	24 - 33	2	106	2	82	45	M14	M10	1250
SK.01.45.720	5"IPS (141,3mm)	33 - 45	2	106	3	123	45	M14	M10	1600
SK.01.45.730	5"IPS (141,3mm)	45 - 50	2	106	3	123	45	M14	M10	2000
SK.01.45.740	6"IPS (168,2mm)	16 - 24	2	106	2	72	45	M14	M8	800
SK.01.45.750	6"IPS (168,2mm)	24 - 33	2	106	2	82	45	M14	M10	1250
SK.01.45.760	6"IPS (168,2mm)	33 - 45	2	106	3	123	45	M14	M10	1600
SK.01.45.770	6"IPS (168,2mm)	45 - 50	2	106	3	123	45	M14	M10	2000
SK.01.45.780	8"IPS (219mm)	16 - 24	2	116	2	72	45	M16	M8	800
SK.01.45.790	8"IPS (219mm)	24 - 33	2	116	2	82	45	M16	M10	1250
SK.01.45.800	8"IPS (219mm)	33 - 45	2	116	3	123	45	M16	M10	1600
SK.01.45.810	8"IPS (219mm)	45 - 50	2	116	3	123	45	M16	M10	2000





## SK90

STUD OR TUBE - CABLE

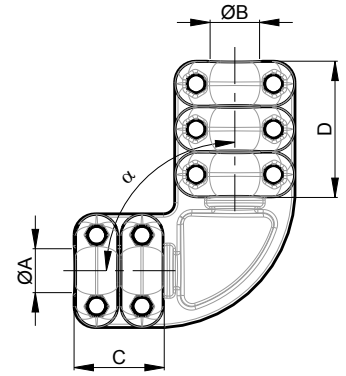


PART NUMBER	A	B	COVERS A	C	COVERS B	D	α	BOLTS A	BOLTS B	CURRENT [A]
SK.01.90.010	30 - 40	16 - 24	2	82	2	72	90	M10	M8	800
SK.01.90.020	30 - 40	24 - 33	2	82	2	82	90	M10	M10	1250
SK.01.90.030	30 - 40	33 - 45	2	82	3	123	90	M10	M10	1600
SK.01.90.040	30 - 40	45 - 50	2	82	3	123	90	M10	M10	2000
SK.01.90.050	50 - 60	16 - 24	2	92	2	72	90	M12	M8	800
SK.01.90.060	50 - 60	24 - 33	2	92	2	82	90	M12	M10	1250
SK.01.90.070	50 - 60	33 - 45	2	92	3	123	90	M12	M10	1600
SK.01.90.080	50 - 60	45 - 50	2	92	3	123	90	M12	M10	2000
SK.01.90.090	70 - 80	16 - 24	2	92	2	72	90	M12	M8	800
SK.01.90.100	70 - 80	24 - 33	2	92	2	82	90	M12	M10	1250
SK.01.90.110	70 - 80	33 - 45	2	92	3	123	90	M12	M10	1600
SK.01.90.120	70 - 80	45 - 50	2	92	3	123	90	M12	M10	2000
SK.01.90.130	90 - 100	16 - 24	2	92	2	72	90	M12	M8	800
SK.01.90.140	90 - 100	24 - 33	2	92	2	82	90	M12	M10	1250
SK.01.90.150	90 - 100	33 - 45	2	92	3	123	90	M12	M10	1600
SK.01.90.160	90 - 100	45 - 50	2	92	3	123	90	M12	M10	2000
SK.01.90.170	120	16 - 24	2	106	2	72	90	M14	M8	800
SK.01.90.180	120	24 - 33	2	106	2	82	90	M14	M10	1250
SK.01.90.190	120	33 - 45	2	106	3	123	90	M14	M10	1600
SK.01.90.200	120	45 - 50	2	106	3	123	90	M14	M10	2000
SK.01.90.210	140 - 150	16 - 24	2	106	2	72	90	M14	M8	800
SK.01.90.220	140 - 150	24 - 33	2	106	2	82	90	M14	M10	1250
SK.01.90.230	140 - 150	33 - 45	2	106	3	123	90	M14	M10	1600
SK.01.90.240	140 - 150	45 - 50	2	106	3	123	90	M14	M10	2000
SK.01.90.250	160 - 170	16 - 24	2	106	2	72	90	M14	M8	800
SK.01.90.260	160 - 170	24 - 33	2	106	2	82	90	M14	M10	1250
SK.01.90.270	160 - 170	33 - 45	2	106	3	123	90	M14	M10	1600
SK.01.90.280	160 - 170	45 - 50	2	106	3	123	90	M14	M10	2000
SK.01.90.290	200	16 - 24	2	116	2	72	90	M16	M8	800
SK.01.90.300	200	24 - 33	2	116	2	82	90	M16	M10	1250
SK.01.90.310	200	33 - 45	2	116	3	123	90	M16	M10	1600
SK.01.90.320	200	45 - 50	2	116	3	123	90	M16	M10	2000
SK.01.90.330	250	16 - 24	2	116	2	72	90	M16	M8	800
SK.01.90.340	250	24 - 33	2	116	2	82	90	M16	M10	1250
SK.01.90.350	250	33 - 45	2	116	3	123	90	M16	M10	1600
SK.01.90.360	250	45 - 50	2	116	3	123	90	M16	M10	2000
SK.01.90.370	300	16 - 24	2	116	2	72	90	M16	M8	800
SK.01.90.380	300	24 - 33	2	116	2	82	90	M16	M10	1250
SK.01.90.390	300	33 - 45	2	116	3	123	90	M16	M10	1600
SK.01.90.400	300	45 - 50	2	116	3	123	90	M16	M10	2000



## SK90

STUD OR TUBE - CABLE

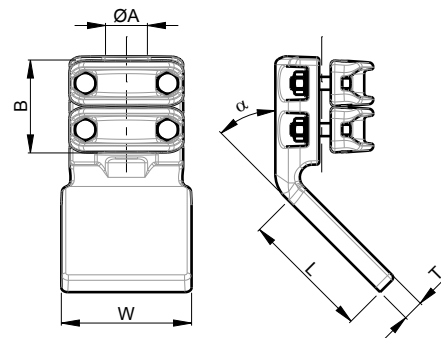


PART NUMBER	A	B	COVERS A	C	COVERS B	D	α	BOLTS A	BOLTS B	CURRENT [A]
SK.01.90.500	2"IPS (60,3mm)	16 - 24	2	92	2	72	90	M12	M8	800
SK.01.90.510	2"IPS (60,3mm)	24 - 33	2	92	2	82	90	M12	M10	1250
SK.01.90.520	2"IPS (60,3mm)	33 - 45	2	92	3	123	90	M12	M10	1600
SK.01.90.530	2"IPS (60,3mm)	45 - 50	2	92	3	123	90	M12	M10	2000
SK.01.90.540	2,5"IPS (73mm)	16 - 24	2	92	2	72	90	M12	M8	800
SK.01.90.550	2,5"IPS (73mm)	24 - 33	2	92	2	82	90	M12	M10	1250
SK.01.90.560	2,5"IPS (73mm)	33 - 45	2	92	3	123	90	M12	M10	1600
SK.01.90.570	2,5"IPS (73mm)	45 - 50	2	92	3	123	90	M12	M10	2000
SK.01.90.580	3"IPS (88,9mm)	16 - 24	2	92	2	72	90	M12	M8	800
SK.01.90.590	3"IPS (88,9mm)	24 - 33	2	92	2	82	90	M12	M10	1250
SK.01.90.600	3"IPS (88,9mm)	33 - 45	2	92	3	123	90	M12	M10	1600
SK.01.90.610	3"IPS (88,9mm)	45 - 50	2	92	3	123	90	M12	M10	2000
SK.01.90.620	3,5"IPS (101,6mm)	16 - 24	2	92	2	72	90	M12	M8	800
SK.01.90.630	3,5"IPS (101,6mm)	24 - 33	2	92	2	82	90	M12	M10	1250
SK.01.90.640	3,5"IPS (101,6mm)	33 - 45	2	92	3	123	90	M12	M10	1600
SK.01.90.650	3,5"IPS (101,6mm)	45 - 50	2	92	3	123	90	M12	M10	2000
SK.01.90.660	4"IPS (114,3mm)	16 - 24	2	106	2	72	90	M14	M8	800
SK.01.90.670	4"IPS (114,3mm)	24 - 33	2	106	2	82	90	M14	M10	1250
SK.01.90.680	4"IPS (114,3mm)	33 - 45	2	106	3	123	90	M14	M10	1600
SK.01.90.690	4"IPS (114,3mm)	45 - 50	2	106	3	123	90	M14	M10	2000
SK.01.90.700	5"IPS (141,3mm)	16 - 24	2	106	2	72	90	M14	M8	800
SK.01.90.710	5"IPS (141,3mm)	24 - 33	2	106	2	82	90	M14	M10	1250
SK.01.90.720	5"IPS (141,3mm)	33 - 45	2	106	3	123	90	M14	M10	1600
SK.01.90.730	5"IPS (141,3mm)	45 - 50	2	106	3	123	90	M14	M10	2000
SK.01.90.740	6"IPS (168,2mm)	16 - 24	2	106	2	72	90	M14	M8	800
SK.01.90.750	6"IPS (168,2mm)	24 - 33	2	106	2	82	90	M14	M10	1250
SK.01.90.760	6"IPS (168,2mm)	33 - 45	2	106	3	123	90	M14	M10	1600
SK.01.90.770	6"IPS (168,2mm)	45 - 50	2	106	3	123	90	M14	M10	2000
SK.01.90.780	8"IPS (219mm)	16 - 24	2	116	2	72	90	M16	M8	800
SK.01.90.790	8"IPS (219mm)	24 - 33	2	116	2	82	90	M16	M10	1250
SK.01.90.800	8"IPS (219mm)	33 - 45	2	116	3	123	90	M16	M10	1600
SK.01.90.810	8"IPS (219mm)	45 - 50	2	116	3	123	90	M16	M10	2000



## JAK01

CABLE - PAD



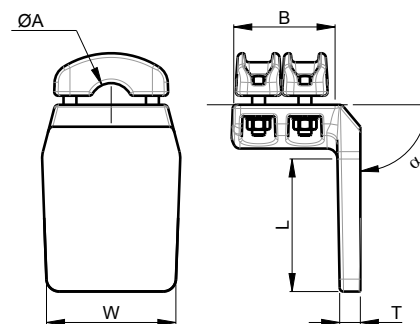
UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

A2-70

PAD

PART NUMBER	A	COVERS	B	L	W	T	α	BOLTS A	CURRENT [A]
JAK.01.45.010	16,0 - 21,6	2	66	76	76	16	45	M8	750
JAK.01.45.020	16,0 - 21,6	2	66	100	100	16	45	M8	750
JAK.01.45.030	16,0 - 21,6	2	66	125	125	16	45	M8	750
JAK.01.45.040	21,6 - 29,6	2	74	76	76	16	45	M10	1000
JAK.01.45.050	21,6 - 29,6	2	74	100	100	16	45	M10	1000
JAK.01.45.060	21,6 - 29,6	2	74	125	125	16	45	M10	1000
JAK.01.45.070	29,6 - 37,6	2	74	76	76	16	45	M10	1250
JAK.01.45.080	29,6 - 37,6	2	74	100	100	16	45	M10	1250
JAK.01.45.090	29,6 - 37,6	2	74	125	125	16	45	M10	1250



UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

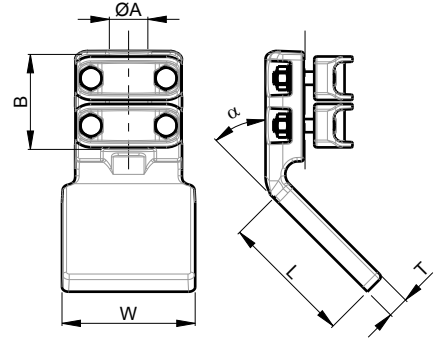
A2-70

PAD

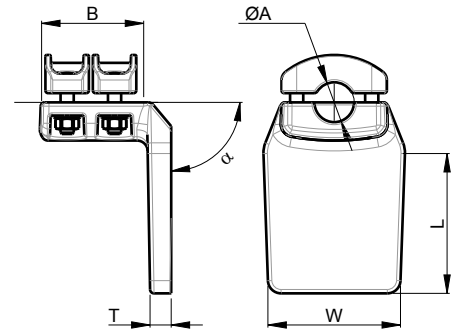
PART NUMBER	A	COVERS	B	L	W	T	α	BOLTS A	CURRENT [A]
JAK.01.90.010	16,0 - 21,6	2	66	76	76	16	90	M8	750
JAK.01.90.020	16,0 - 21,6	2	66	100	100	16	90	M8	750
JAK.01.90.030	16,0 - 21,6	2	66	125	125	16	90	M8	750
JAK.01.90.040	21,6 - 29,6	2	74	76	76	16	90	M10	1000
JAK.01.90.050	21,6 - 29,6	2	74	100	100	16	90	M10	1000
JAK.01.90.060	21,6 - 29,6	2	74	125	125	16	90	M10	1000
JAK.01.90.070	29,6 - 37,6	2	74	76	76	16	90	M10	1250
JAK.01.90.080	29,6 - 37,6	2	74	100	100	16	90	M10	1250
JAK.01.90.090	29,6 - 37,6	2	74	125	125	16	90	M10	1250

# JAK02

STUD - PAD



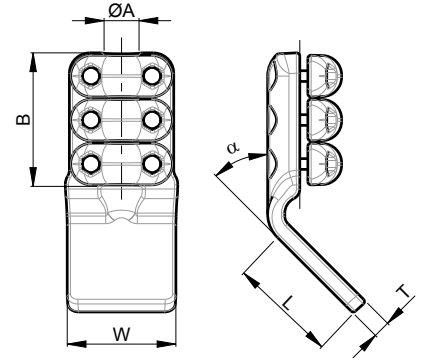
PART NUMBER	A	COVERS A	B	L	W	T	α	BOLTS A	CURRENT [A]
JAK.02.45.010	30	2	74	76	76	16	45	M10	1000
JAK.02.45.020	30	2	74	100	100	16	45	M10	1000
JAK.02.45.030	30	2	74	125	125	16	45	M10	1000
JAK.02.45.040	40	2	74	76	76	16	45	M10	1200
JAK.02.45.050	40	2	74	100	100	16	45	M10	1600
JAK.02.45.060	40	2	74	125	125	16	45	M10	1600
JAK.02.45.070	50	2	80	76	76	16	45	M12	1200
JAK.02.45.080	50	2	80	100	100	16	45	M12	1600
JAK.02.45.090	50	2	80	125	125	16	45	M12	1600



PART NUMBER	A	COVERS A	B	L	W	T	α	BOLTS A	CURRENT [A]
JAK.02.90.010	30	2	74	76	76	16	90	M10	1000
JAK.02.90.020	30	2	74	100	100	16	90	M10	1000
JAK.02.90.030	30	2	74	125	125	16	90	M10	1000
JAK.02.90.040	40	2	74	76	76	16	90	M10	1200
JAK.02.90.050	40	2	74	100	100	16	90	M10	1600
JAK.02.90.060	40	2	74	125	125	16	90	M10	1600
JAK.02.90.070	50	2	80	76	76	16	90	M12	1200
JAK.02.90.080	50	2	80	100	100	16	90	M12	1600
JAK.02.90.090	50	2	80	125	125	16	90	M12	1600

## SAK01

CABLE-PAD



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

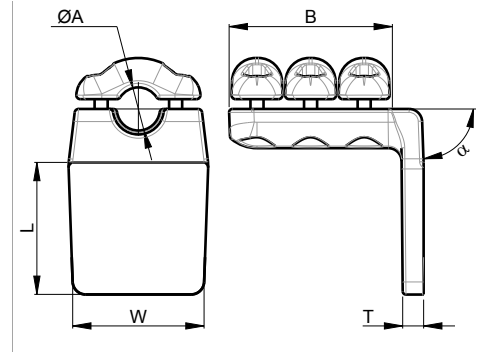
**PAD**

PART NUMBER	A	COVERS	B	L	W	T	α	BOLTS A	CURRENT [A]
SAK.01.45.010	16 - 24	2	72	76	76	16	45	M8	800
SAK.01.45.020	16 - 24	2	72	100	100	16	45	M8	800
SAK.01.45.030	16 - 24	2	72	125	125	16	45	M8	800
SAK.01.45.040	16 - 24	2	72	100	200	16	45	M8	800
SAK.01.45.050	24 - 33	2	82	76	76	16	45	M10	1250
SAK.01.45.060	24 - 33	2	82	100	100	16	45	M10	1250
SAK.01.45.070	24 - 33	2	82	125	125	16	45	M10	1250
SAK.01.45.080	24 - 33	2	82	100	200	16	45	M10	1250
SAK.01.45.090	33 - 45	3	123	76	76	25	45	M10	1600
SAK.01.45.100	33 - 45	3	123	100	100	20	45	M10	1600
SAK.01.45.110	33 - 45	3	123	125	125	16	45	M10	1600
SAK.01.45.120	33 - 45	3	123	100	200	16	45	M10	1600
SAK.01.45.130	45 - 50	3	123	76	76	25	45	M10	2000
SAK.01.45.140	45 - 50	3	123	100	100	20	45	M10	2000
SAK.01.45.150	45 - 50	3	123	125	125	16	45	M10	2000
SAK.01.45.160	45 - 50	3	123	100	200	16	45	M10	2000



# SAK01

CABLE - PAD



PART NUMBER	A	COVERS	B	L	W	T	α	BOLTS A	CURRENT [A]
SAK.01.90.010	16 - 24	2	72	76	76	16	90	M8	800
SAK.01.90.020	16 - 24	2	72	100	100	16	90	M8	800
SAK.01.90.030	16 - 24	2	72	125	125	16	90	M8	800
SAK.01.90.040	16 - 24	2	72	100	200	16	90	M8	800
SAK.01.90.050	24 - 33	2	82	76	76	16	90	M10	1250
SAK.01.90.060	24 - 33	2	82	100	100	16	90	M10	1250
SAK.01.90.070	24 - 33	2	82	125	125	16	90	M10	1250
SAK.01.90.080	24 - 33	2	82	100	200	16	90	M10	1250
SAK.01.90.090	33 - 45	3	123	76	76	25	90	M10	1600
SAK.01.90.100	33 - 45	3	123	100	100	20	90	M10	1600
SAK.01.90.110	33 - 45	3	123	125	125	16	90	M10	1600
SAK.01.90.120	33 - 45	3	123	100	200	16	90	M10	1600
SAK.01.90.130	45 - 50	3	123	76	76	25	90	M10	2000
SAK.01.90.140	45 - 50	3	123	100	100	20	90	M10	2000
SAK.01.90.150	45 - 50	3	123	125	125	16	90	M10	2000
SAK.01.90.160	45 - 50	3	123	100	200	16	90	M10	2000



## SAK02

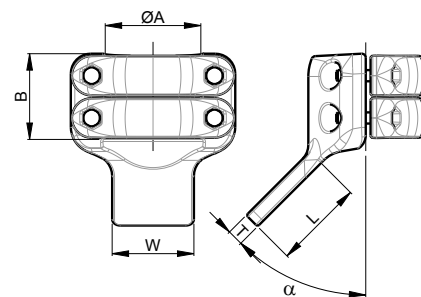
TUBE - PAD

UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

**PAD**



PART NUMBER	A	COVERS	B	L	W	T	α	BOLTS A	CURRENT [A]
SAK.02.45.060	50 - 60	2	92	100	100	20	45	M12	2000
SAK.02.45.070	50 - 60	2	92	125	125	16	45	M12	2000
SAK.02.45.080	50 - 60	2	92	100	200	16	45	M12	2000
SAK.02.45.100	70 - 80	2	92	100	100	25	45	M12	2500
SAK.02.45.110	70 - 80	2	92	125	125	20	45	M12	2500
SAK.02.45.120	70 - 80	2	92	100	200	16	45	M12	3200
SAK.02.45.140	90 - 100	2	92	100	100	30	45	M12	3200
SAK.02.45.150	90 - 100	2	92	125	125	25	45	M12	3200
SAK.02.45.160	90 - 100	2	92	100	200	16	45	M12	3200
SAK.02.45.180	120	2	106	100	100	30	45	M14	3200
SAK.02.45.190	120	2	106	125	125	35	45	M14	4000
SAK.02.45.200	120	2	106	100	200	20	45	M14	4000
SAK.02.45.220	140 - 150	2	106	100	100	30	45	M14	3200
SAK.02.45.230	140 - 150	2	106	125	125	35	45	M14	4000
SAK.02.45.240	140 - 150	2	106	100	200	20	45	M14	4000
SAK.02.45.260	160-170	2	106	100	100	30	45	M14	3200
SAK.02.45.270	160-170	2	106	125	125	35	45	M14	4000
SAK.02.45.280	160-170	2	106	100	200	20	45	M14	4000
SAK.02.45.300	200	2	174	100	100	35	45	M16	3600
SAK.02.45.310	200	2	174	125	125	35	45	M16	4000
SAK.02.45.320	200	2	174	100	200	20	45	M16	4000
SAK.02.45.340	250	2	174	100	100	35	45	M16	3600
SAK.02.45.350	250	2	174	125	125	35	45	M16	4000
SAK.02.45.360	250	2	174	100	200	20	45	M16	4000
SAK.02.45.510	2"IPS (60,3mm)	2	92	100	100	20	45	M12	2000
SAK.02.45.520	2"IPS (60,3mm)	2	92	125	125	16	45	M12	2000
SAK.02.45.530	2"IPS (60,3mm)	2	92	100	200	16	45	M12	2000
SAK.02.45.550	2,5"IPS (73mm)	2	92	100	100	20	45	M12	2000
SAK.02.45.560	2,5"IPS (73mm)	2	92	125	125	16	45	M12	2000
SAK.02.45.570	2,5"IPS (73mm)	2	92	100	200	16	45	M12	2000
SAK.02.45.545	3"IPS (88,9mm)	2	92	100	100	25	45	M12	2500
SAK.02.45.600	3"IPS (88,9mm)	2	92	125	125	20	45	M12	2500
SAK.02.45.610	3"IPS (88,9mm)	2	92	100	200	16	45	M12	2500
SAK.02.45.630	3,5"IPS (101,6mm)	2	92	100	100	30	45	M12	3200
SAK.02.45.640	3,5"IPS (101,6mm)	2	92	125	125	25	45	M12	3200
SAK.02.45.650	3,5"IPS (101,6mm)	2	92	100	200	16	45	M12	3200
SAK.02.45.670	4"IPS (114,3mm)	2	106	100	100	30	45	M14	3200
SAK.02.45.680	4"IPS (114,3mm)	2	106	125	125	25	45	M14	3200
SAK.02.45.645	4"IPS (114,3mm)	2	106	100	200	16	45	M14	3200
SAK.02.45.710	5"IPS (141,3mm)	2	106	100	100	30	45	M14	3200
SAK.02.45.720	5"IPS (141,3mm)	2	106	125	125	35	45	M14	4000
SAK.02.45.730	5"IPS (141,3mm)	2	106	100	200	20	45	M14	4000
SAK.02.45.750	6"IPS (168,2mm)	2	106	100	100	30	45	M14	3200
SAK.02.45.760	6"IPS (168,2mm)	2	106	125	125	35	45	M14	4000
SAK.02.45.770	6"IPS (168,2mm)	2	106	100	200	20	45	M14	4000
SAK.02.45.745	8"IPS (219mm)	2	116	100	100	30	45	M16	3200
SAK.02.45.800	8"IPS (219mm)	2	116	125	125	35	45	M16	4000
SAK.02.45.810	8"IPS (219mm)	2	116	100	200	20	45	M16	4000



## SAK02

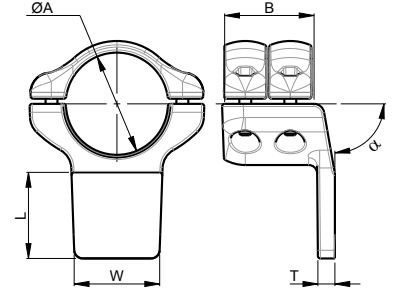
TUBE - PAD

UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

**PAD**



PART NUMBER	A	COVERS	B	L	W	T	α	BOLTS A	CURRENT [A]
SAK.02.90.010	50 - 60	2	92	100	100	20	90	M12	2000
SAK.02.90.020	50 - 60	2	92	125	125	16	90	M12	2000
SAK.02.90.030	50 - 60	2	92	100	200	16	90	M12	2000
SAK.02.90.040	70 - 80	2	92	100	100	25	90	M12	2500
SAK.02.90.050	70 - 80	2	92	125	125	20	90	M12	2500
SAK.02.90.060	70 - 80	2	92	100	200	16	90	M12	3200
SAK.02.90.070	90 - 100	2	92	100	100	30	90	M12	3200
SAK.02.90.080	90 - 100	2	92	125	125	25	90	M12	3200
SAK.02.90.090	90 - 100	2	92	100	200	16	90	M12	3200
SAK.02.90.100	120	2	106	100	100	30	90	M14	3200
SAK.02.90.110	120	2	106	125	125	35	90	M14	4000
SAK.02.90.120	120	2	106	100	200	20	90	M14	4000
SAK.02.90.130	140 -150	2	106	100	100	30	90	M14	3200
SAK.02.90.140	140 -150	2	106	125	125	35	90	M14	4000
SAK.02.90.150	140 -150	2	106	100	200	20	90	M14	4000
SAK.02.90.160	160-170	2	106	100	100	30	90	M14	3200
SAK.02.90.170	160-170	2	106	125	125	35	90	M14	4000
SAK.02.90.180	160-170	2	106	100	200	20	90	M14	4000
SAK.02.90.190	200	2	174	100	100	35	90	M16	3600
SAK.02.90.200	200	2	174	125	125	35	90	M16	4000
SAK.02.90.210	200	2	174	100	200	20	90	M16	4000
SAK.02.90.220	250	2	174	100	100	35	90	M16	3600
SAK.02.90.230	250	2	174	125	125	35	90	M16	4000
SAK.02.90.240	250	2	174	100	200	20	90	M16	4000

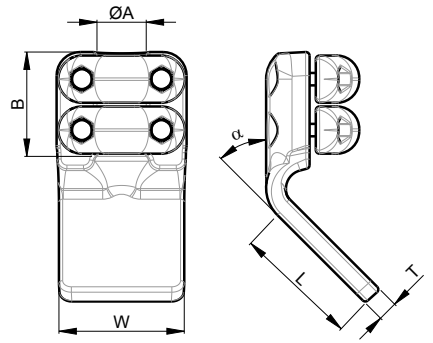
SAK.02.90.510	2"IPS (60,3mm)	2	72	100	100	20	90	M12	2000
SAK.02.90.520	2"IPS (60,3mm)	2	72	125	125	16	90	M12	2000
SAK.02.90.530	2"IPS (60,3mm)	2	72	100	200	16	90	M12	2000
SAK.02.90.550	2,5"IPS (73mm)	2	72	100	100	20	90	M12	2000
SAK.02.90.560	2,5"IPS (73mm)	2	72	125	125	16	90	M12	2000
SAK.02.90.570	2,5"IPS (73mm)	2	72	100	200	16	90	M12	2000
SAK.02.90.590	3"IPS (88,9mm)	2	72	100	100	25	90	M12	2500
SAK.02.90.600	3"IPS (88,9mm)	2	72	125	125	20	90	M12	2500
SAK.02.90.610	3"IPS (88,9mm)	2	72	100	200	16	90	M12	2500
SAK.02.90.630	3,5"IPS (101,6mm)	2	72	100	100	30	90	M12	3200
SAK.02.90.640	3,5"IPS (101,6mm)	2	72	125	125	25	90	M12	3200
SAK.02.90.650	3,5"IPS (101,6mm)	2	72	100	200	16	90	M12	3200
SAK.02.90.670	4"IPS (114,3mm)	2	72	100	100	30	90	M14	3200
SAK.02.90.680	4"IPS (114,3mm)	2	72	125	125	25	90	M14	3200
SAK.02.90.690	4"IPS (114,3mm)	2	72	100	200	16	90	M14	3200
SAK.02.90.710	5"IPS (141,3mm)	2	72	100	100	30	90	M14	3200
SAK.02.90.720	5"IPS (141,3mm)	2	72	125	125	35	90	M14	4000
SAK.02.90.730	5"IPS (141,3mm)	2	72	100	200	20	90	M14	4000
SAK.02.90.750	6"IPS (168,2mm)	2	72	100	100	30	90	M14	3200
SAK.02.90.760	6"IPS (168,2mm)	2	72	125	125	35	90	M14	4000
SAK.02.90.770	6"IPS (168,2mm)	2	72	100	200	20	90	M14	4000
SAK.02.90.790	8"IPS (219mm)	2	72	100	100	30	90	M16	3200
SAK.02.90.800	8"IPS (219mm)	2	72	125	125	35	90	M16	4000
SAK.02.90.810	8"IPS (219mm)	2	72	100	200	20	90	M16	4000



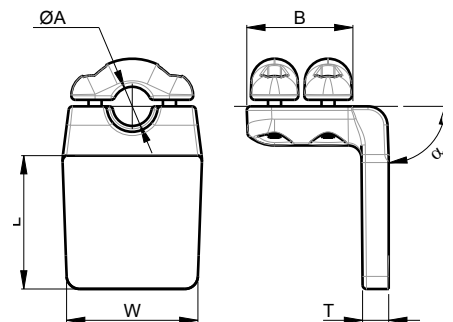


## SAK03

STUD - PAD



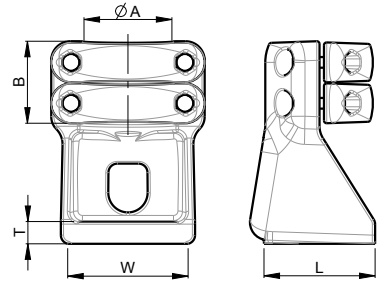
PART NUMBER	A	COVERS	B	L	W	T	α	BOLTS A	CURRENT [A]
SAK.03.45.010	30	2	82	76	76	16	45	M10	1000
SAK.03.45.020	30	2	82	100	100	16	45	M10	1000
SAK.03.45.030	30	2	82	125	125	16	45	M10	1000
SAK.03.45.040	30	2	82	100	200	16	45	M10	1000
SAK.03.45.050	40	2	82	76	76	20	45	M10	1600
SAK.03.45.060	40	2	82	100	100	16	45	M10	1600
SAK.03.45.070	40	2	82	125	125	16	45	M10	1600
SAK.03.45.080	40	2	82	100	200	16	45	M10	1600
SAK.03.45.090	50	2	92	76	76	20	45	M12	1600
SAK.03.45.100	50	2	92	100	100	25	45	M12	2500
SAK.03.45.110	50	2	92	125	125	20	45	M12	2500
SAK.03.45.120	50	2	92	100	200	16	45	M12	2500
SAK.03.45.130	60	2	92	76	76	20	45	M12	1600
SAK.03.45.140	60	2	92	100	100	30	45	M12	3200
SAK.03.45.150	60	2	92	125	125	25	45	M12	3200
SAK.03.45.160	60	2	92	100	200	16	45	M12	3200



PART NUMBER	A	COVERS	B	L	W	T	α	BOLTS A	CURRENT [A]
SAK.03.90.010	30	2	82	76	76	16	90	M10	1000
SAK.03.90.020	30	2	82	100	100	16	90	M10	1000
SAK.03.90.030	30	2	82	125	125	16	90	M10	1000
SAK.03.90.040	30	2	82	100	200	16	90	M10	1000
SAK.03.90.050	40	2	82	76	76	20	90	M10	1600
SAK.03.90.060	40	2	82	100	100	16	90	M10	1600
SAK.03.90.070	40	2	82	125	125	16	90	M10	1600
SAK.03.90.080	40	2	82	100	200	16	90	M10	1600
SAK.03.90.090	50	2	92	76	76	20	90	M12	1600
SAK.03.90.100	50	2	92	100	100	25	90	M12	2500
SAK.03.90.110	50	2	92	125	125	20	90	M12	2500
SAK.03.90.120	50	2	92	100	200	16	90	M12	2500
SAK.03.90.130	60	2	92	76	76	20	90	M12	1600
SAK.03.90.140	60	2	92	100	100	30	90	M12	3200
SAK.03.90.150	60	2	92	125	125	25	90	M12	3200
SAK.03.90.160	60	2	92	100	200	16	90	M12	3200

# SAT01

TUBE



PART NUMBER	A	COVERS	B	L	W	T	BOLTS A	CURRENT [A]
SAT.010	50 - 60	2	92	100	100	20	M12	2000
SAT.020	50 - 60	2	92	125	125	16	M12	2000
SAT.030	50 - 60	2	92	100	200	16	M12	2000
SAT.040	70 - 80	2	92	100	100	25	M12	2500
SAT.050	70 - 80	2	92	125	125	20	M12	2500
SAT.060	70 - 80	2	92	100	200	16	M12	3200
SAT.070	90 - 100	2	92	100	100	30	M12	3200
SAT.080	90 - 100	2	92	125	125	25	M12	3200
SAT.090	90 - 100	2	92	100	200	16	M12	3200
SAT.100	120	2	106	100	100	30	M14	3200
SAT.110	120	2	106	125	125	35	M14	4000
SAT.120	120	2	106	100	200	20	M14	4000
SAT.130	140 -150	2	106	100	100	30	M14	3200
SAT.140	140 -150	2	106	125	125	35	M14	4000
SAT.150	140 -150	2	106	100	200	20	M14	4000
SAT.160	160-170	2	106	100	100	30	M14	3200
SAT.170	160-170	2	106	125	125	35	M14	4000
SAT.180	160-170	2	106	100	200	20	M14	4000
SAT.190	200	2	116	100	100	35	M16	3600
SAT.200	200	2	116	125	125	35	M16	4000
SAT.210	200	2	116	100	200	20	M16	4000
SAT.220	250	2	116	100	100	35	M16	3600
SAT.230	250	2	116	125	125	35	M16	4000
SAT.240	250	2	116	100	200	20	M16	4000
SAT.510	2"IPS (60,3mm)	2	92	100	100	20	M12	2000
SAT.520	2"IPS (60,3mm)	2	92	125	125	16	M12	2000
SAT.530	2"IPS (60,3mm)	2	92	100	200	16	M12	2000
SAT.540	2,5"IPS (73mm)	2	92	100	100	20	M12	2000
SAT.550	2,5"IPS (73mm)	2	92	125	125	16	M12	2000
SAT.560	2,5"IPS (73mm)	2	92	100	200	16	M12	2000
SAT.570	3"IPS (88,9mm)	2	92	100	100	25	M12	2500
SAT.580	3"IPS (88,9mm)	2	92	125	125	20	M12	2500
SAT.590	3"IPS (88,9mm)	2	92	100	200	16	M12	2500
SAT.600	3,5"IPS (101,6mm)	2	92	100	100	30	M12	3200
SAT.610	3,5"IPS (101,6mm)	2	92	125	125	25	M12	3200
SAT.620	3,5"IPS (101,6mm)	2	92	100	200	16	M12	3200
SAT.630	4"IPS (114,3mm)	2	106	100	100	30	M14	3200
SAT.640	4"IPS (114,3mm)	2	106	125	125	25	M14	3200
SAT.650	4"IPS (114,3mm)	2	106	100	200	16	M14	3200
SAT.660	5"IPS (141,3mm)	2	106	100	100	30	M14	3200
SAT.670	5"IPS (141,3mm)	2	106	125	125	35	M14	4000
SAT.680	5"IPS (141,3mm)	2	106	100	200	20	M14	4000
SAT.690	6"IPS (168,2mm)	2	106	100	100	30	M14	3200
SAT.700	6"IPS (168,2mm)	2	106	125	125	35	M14	4000
SAT.710	6"IPS (168,2mm)	2	106	100	200	20	M14	4000
SAT.720	8"IPS (219mm)	2	116	100	100	30	M16	3200
SAT.730	8"IPS (219mm)	2	116	125	125	35	M16	4000
SAT.740	8"IPS (219mm)	2	116	100	200	20	M16	4000

# STS

AL-T COUPLER CONNECTOR



# STK

AL-15° ANGLE- T-CONNECTOR



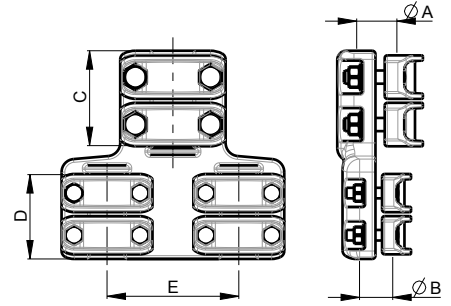
# SATJ

AL-AFRAME-CONNECTOR TO CONNECT  
A TUBE WITH TWO TUBES 15°



# JSD

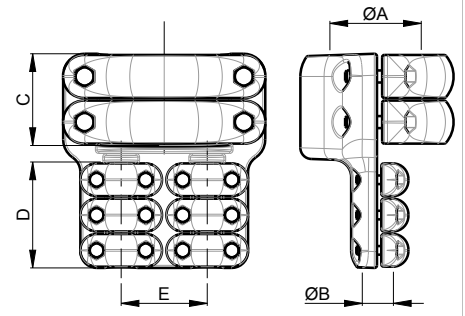
STUD OR TUBE - CABLE



PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	BOLTS A	BOLTS B
JSD.100.010	30 - 40	16,0 - 21,6	2	74	2	66	100	M10	M8
JSD.100.020	30 - 40	21,6 - 29,6	2	74	2	74	100	M10	M10
JSD.100.030	30 - 40	29,6 - 37,6	2	74	2	74	100	M10	M10
JSD.100.040	50 - 60	16,0 - 21,6	2	80	2	66	100	M12	M8
JSD.100.050	50 - 60	21,6 - 29,6	2	80	2	74	100	M12	M10
JSD.100.060	50 - 60	29,6 - 37,6	2	80	2	74	100	M12	M10
JSD.100.070	70 - 80	16,0 - 21,6	2	80	2	66	100	M12	M8
JSD.100.080	70 - 80	21,6 - 29,6	2	80	2	74	100	M12	M10
JSD.100.090	70 - 80	29,6 - 37,6	2	80	2	74	100	M12	M10
JSD.100.100	90 - 100	16,0 - 21,6	2	80	2	66	100	M12	M8
JSD.100.110	90 - 100	21,6 - 29,6	2	80	2	74	100	M12	M10
JSD.100.120	90 - 100	29,6 - 37,6	2	80	2	74	100	M12	M10
JSD.100.130	120	16,0 - 21,6	2	80	2	66	100	M12	M8
JSD.100.140	120	21,6 - 29,6	2	80	2	74	100	M12	M10
JSD.100.150	120	29,6 - 37,6	2	80	2	74	100	M12	M10
JSD.100.160	140 - 150	16,0 - 21,6	2	80	2	66	100	M12	M8
JSD.100.170	140 - 150	21,6 - 29,6	2	80	2	74	100	M12	M10
JSD.100.180	140 - 150	29,6 - 37,6	2	80	2	74	100	M12	M10
JSD.200.010	30 - 40	16,0 - 21,6	2	74	2	66	200	M10	M8
JSD.200.020	30 - 40	21,6 - 29,6	2	74	2	74	200	M10	M10
JSD.200.030	30 - 40	29,6 - 37,6	2	74	2	74	200	M10	M10
JSD.200.040	50 - 60	16,0 - 21,6	2	80	2	66	200	M12	M8
JSD.200.050	50 - 60	21,6 - 29,6	2	80	2	74	200	M12	M10
JSD.200.060	50 - 60	29,6 - 37,6	2	80	2	74	200	M12	M10
JSD.200.070	70 - 80	16,0 - 21,6	2	80	2	66	200	M12	M8
JSD.200.080	70 - 80	21,6 - 29,6	2	80	2	74	200	M12	M10
JSD.200.090	70 - 80	29,6 - 37,6	2	80	2	74	200	M12	M10
JSD.200.200	90 - 100	16,0 - 21,6	2	80	2	66	200	M12	M8
JSD.200.110	90 - 100	21,6 - 29,6	2	80	2	74	200	M12	M10
JSD.200.120	90 - 100	29,6 - 37,6	2	80	2	74	200	M12	M10
JSD.200.130	120	16,0 - 21,6	2	80	2	66	200	M12	M8
JSD.200.140	120	21,6 - 29,6	2	80	2	74	200	M12	M10
JSD.200.150	120	29,6 - 37,6	2	80	2	74	200	M12	M10
JSD.200.160	140 - 150	16,0 - 21,6	2	80	2	66	200	M12	M8
JSD.200.170	140 - 150	21,6 - 29,6	2	80	2	74	200	M12	M10
JSD.200.180	140 - 150	29,6 - 37,6	2	80	2	74	200	M12	M10

## SSD

STUD OR TUBE - CABLE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

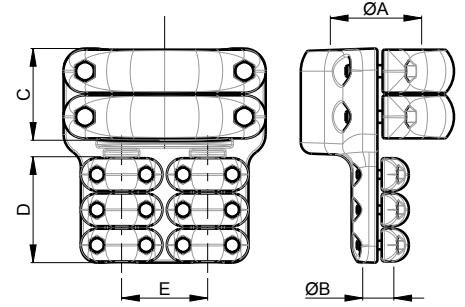


PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	BOLTS A	BOLTS B
SSD.100.010	30 - 40	16 - 24	2	82	2	72	100	M10	M8
SSD.100.020	30 - 40	24 - 33	2	82	2	82	100	M10	M10
SSD.100.030	30 - 40	33 - 45	2	82	3	123	100	M10	M10
SSD.100.040	30 - 40	45 - 50	2	82	3	123	100	M10	M10
SSD.100.050	50 - 60	16 - 24	2	92	2	72	100	M12	M8
SSD.100.060	50 - 60	24 - 33	2	92	2	82	100	M12	M10
SSD.100.070	50 - 60	33 - 45	2	92	3	123	100	M12	M10
SSD.100.080	50 - 60	45 - 50	2	92	3	123	100	M12	M10
SSD.100.090	70 - 80	16 - 24	2	92	2	72	100	M12	M8
SSD.100.100	70 - 80	24 - 33	2	92	2	82	100	M12	M10
SSD.100.110	70 - 80	33 - 45	2	92	3	123	100	M12	M10
SSD.100.120	70 - 80	45 - 50	2	92	3	123	100	M12	M10
SSD.100.130	90 - 100	16 - 24	2	92	2	72	100	M12	M8
SSD.100.140	90 - 100	24 - 33	2	92	2	82	100	M12	M10
SSD.100.150	90 - 100	33 - 45	2	92	3	123	100	M12	M10
SSD.100.160	90 - 100	45 - 50	2	92	3	123	100	M12	M10
SSD.100.170	120	16 - 24	2	106	2	72	100	M14	M8
SSD.100.180	120	24 - 33	2	106	2	82	100	M14	M10
SSD.100.190	120	33 - 45	2	106	3	123	100	M14	M10
SSD.100.200	120	45 - 50	2	106	3	123	100	M14	M10
SSD.100.210	140 - 150	16 - 24	2	106	2	72	100	M14	M8
SSD.100.220	140 - 150	24 - 33	2	106	2	82	100	M14	M10
SSD.100.230	140 - 150	33 - 45	2	106	3	123	100	M14	M10
SSD.100.240	140 - 150	45 - 50	2	106	3	123	100	M14	M10
SSD.100.250	160-170	16 - 24	2	106	2	72	100	M14	M8
SSD.100.260	160-170	24 - 33	2	106	2	82	100	M14	M10
SSD.100.270	160-170	33 - 45	2	106	3	123	100	M14	M10
SSD.100.280	160-170	45 - 50	2	106	3	123	100	M14	M10
SSD.100.290	200	16 - 24	2	116	2	72	100	M16	M8
SSD.100.300	200	24 - 33	2	116	2	82	100	M16	M10
SSD.100.310	200	33 - 45	2	116	3	123	100	M16	M10
SSD.100.320	200	45 - 50	2	116	3	123	100	M16	M10
SSD.100.330	250	16 - 24	2	116	2	72	100	M16	M8
SSD.100.340	250	24 - 33	2	116	2	82	100	M16	M10
SSD.100.350	250	33 - 45	2	116	3	123	100	M16	M10
SSD.100.360	250	45 - 50	2	116	3	123	100	M16	M10
SSD.100.370	300	16 - 24	2	116	2	72	100	M16	M8
SSD.100.380	300	24 - 33	2	116	2	82	100	M16	M10
SSD.100.390	300	33 - 45	2	116	3	123	100	M16	M10
SSD.100.400	300	45 - 50	2	116	3	123	100	M16	M10



# SSD

STUD OR TUBE - CABLE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

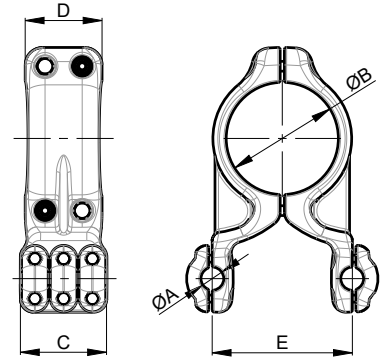


PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	BOLTS A	BOLTS B
SSD.200.010	30 - 40	16 - 24	2	82	2	72	200	M10	M8
SSD.200.020	30 - 40	24 - 33	2	82	2	82	200	M10	M10
SSD.200.030	30 - 40	33 - 45	2	82	3	123	200	M10	M10
SSD.200.040	30 - 40	45 - 50	2	82	3	123	200	M10	M10
SSD.200.050	50 - 60	16 - 24	2	92	2	72	200	M12	M8
SSD.200.060	50 - 60	24 - 33	2	92	2	82	200	M12	M10
SSD.200.070	50 - 60	33 - 45	2	92	3	123	200	M12	M10
SSD.200.080	50 - 60	45 - 50	2	92	3	123	200	M12	M10
SSD.200.090	70 - 80	16 - 24	2	92	2	72	200	M12	M8
SSD.200.100	70 - 80	24 - 33	2	92	2	82	200	M12	M10
SSD.200.110	70 - 80	33 - 45	2	92	3	123	200	M12	M10
SSD.200.120	70 - 80	45 - 50	2	92	3	123	200	M12	M10
SSD.200.130	90 - 100	16 - 24	2	92	2	72	200	M12	M8
SSD.200.140	90 - 100	24 - 33	2	92	2	82	200	M12	M10
SSD.200.150	90 - 100	33 - 45	2	92	3	123	200	M12	M10
SSD.200.160	90 - 100	45 - 50	2	92	3	123	200	M12	M10
SSD.200.170	120	16 - 24	2	106	2	72	200	M14	M8
SSD.200.180	120	24 - 33	2	106	2	82	200	M14	M10
SSD.200.190	120	33 - 45	2	106	3	123	200	M14	M10
SSD.200.200	120	45 - 50	2	106	3	123	200	M14	M10
SSD.200.210	140 - 150	16 - 24	2	106	2	72	200	M14	M8
SSD.200.220	140 - 150	24 - 33	2	106	2	82	200	M14	M10
SSD.200.230	140 - 150	33 - 45	2	106	3	123	200	M14	M10
SSD.200.240	140 - 150	45 - 50	2	106	3	123	200	M14	M10
SSD.200.250	160 - 170	16 - 24	2	106	2	72	200	M14	M8
SSD.200.260	160 - 170	24 - 33	2	106	2	82	200	M14	M10
SSD.200.270	160 - 170	33 - 45	2	106	3	123	200	M14	M10
SSD.200.280	160 - 170	45 - 50	2	106	3	123	200	M14	M10
SSD.200.290	200	16 - 24	2	116	2	72	200	M16	M8
SSD.200.300	200	24 - 33	2	116	2	82	200	M16	M10
SSD.200.310	200	33 - 45	2	116	3	123	200	M16	M10
SSD.200.320	200	45 - 50	2	116	3	123	200	M16	M10
SSD.200.330	250	16 - 24	2	116	2	72	200	M16	M8
SSD.200.340	250	24 - 33	2	116	2	82	200	M16	M10
SSD.200.350	250	33 - 45	2	116	3	123	200	M16	M10
SSD.200.360	250	45 - 50	2	116	3	123	200	M16	M10
SSD.200.370	300	16 - 24	2	116	2	72	200	M16	M8
SSD.200.380	300	24 - 33	2	116	2	82	200	M16	M10
SSD.200.390	300	33 - 45	2	116	3	123	200	M16	M10
SSD.200.400	300	45 - 50	2	116	3	123	200	M16	M10



## SPD

CABLE - TUBE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**



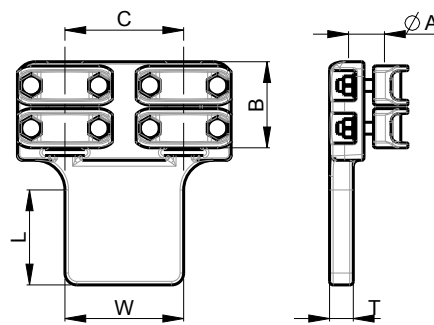
PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	BOLTS A	BOLTS B
SPD.100.020	16 - 24	50 - 60	2	72	2	92	100	M8	M12
SPD.100.030	16 - 24	70 - 80	2	72	2	92	100	M8	M12
SPD.100.040	16 - 24	90 - 100	2	72	2	92	100	M8	M12
SPD.100.050	16 - 24	120	2	72	2	106	100	M8	M14
SPD.100.060	16 - 24	140 - 150	2	72	2	106	100	M8	M14
SPD.100.070	16 - 24	160-170	2	72	2	106	100	M8	M14
SPD.100.080	16 - 24	200	2	72	2	116	100	M8	M16
SPD.100.090	16 - 24	250	2	72	2	116	100	M8	M16
SPD.100.100	16 - 24	300	2	72	2	116	100	M8	M16
SPD.100.120	24 - 33	50 - 60	3	123	2	92	100	M10	M12
SPD.100.130	24 - 33	70 - 80	3	123	2	92	100	M10	M12
SPD.100.140	24 - 33	90 - 100	3	123	2	92	100	M10	M12
SPD.100.150	24 - 33	120	3	123	2	106	100	M10	M14
SPD.100.160	24 - 33	140 - 150	3	123	2	106	100	M10	M14
SPD.100.170	24 - 33	160-170	3	123	2	106	100	M10	M14
SPD.100.180	24 - 33	200	3	123	2	116	100	M10	M16
SPD.100.190	24 - 33	250	3	123	2	116	100	M10	M16
SPD.100.200	24 - 33	300	3	123	2	116	100	M10	M16
SPD.100.220	33 - 45	50 - 60	3	123	2	92	100	M10	M12
SPD.100.230	33 - 45	70 - 80	3	123	2	92	100	M10	M12
SPD.100.240	33 - 45	90 - 100	3	123	2	92	100	M10	M12
SPD.100.250	33 - 45	120	3	123	2	106	100	M10	M14
SPD.100.260	33 - 45	140 - 150	3	123	2	106	100	M10	M14
SPD.100.270	33 - 45	160-170	3	123	2	106	100	M10	M14
SPD.100.280	33 - 45	200	3	123	2	116	100	M10	M16
SPD.100.290	33 - 45	250	3	123	2	116	100	M10	M16
SPD.100.300	33 - 45	300	3	123	2	116	100	M10	M16
SPD.100.320	45 - 50	50 - 60	3	123	2	92	100	M10	M12
SPD.100.330	45 - 50	70 - 80	3	123	2	92	100	M10	M12
SPD.100.340	45 - 50	90 - 100	3	123	2	92	100	M10	M12
SPD.100.350	45 - 50	120	3	123	2	106	100	M10	M14
SPD.100.360	45 - 50	140 - 150	3	123	2	106	100	M10	M14
SPD.100.370	45 - 50	160-170	3	123	2	106	100	M10	M14
SPD.100.380	45 - 50	200	3	123	2	116	100	M10	M16
SPD.100.390	45 - 50	250	3	123	2	116	100	M10	M16
SPD.100.400	45 - 50	300	3	123	2	116	100	M10	M16





## JDA

CABLE - PAD



UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

**A2-70**

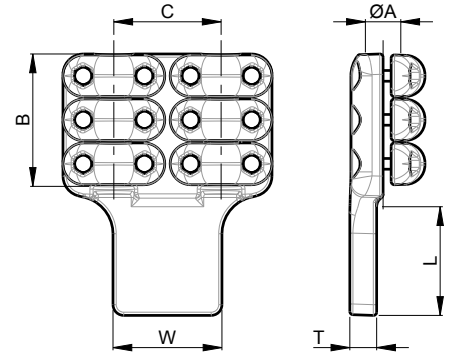


PART NUMBER	A	B	C	COVERS A	L	W	T	BOLTS A	CURRENT [A]
JDA.100.010	16,0 - 21,6	66	100	2	100	100	16	M8	1500
JDA.100.020	16,0 - 21,6	66	100	2	125	125	16	M8	1500
JDA.100.030	16,0 - 21,6	66	100	2	100	200	16	M8	1500
JDA.100.040	21,6 - 29,6	74	100	2	100	100	20	M10	2000
JDA.100.050	21,6 - 29,6	74	100	2	125	125	16	M10	2000
JDA.100.060	21,6 - 29,6	74	100	2	100	200	16	M10	2000
JDA.100.070	29,6 - 37,6	74	100	2	100	100	25	M10	2500
JDA.100.080	29,6 - 37,6	74	100	2	125	125	20	M10	2500
JDA.100.090	29,6 - 37,6	74	100	2	100	200	16	M10	2500
JDA.200.010	16,0 - 21,6	66	200	2	100	100	16	M8	1500
JDA.200.020	16,0 - 21,6	66	200	2	125	125	16	M8	1500
JDA.200.030	16,0 - 21,6	66	200	2	100	200	16	M8	1500
JDA.200.040	21,6 - 29,6	74	200	2	100	100	20	M10	2000
JDA.200.050	21,6 - 29,6	74	200	2	125	125	16	M10	2000
JDA.200.060	21,6 - 29,6	74	200	2	100	200	16	M10	2000
JDA.200.070	29,6 - 37,6	74	200	2	100	100	25	M10	2500
JDA.200.080	29,6 - 37,6	74	200	2	125	125	20	M10	2500
JDA.200.090	29,6 - 37,6	74	200	2	100	200	16	M10	2500



# SDA

CABLE - PAD



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

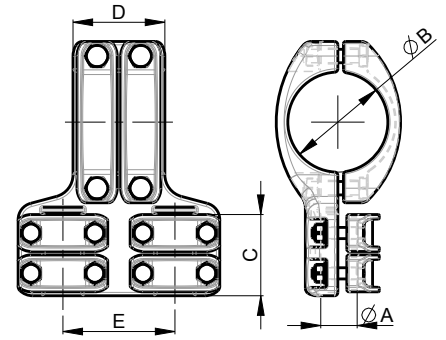
PAD



PART NUMBER	A	B	C	COVERS A	L	W	T	BOLTS A	CURRENT [A]
SDA.100.010	16 - 24	72	100	2	100	100	16	M8	1600
SDA.100.020	16 - 24	72	100	2	125	125	16	M8	1600
SDA.100.030	16 - 24	72	100	2	100	200	16	M8	1600
SDA.100.040	24 - 33	82	100	2	100	100	25	M10	2500
SDA.100.050	24 - 33	82	100	2	125	125	20	M10	2500
SDA.100.060	24 - 33	82	100	2	100	200	16	M10	2500
SDA.100.070	33 - 45	123	113	3	100	100	35	M10	3200
SDA.100.080	33 - 45	123	113	3	125	125	25	M10	3200
SDA.100.090	33 - 45	123	113	3	100	200	16	M10	3200
SDA.100.100	45 - 50	123	118	3	100	100	40	M10	4000
SDA.100.110	45 - 50	123	118	3	125	125	35	M10	4000
SDA.100.120	45 - 50	123	118	3	100	200	20	M10	4000
SDA.200.010	16 - 24	72	200	2	100	100	16	M8	1600
SDA.200.020	16 - 24	72	200	2	125	125	16	M8	1600
SDA.200.030	16 - 24	72	200	2	100	200	16	M8	1600
SDA.200.040	24 - 33	82	200	2	100	100	25	M10	2500
SDA.200.050	24 - 33	82	200	2	125	125	20	M10	2500
SDA.200.060	24 - 33	82	200	2	100	200	16	M10	2500
SDA.200.070	33 - 45	123	200	3	100	100	35	M10	3200
SDA.200.080	33 - 45	123	200	3	125	125	25	M10	3200
SDA.200.090	33 - 45	123	200	3	100	200	16	M10	3200
SDA.200.100	45 - 50	123	200	3	100	100	40	M10	4000
SDA.200.110	45 - 50	123	200	3	125	125	35	M10	4000
SDA.200.120	45 - 50	123	200	3	100	200	20	M10	4000

# JDT01

CABLE - TUBE



UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

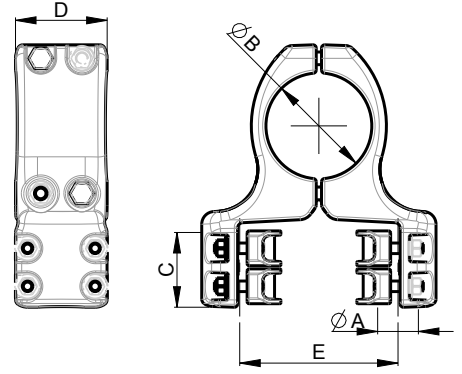
**A2-70**



PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	BOLTS A	BOLTS B
JDT.01.100.020	16,0 - 21,6	50 - 60	2	66	2	82	100	M8	M12
JDT.01.100.030	16,0 - 21,6	70 - 80	2	66	2	82	100	M8	M12
JDT.01.100.040	16,0 - 21,6	90 - 100	2	66	2	82	100	M8	M12
JDT.01.100.050	16,0 - 21,6	120	2	66	2	82	100	M8	M12
JDT.01.100.060	16,0 - 21,6	140 - 150	2	66	2	82	100	M8	M12
JDT.01.100.080	21,6 - 29,6	50 - 60	2	74	2	82	100	M10	M12
JDT.01.100.090	21,6 - 29,6	70 - 80	2	74	2	82	100	M10	M12
JDT.01.100.100	21,6 - 29,6	90 - 100	2	74	2	82	100	M10	M12
JDT.01.100.110	21,6 - 29,6	120	2	74	2	82	100	M10	M12
JDT.01.100.120	21,6 - 29,6	140 - 150	2	74	2	82	100	M10	M12
JDT.01.100.140	29,6 - 37,6	50 - 60	2	74	2	82	100	M10	M12
JDT.01.100.150	29,6 - 37,6	70 - 80	2	74	2	82	100	M10	M12
JDT.01.100.160	29,6 - 37,6	90 - 100	2	74	2	82	100	M10	M12
JDT.01.100.170	29,6 - 37,6	120	2	74	2	82	100	M10	M12
JDT.01.100.180	29,6 - 37,6	140 - 150	2	74	2	82	100	M10	M12
JDT.01.200.020	16,0 - 21,6	50 - 60	2	66	2	82	200	M8	M12
JDT.01.200.030	16,0 - 21,6	70 - 80	2	66	2	82	200	M8	M12
JDT.01.200.040	16,0 - 21,6	90 - 100	2	66	2	82	200	M8	M12
JDT.01.200.050	16,0 - 21,6	120	2	66	2	82	200	M8	M12
JDT.01.200.060	16,0 - 21,6	140 - 150	2	66	2	82	200	M8	M12
JDT.01.200.080	21,6 - 29,6	50 - 60	2	74	2	82	200	M10	M12
JDT.01.200.090	21,6 - 29,6	70 - 80	2	74	2	82	200	M10	M12
JDT.01.200.200	21,6 - 29,6	90 - 100	2	74	2	82	200	M10	M12
JDT.01.200.110	21,6 - 29,6	120	2	74	2	82	200	M10	M12
JDT.01.200.120	21,6 - 29,6	140 - 150	2	74	2	82	200	M10	M12
JDT.01.200.140	29,6 - 37,6	50 - 60	2	74	2	82	200	M10	M12
JDT.01.200.150	29,6 - 37,6	70 - 80	2	74	2	82	200	M10	M12
JDT.01.200.160	29,6 - 37,6	90 - 100	2	74	2	82	200	M10	M12
JDT.01.200.170	29,6 - 37,6	120	2	74	2	82	200	M10	M12
JDT.01.200.180	29,6 - 37,6	140 - 150	2	74	2	82	200	M10	M12

## JDT02

CABLE - TUBE



UP TO  
**230kV**

**BIMET**  
CUPAL OF TIN

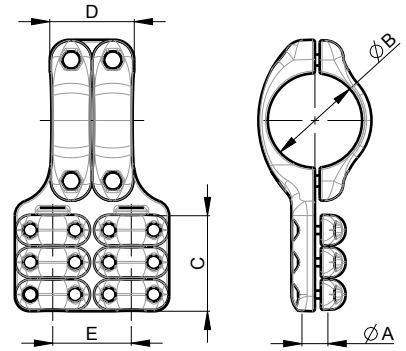
**A2-70**



PART NUMBER	A	B	COVERS A	C	D	E	BOLTS A	BOLTS B
JDT.02.100.020	16,0 - 21,6	50 - 60	2	66	82	100	M8	M12
JDT.02.100.030	16,0 - 21,6	70 - 80	2	66	82	100	M8	M12
JDT.02.100.040	16,0 - 21,6	90 - 100	2	66	82	100	M8	M12
JDT.02.100.050	16,0 - 21,6	120	2	66	82	100	M8	M12
JDT.02.100.060	16,0 - 21,6	140 -150	2	66	82	100	M8	M12
JDT.02.100.080	21,6 - 29,6	50 - 60	2	74	82	100	M10	M12
JDT.02.100.090	21,6 - 29,6	70 - 80	2	74	82	100	M10	M12
JDT.02.100.100	21,6 - 29,6	90 - 100	2	74	82	100	M10	M12
JDT.02.100.110	21,6 - 29,6	120	2	74	82	100	M10	M12
JDT.02.100.120	21,6 - 29,6	140 -150	2	74	82	100	M10	M12
JDT.02.100.140	29,6 - 37,6	50 - 60	2	74	82	100	M10	M12
JDT.02.100.150	29,6 - 37,6	70 - 80	2	74	82	100	M10	M12
JDT.02.100.160	29,6 - 37,6	90 - 100	2	74	82	100	M10	M12
JDT.02.100.170	29,6 - 37,6	120	2	74	82	100	M10	M12
JDT.02.100.180	29,6 - 37,6	140 -150	2	74	82	100	M10	M12
JDT.02.200.020	16,0 - 21,6	50 - 60	2	66	82	200	M8	M12
JDT.02.200.030	16,0 - 21,6	70 - 80	2	66	82	200	M8	M12
JDT.02.200.040	16,0 - 21,6	90 - 100	2	66	82	200	M8	M12
JDT.02.200.050	16,0 - 21,6	120	2	66	82	200	M8	M12
JDT.02.200.060	16,0 - 21,6	140 -150	2	66	82	200	M8	M12
JDT.02.200.080	21,6 - 29,6	50 - 60	2	74	82	200	M10	M12
JDT.02.200.090	21,6 - 29,6	70 - 80	2	74	82	200	M10	M12
JDT.02.200.200	21,6 - 29,6	90 - 100	2	74	82	200	M10	M12
JDT.02.200.110	21,6 - 29,6	120	2	74	82	200	M10	M12
JDT.02.200.120	21,6 - 29,6	140 -150	2	74	82	200	M10	M12
JDT.02.200.140	29,6 - 37,6	50 - 60	2	74	82	200	M10	M12
JDT.02.200.150	29,6 - 37,6	70 - 80	2	74	82	200	M10	M12
JDT.02.200.160	29,6 - 37,6	90 - 100	2	74	82	200	M10	M12
JDT.02.200.170	29,6 - 37,6	120	2	74	82	200	M10	M12
JDT.02.200.180	29,6 - 37,6	140 -150	2	74	82	200	M10	M12

## SDT01

CABLE - TUBE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

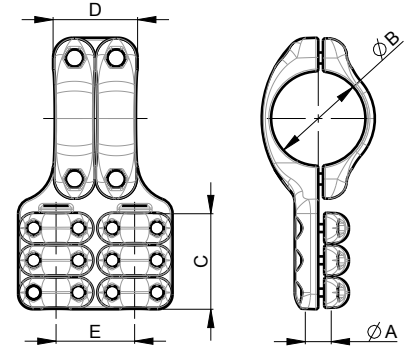


PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	BOLTS A	BOLTS B	CURRENT [A]
SDT.01.100.010	16 - 24	50 - 60	2	72	2	92	100	M8	M12	1600
SDT.01.100.020	16 - 24	70 - 80	2	72	2	92	100	M8	M12	1600
SDT.01.100.030	16 - 24	90 - 100	2	72	2	92	100	M8	M12	1600
SDT.01.100.040	16 - 24	120	2	72	2	106	100	M8	M14	1600
SDT.01.100.050	16 - 24	140 - 150	2	72	2	106	100	M8	M14	1600
SDT.01.100.060	16 - 24	160-170	2	72	2	106	100	M8	M14	1600
SDT.01.100.070	16 - 24	200	2	72	2	116	100	M8	M16	1600
SDT.01.100.080	16 - 24	250	2	72	2	116	100	M8	M16	1600
SDT.01.100.090	16 - 24	300	2	72	2	116	100	M8	M16	1600
SDT.01.100.100	24 - 33	50 - 60	2	82	2	92	100	M10	M12	2500
SDT.01.100.110	24 - 33	70 - 80	2	82	2	92	100	M10	M12	2500
SDT.01.100.120	24 - 33	90 - 100	2	82	2	92	100	M10	M12	2500
SDT.01.100.130	24 - 33	120	2	82	2	106	100	M10	M14	2500
SDT.01.100.140	24 - 33	140 - 150	2	82	2	106	100	M10	M14	2500
SDT.01.100.150	24 - 33	160-170	2	82	2	106	100	M10	M14	2500
SDT.01.100.160	24 - 33	200	2	82	2	116	100	M10	M16	2500
SDT.01.100.170	24 - 33	250	2	82	2	116	100	M10	M16	2500
SDT.01.100.180	24 - 33	300	2	82	2	116	100	M10	M16	2500
SDT.01.100.190	33 - 45	50 - 60	3	123	2	92	110	M10	M12	3200
SDT.01.100.200	33 - 45	70 - 80	3	123	2	92	110	M10	M12	3200
SDT.01.100.210	33 - 45	90 - 100	3	123	2	92	110	M10	M12	3200
SDT.01.100.220	33 - 45	120	3	123	2	106	110	M10	M14	3200
SDT.01.100.230	33 - 45	140 - 150	3	123	2	106	110	M10	M14	3200
SDT.01.100.240	33 - 45	160-170	3	123	2	106	110	M10	M14	3200
SDT.01.100.250	33 - 45	200	3	123	2	116	110	M10	M16	3200
SDT.01.100.260	33 - 45	250	3	123	2	116	110	M10	M16	3200
SDT.01.100.270	33 - 45	300	3	123	2	116	110	M10	M16	3200
SDT.01.100.280	45 - 50	50 - 60	3	123	2	92	118	M10	M12	4000
SDT.01.100.290	45 - 50	70 - 80	3	123	2	92	118	M10	M12	4000
SDT.01.100.300	45 - 50	90 - 100	3	123	2	92	118	M10	M12	4000
SDT.01.100.310	45 - 50	120	3	123	2	106	118	M10	M14	4000
SDT.01.100.320	45 - 50	140 - 150	3	123	2	106	118	M10	M14	4000
SDT.01.100.330	45 - 50	160-170	3	123	2	106	118	M10	M14	4000
SDT.01.100.340	45 - 50	200	3	123	2	116	118	M10	M16	4000
SDT.01.100.350	45 - 50	250	3	123	2	116	118	M10	M16	4000
SDT.01.100.360	45 - 50	300	3	123	2	116	118	M10	M16	4000



## SDT01

CABLE - TUBE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

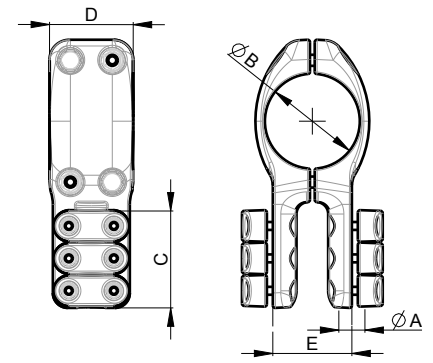


PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	BOLTS A	BOLTS B	CURRENT [A]
SDT.01.200.010	16 - 24	50 - 60	2	72	2	92	200	M8	M12	1600
SDT.01.200.020	16 - 24	70 - 80	2	72	2	92	200	M8	M12	1600
SDT.01.200.030	16 - 24	90 - 200	2	72	2	92	200	M8	M12	1600
SDT.01.200.040	16 - 24	120	2	72	2	106	200	M8	M14	1600
SDT.01.200.050	16 - 24	140 -150	2	72	2	106	200	M8	M14	1600
SDT.01.200.060	16 - 24	160-170	2	72	2	106	200	M8	M14	1600
SDT.01.200.070	16 - 24	200	2	72	2	116	200	M8	M16	1600
SDT.01.200.080	16 - 24	250	2	72	2	116	200	M8	M16	1600
SDT.01.200.090	16 - 24	300	2	72	2	116	200	M8	M16	1600
SDT.01.200.100	24 - 33	50 - 60	2	82	2	92	200	M10	M12	2500
SDT.01.200.110	24 - 33	70 - 80	2	82	2	92	200	M10	M12	2500
SDT.01.200.120	24 - 33	90 - 200	2	82	2	92	200	M10	M12	2500
SDT.01.200.130	24 - 33	120	2	82	2	106	200	M10	M14	2500
SDT.01.200.140	24 - 33	140 -150	2	82	2	106	200	M10	M14	2500
SDT.01.200.150	24 - 33	160-170	2	82	2	106	200	M10	M14	2500
SDT.01.200.160	24 - 33	200	2	82	2	116	200	M10	M16	2500
SDT.01.200.170	24 - 33	250	2	82	2	116	200	M10	M16	2500
SDT.01.200.180	24 - 33	300	2	82	2	116	200	M10	M16	2500
SDT.01.200.190	33 - 45	50 - 60	3	123	2	92	200	M10	M12	3200
SDT.01.200.200	33 - 45	70 - 80	3	123	2	92	200	M10	M12	3200
SDT.01.200.210	33 - 45	90 - 200	3	123	2	92	200	M10	M12	3200
SDT.01.200.220	33 - 45	120	3	123	2	106	200	M10	M14	3200
SDT.01.200.230	33 - 45	140 -150	3	123	2	106	200	M10	M14	3200
SDT.01.200.240	33 - 45	160-170	3	123	2	106	200	M10	M14	3200
SDT.01.200.250	33 - 45	200	3	123	2	116	200	M10	M16	3200
SDT.01.200.260	33 - 45	250	3	123	2	116	200	M10	M16	3200
SDT.01.200.270	33 - 45	300	3	123	2	116	200	M10	M16	3200
SDT.01.200.280	45 - 50	50 - 60	3	123	2	92	200	M10	M12	4000
SDT.01.200.290	45 - 50	70 - 80	3	123	2	92	200	M10	M12	4000
SDT.01.200.300	45 - 50	90 - 200	3	123	2	92	200	M10	M12	4000
SDT.01.200.310	45 - 50	120	3	123	2	106	200	M10	M14	4000
SDT.01.200.320	45 - 50	140 -150	3	123	2	106	200	M10	M14	4000
SDT.01.200.330	45 - 50	160-170	3	123	2	106	200	M10	M14	4000
SDT.01.200.340	45 - 50	200	3	123	2	116	200	M10	M16	4000
SDT.01.200.350	45 - 50	250	3	123	2	116	200	M10	M16	4000
SDT.01.200.360	45 - 50	300	3	123	2	116	200	M10	M16	4000



## SDT02

CABLE - TUBE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

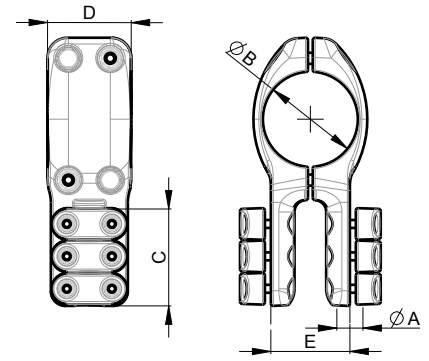


PART NUMBER	A	B	COVERS A	C	D	E	BOLTS A	BOLTS B	CURRENT [A]
SDT.02.100.010	16 - 24	50 - 60	2	72	92	100	M8	M12	1600
SDT.02.100.020	16 - 24	70 - 80	2	72	92	100	M8	M12	1600
SDT.02.100.030	16 - 24	90 - 100	2	72	92	100	M8	M12	1600
SDT.02.100.040	16 - 24	120	2	72	106	100	M8	M14	1600
SDT.02.100.050	16 - 24	140 -150	2	72	106	100	M8	M14	1600
SDT.02.100.060	16 - 24	160-170	2	72	106	100	M8	M14	1600
SDT.02.100.070	16 - 24	200	2	72	116	100	M8	M16	1600
SDT.02.100.080	16 - 24	250	2	72	116	100	M8	M16	1600
SDT.02.100.090	16 - 24	300	2	72	116	100	M8	M16	1600
SDT.02.100.100	24 - 33	50 - 60	2	82	92	100	M10	M12	2500
SDT.02.100.110	24 - 33	70 - 80	2	82	92	100	M10	M12	2500
SDT.02.100.120	24 - 33	90 - 100	2	82	92	100	M10	M12	2500
SDT.02.100.130	24 - 33	120	2	82	106	100	M10	M14	2500
SDT.02.100.140	24 - 33	140 -150	2	82	106	100	M10	M14	2500
SDT.02.100.150	24 - 33	160-170	2	82	106	100	M10	M14	2500
SDT.02.100.160	24 - 33	200	2	82	116	100	M10	M16	2500
SDT.02.100.170	24 - 33	250	2	82	116	100	M10	M16	2500
SDT.02.100.180	24 - 33	300	2	82	116	100	M10	M16	2500
SDT.02.100.190	33 - 45	50 - 60	3	123	92	100	M10	M12	3200
SDT.02.100.200	33 - 45	70 - 80	3	123	92	100	M10	M12	3200
SDT.02.100.210	33 - 45	90 - 100	3	123	92	100	M10	M12	3200
SDT.02.100.220	33 - 45	120	3	123	106	100	M10	M14	3200
SDT.02.100.230	33 - 45	140 -150	3	123	106	100	M10	M14	3200
SDT.02.100.240	33 - 45	160-170	3	123	106	100	M10	M14	3200
SDT.02.100.250	33 - 45	200	3	123	116	100	M10	M16	3200
SDT.02.100.260	33 - 45	250	3	123	116	100	M10	M16	3200
SDT.02.100.270	33 - 45	300	3	123	116	100	M10	M16	3200
SDT.02.100.280	45 - 50	50 - 60	3	123	92	100	M10	M12	4000
SDT.02.100.290	45 - 50	70 - 80	3	123	92	100	M10	M12	4000
SDT.02.100.300	45 - 50	90 - 100	3	123	92	100	M10	M12	4000
SDT.02.100.310	45 - 50	120	3	123	106	100	M10	M14	4000
SDT.02.100.320	45 - 50	140 -150	3	123	106	100	M10	M14	4000
SDT.02.100.330	45 - 50	160-170	3	123	106	100	M10	M14	4000
SDT.02.100.340	45 - 50	200	3	123	116	100	M10	M16	4000
SDT.02.100.350	45 - 50	250	3	123	116	100	M10	M16	4000
SDT.02.100.360	45 - 50	300	3	123	116	100	M10	M16	4000



## SDT02

CABLE - TUBE



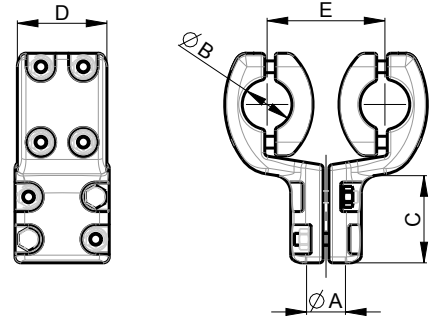
PART NUMBER	A	B	COVERS A	C	D	E	BOLTS A	BOLTS B	CURRENT [A]
SDT.02.200.010	16 - 24	50 - 60	2	72	92	200	M8	M12	1600
SDT.02.200.020	16 - 24	70 - 80	2	72	92	200	M8	M12	1600
SDT.02.200.030	16 - 24	90 - 200	2	72	92	200	M8	M12	1600
SDT.02.200.040	16 - 24	120	2	72	106	200	M8	M14	1600
SDT.02.200.050	16 - 24	140 - 150	2	72	106	200	M8	M14	1600
SDT.02.200.060	16 - 24	160-170	2	72	106	200	M8	M14	1600
SDT.02.200.070	16 - 24	200	2	72	116	200	M8	M16	1600
SDT.02.200.080	16 - 24	250	2	72	116	200	M8	M16	1600
SDT.02.200.090	16 - 24	300	2	72	116	200	M8	M16	1600
SDT.02.200.100	24 - 33	50 - 60	2	82	92	200	M10	M12	2500
SDT.02.200.110	24 - 33	70 - 80	2	82	92	200	M10	M12	2500
SDT.02.200.120	24 - 33	90 - 200	2	82	92	200	M10	M12	2500
SDT.02.200.130	24 - 33	120	2	82	106	200	M10	M14	2500
SDT.02.200.140	24 - 33	140 - 150	2	82	106	200	M10	M14	2500
SDT.02.200.150	24 - 33	160-170	2	82	106	200	M10	M14	2500
SDT.02.200.160	24 - 33	200	2	82	116	200	M10	M16	2500
SDT.02.200.170	24 - 33	250	2	82	116	200	M10	M16	2500
SDT.02.200.180	24 - 33	300	2	82	116	200	M10	M16	2500
SDT.02.200.190	33 - 45	50 - 60	3	123	92	200	M10	M12	3200
SDT.02.200.200	33 - 45	70 - 80	3	123	92	200	M10	M12	3200
SDT.02.200.210	33 - 45	90 - 200	3	123	92	200	M10	M12	3200
SDT.02.200.220	33 - 45	120	3	123	106	200	M10	M14	3200
SDT.02.200.230	33 - 45	140 - 150	3	123	106	200	M10	M14	3200
SDT.02.200.240	33 - 45	160-170	3	123	106	200	M10	M14	3200
SDT.02.200.250	33 - 45	200	3	123	116	200	M10	M16	3200
SDT.02.200.260	33 - 45	250	3	123	116	200	M10	M16	3200
SDT.02.200.270	33 - 45	300	3	123	116	200	M10	M16	3200
SDT.02.200.280	45 - 50	50 - 60	3	123	92	200	M10	M12	4000
SDT.02.200.290	45 - 50	70 - 80	3	123	92	200	M10	M12	4000
SDT.02.200.300	45 - 50	90 - 200	3	123	92	200	M10	M12	4000
SDT.02.200.310	45 - 50	120	3	123	106	200	M10	M14	4000
SDT.02.200.320	45 - 50	140 - 150	3	123	106	200	M10	M14	4000
SDT.02.200.330	45 - 50	160-170	3	123	106	200	M10	M14	4000
SDT.02.200.340	45 - 50	200	3	123	116	200	M10	M16	4000
SDT.02.200.350	45 - 50	250	3	123	116	200	M10	M16	4000
SDT.02.200.360	45 - 50	300	3	123	116	200	M10	M16	4000





# JTD

STUD - CABLE



UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

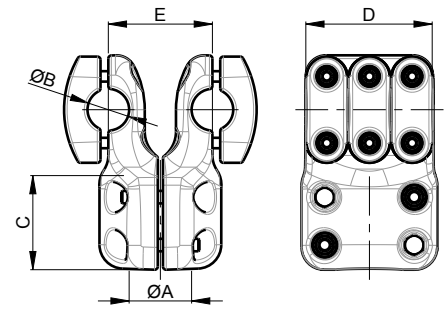
**A2-70**



PART NUMBER	A	B	C	COVERS B	D	E	BOLTS A	BOLTS B
JTD.100.010	30	16,0 - 21,6	74	2	68	100	M10	M8
JTD.100.020	30	21,6 - 29,6	74	2	76	100	M10	M10
JTD.100.030	30	29,6 - 37,6	74	2	76	100	M10	M10
JTD.100.040	40	16,0 - 21,6	74	2	68	100	M10	M8
JTD.100.050	40	21,6 - 29,6	74	2	76	100	M10	M10
JTD.100.060	40	29,6 - 37,6	74	2	76	100	M10	M10
JTD.100.070	50	16,0 - 21,6	80	2	68	100	M12	M8
JTD.100.080	50	21,6 - 29,6	80	2	76	100	M12	M10
JTD.100.090	50	29,6 - 37,6	80	2	76	100	M12	M10
JTD.100.100	60	16,0 - 21,6	80	2	68	100	M12	M8
JTD.100.110	60	21,6 - 29,6	80	2	76	100	M12	M10
JTD.100.120	60	29,6 - 37,6	80	2	76	100	M12	M10
JTD.200.010	30	16,0 - 21,6	74	2	68	200	M10	M8
JTD.200.020	30	21,6 - 29,6	74	2	76	200	M10	M10
JTD.200.030	30	29,6 - 37,6	74	2	76	200	M10	M10
JTD.200.040	40	16,0 - 21,6	74	2	68	200	M10	M8
JTD.200.050	40	21,6 - 29,6	74	2	76	200	M10	M10
JTD.200.060	40	29,6 - 37,6	74	2	76	200	M10	M10
JTD.200.070	50	16,0 - 21,6	80	2	68	200	M12	M8
JTD.200.080	50	21,6 - 29,6	80	2	76	200	M12	M10
JTD.200.090	50	29,6 - 37,6	80	2	76	200	M12	M10
JTD.200.200	60	16,0 - 21,6	80	2	68	200	M12	M8
JTD.200.110	60	21,6 - 29,6	80	2	76	200	M12	M10
JTD.200.120	60	29,6 - 37,6	80	2	76	200	M12	M10

# STD01

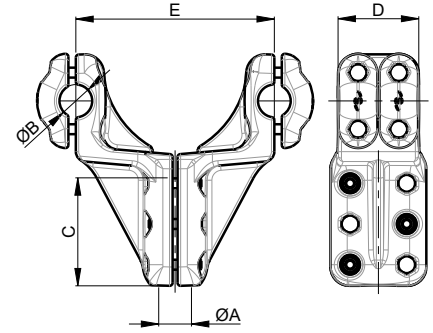
STUD - CABLE



PART NUMBER	A	B	C	COVERS A	D	E	BOLTS A	BOLTS B	CURRENT [A]
STD.01.100.010	30	16 - 24	82	2	72	100	M10	M8	1600
STD.01.100.020	30	24 - 33	82	2	82	100	M10	M10	2500
STD.01.100.030	30	33 - 45	82	3	123	100	M10	M10	3200
STD.01.100.040	30	45 - 50	82	3	123	100	M10	M10	4000
STD.01.100.050	40	16 - 24	82	2	72	100	M10	M8	1600
STD.01.100.060	40	24 - 33	82	2	82	100	M10	M10	2500
STD.01.100.070	40	33 - 45	82	3	123	100	M10	M10	3200
STD.01.100.080	40	45 - 50	82	3	123	100	M10	M10	4000
STD.01.100.090	50	16 - 24	92	2	72	100	M12	M8	1600
STD.01.100.100	50	24 - 33	92	2	82	100	M12	M10	2500
STD.01.100.110	50	33 - 45	92	3	123	100	M12	M10	3200
STD.01.100.120	50	45 - 50	92	3	123	100	M12	M10	4000
STD.01.100.130	60	16 - 24	92	2	72	100	M12	M8	1600
STD.01.100.140	60	24 - 33	92	2	82	100	M12	M10	2500
STD.01.100.150	60	33 - 45	92	3	123	100	M12	M10	3200
STD.01.100.160	60	45 - 50	92	3	123	100	M12	M10	4000
STD.01.200.010	30	16 - 24	82	2	72	200	M10	M8	1600
STD.01.200.020	30	24 - 33	82	2	82	200	M10	M10	2500
STD.01.200.030	30	33 - 45	82	3	123	200	M10	M10	3200
STD.01.200.040	30	45 - 50	82	3	123	200	M10	M10	4000
STD.01.200.050	40	16 - 24	82	2	72	200	M10	M8	1600
STD.01.200.060	40	24 - 33	82	2	82	200	M10	M10	2500
STD.01.200.070	40	33 - 45	82	3	123	200	M10	M10	3200
STD.01.200.080	40	45 - 50	82	3	123	200	M10	M10	4000
STD.01.200.090	50	16 - 24	92	2	72	200	M12	M8	1600
STD.01.200.100	50	24 - 33	92	2	82	200	M12	M10	2500
STD.01.200.110	50	33 - 45	92	3	123	200	M12	M10	3200
STD.01.200.120	50	45 - 50	92	3	123	200	M12	M10	4000
STD.01.200.130	60	16 - 24	92	2	72	200	M12	M8	1600
STD.01.200.140	60	24 - 33	92	2	82	200	M12	M10	2500
STD.01.200.150	60	33 - 45	92	3	123	200	M12	M10	3200
STD.01.200.160	60	45 - 50	92	3	123	200	M12	M10	4000

## STD02

CABLE - CABLE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

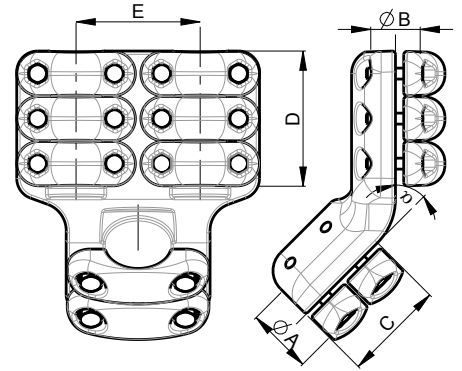
**A2-70**



PART NUMBER	A	B	C	COVERS B	D	E	BOLTS A	BOLTS B	CURRENT [A]
STD.02.100.010	16 - 24	16 - 24	72	2	72	100	M10	M8	800
STD.02.100.020	16 - 24	24 - 33	72	2	82	100	M10	M10	800
STD.02.100.030	16 - 24	33 - 45	72	2	82	100	M10	M10	800
STD.02.100.040	16 - 24	45 - 50	72	2	82	100	M10	M10	800
STD.02.100.050	24 - 33	16 - 24	82	2	72	100	M10	M8	1250
STD.02.100.060	24 - 33	24 - 33	82	2	82	100	M10	M10	1250
STD.02.100.070	24 - 33	33 - 45	82	2	82	100	M10	M10	1250
STD.02.100.080	24 - 33	45 - 50	82	2	82	100	M10	M10	1250
STD.02.100.090	33 - 45	16 - 24	123	2	72	100	M10	M8	1600
STD.02.100.100	33 - 45	24 - 33	123	2	82	100	M10	M10	1600
STD.02.100.110	33 - 45	33 - 45	123	2	82	100	M10	M10	1600
STD.02.100.120	33 - 45	45 - 50	123	2	82	100	M10	M10	1600
STD.02.100.130	45 - 50	16 - 24	123	2	72	100	M10	M8	2000
STD.02.100.140	45 - 50	24 - 33	123	2	82	100	M10	M10	2000
STD.02.100.150	45 - 50	33 - 45	123	2	82	100	M10	M10	2000
STD.02.100.160	45 - 50	45 - 50	123	2	82	100	M10	M10	2000
STD.02.200.010	16 - 24	16 - 24	72	2	72	200	M10	M8	800
STD.02.200.020	16 - 24	24 - 33	72	2	82	200	M10	M10	800
STD.02.200.030	16 - 24	33 - 45	72	2	82	200	M10	M10	800
STD.02.200.040	16 - 24	45 - 50	72	2	82	200	M10	M10	800
STD.02.200.050	24 - 33	16 - 24	82	2	72	200	M10	M8	1250
STD.02.200.060	24 - 33	24 - 33	82	2	82	200	M10	M10	1250
STD.02.200.070	24 - 33	33 - 45	82	2	82	200	M10	M10	1250
STD.02.200.080	24 - 33	45 - 50	82	2	82	200	M10	M10	1250
STD.02.200.090	33 - 45	16 - 24	123	2	72	200	M10	M8	1600
STD.02.200.100	33 - 45	24 - 33	123	2	82	200	M10	M10	1600
STD.02.200.110	33 - 45	33 - 45	123	2	82	200	M10	M10	1600
STD.02.200.120	33 - 45	45 - 50	123	2	82	200	M10	M10	1600
STD.02.200.130	45 - 50	16 - 24	123	2	72	200	M10	M8	2000
STD.02.200.140	45 - 50	24 - 33	123	2	82	200	M10	M10	2000
STD.02.200.150	45 - 50	33 - 45	123	2	82	200	M10	M10	2000
STD.02.200.160	45 - 50	45 - 50	123	2	82	200	M10	M10	2000

# SKD45

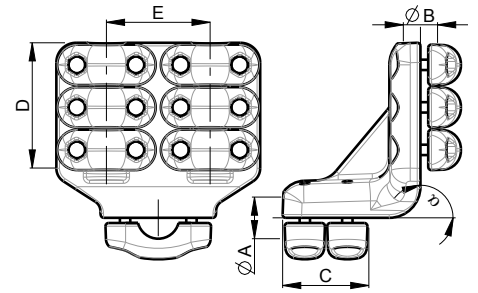
STUD - CABLE



PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	$\alpha$	BOLTS A	BOLTS B	CURRENT [A]
SKD.45.100.010	30	16 - 24	2	82	2	72	100	45	M10	M8	1600
SKD.45.100.020	30	24 - 33	2	82	2	82	100	45	M10	M10	2500
SKD.45.100.030	30	33 - 45	2	82	3	123	100	45	M10	M10	3200
SKD.45.100.040	30	45 - 50	2	82	3	123	100	45	M10	M10	4000
SKD.45.100.050	40	16 - 24	2	82	2	72	100	45	M10	M8	1600
SKD.45.100.060	40	24 - 33	2	82	2	82	100	45	M10	M10	2500
SKD.45.100.070	40	33 - 45	2	82	3	123	100	45	M10	M10	3200
SKD.45.100.080	40	45 - 50	2	82	3	123	100	45	M10	M10	4000
SKD.45.100.090	50	16 - 24	2	92	2	72	100	45	M12	M8	1600
SKD.45.100.100	50	24 - 33	2	92	2	82	100	45	M12	M10	2500
SKD.45.100.110	50	33 - 45	2	92	3	123	100	45	M12	M10	3200
SKD.45.100.120	50	45 - 50	2	92	3	123	100	45	M12	M10	4000
SKD.45.100.130	60	16 - 24	2	92	2	72	100	45	M12	M8	1600
SKD.45.100.140	60	24 - 33	2	92	2	82	100	45	M12	M10	2500
SKD.45.100.150	60	33 - 45	2	92	3	123	100	45	M12	M10	3200
SKD.45.100.160	60	45 - 50	2	92	3	123	100	45	M12	M10	4000
SKD.45.200.010	30	16 - 24	2	82	2	72	200	45	M10	M8	1600
SKD.45.200.020	30	24 - 33	2	82	2	82	200	45	M10	M10	2500
SKD.45.200.030	30	33 - 45	2	82	3	123	200	45	M10	M10	3200
SKD.45.200.040	30	45 - 50	2	82	3	123	200	45	M10	M10	4000
SKD.45.200.050	40	16 - 24	2	82	2	72	200	45	M10	M8	1600
SKD.45.200.060	40	24 - 33	2	82	2	82	200	45	M10	M10	2500
SKD.45.200.070	40	33 - 45	2	82	3	123	200	45	M10	M10	3200
SKD.45.200.080	40	45 - 50	2	82	3	123	200	45	M10	M10	4000
SKD.45.200.090	50	16 - 24	2	92	2	72	200	45	M12	M8	1600
SKD.45.200.100	50	24 - 33	2	92	2	82	200	45	M12	M10	2500
SKD.45.200.110	50	33 - 45	2	92	3	123	200	45	M12	M10	3200
SKD.45.200.120	50	45 - 50	2	92	3	123	200	45	M12	M10	4000
SKD.45.200.130	60	16 - 24	2	92	2	72	200	45	M12	M8	1600
SKD.45.200.140	60	24 - 33	2	92	2	82	200	45	M12	M10	2500
SKD.45.200.150	60	33 - 45	2	92	3	123	200	45	M12	M10	3200
SKD.45.200.160	60	45 - 50	2	92	3	123	200	45	M12	M10	4000

## SKD90

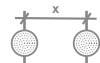
STUD - CABLE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

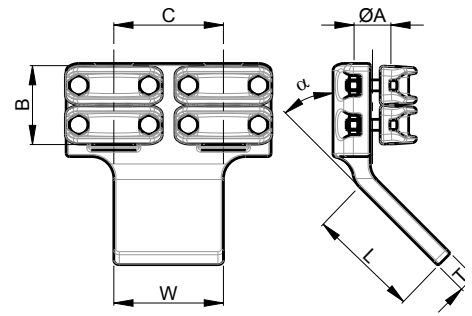
**A2-70**



PART NUMBER	A	B	COVERS A	C	COVERS B	D	E	α	BOLTS A	BOLTS B	CURRENT [A]
SKD.90.100.010	30	16 - 24	2	82	2	72	100	90	M10	M8	1600
SKD.90.100.020	30	24 - 33	2	82	2	82	100	90	M10	M10	2500
SKD.90.100.030	30	33 - 90	2	82	3	123	100	90	M10	M10	3200
SKD.90.100.040	30	90 - 50	2	82	3	123	100	90	M10	M10	4000
SKD.90.100.050	40	16 - 24	2	82	2	72	100	90	M10	M8	1600
SKD.90.100.060	40	24 - 33	2	82	2	82	100	90	M10	M10	2500
SKD.90.100.070	40	33 - 90	2	82	3	123	100	90	M10	M10	3200
SKD.90.100.080	40	90 - 50	2	82	3	123	100	90	M10	M10	4000
SKD.90.100.090	50	16 - 24	2	92	2	72	100	90	M12	M8	1600
SKD.90.100.100	50	24 - 33	2	92	2	82	100	90	M12	M10	2500
SKD.90.100.110	50	33 - 90	2	92	3	123	100	90	M12	M10	3200
SKD.90.100.120	50	90 - 50	2	92	3	123	100	90	M12	M10	4000
SKD.90.100.130	60	16 - 24	2	92	2	72	100	90	M12	M8	1600
SKD.90.100.140	60	24 - 33	2	92	2	82	100	90	M12	M10	2500
SKD.90.100.150	60	33 - 90	2	92	3	123	100	90	M12	M10	3200
SKD.90.100.160	60	90 - 50	2	92	3	123	100	90	M12	M10	4000
SKD.90.200.010	30	16 - 24	2	82	2	72	200	90	M10	M8	1600
SKD.90.200.020	30	24 - 33	2	82	2	82	200	90	M10	M10	2500
SKD.90.200.030	30	33 - 90	2	82	3	123	200	90	M10	M10	3200
SKD.90.200.040	30	90 - 50	2	82	3	123	200	90	M10	M10	4000
SKD.90.200.050	40	16 - 24	2	82	2	72	200	90	M10	M8	1600
SKD.90.200.060	40	24 - 33	2	82	2	82	200	90	M10	M10	2500
SKD.90.200.070	40	33 - 90	2	82	3	123	200	90	M10	M10	3200
SKD.90.200.080	40	90 - 50	2	82	3	123	200	90	M10	M10	4000
SKD.90.200.090	50	16 - 24	2	92	2	72	200	90	M12	M8	1600
SKD.90.200.100	50	24 - 33	2	92	2	82	200	90	M12	M10	2500
SKD.90.200.110	50	33 - 90	2	92	3	123	200	90	M12	M10	3200
SKD.90.200.120	50	90 - 50	2	92	3	123	200	90	M12	M10	4000
SKD.90.200.130	60	16 - 24	2	92	2	72	200	90	M12	M8	1600
SKD.90.200.140	60	24 - 33	2	92	2	82	200	90	M12	M10	2500
SKD.90.200.150	60	33 - 90	2	92	3	123	200	90	M12	M10	3200
SKD.90.200.160	60	90 - 50	2	92	3	123	200	90	M12	M10	4000

# JDAK45

CABLE - PAD



UP TO  
**230kV**

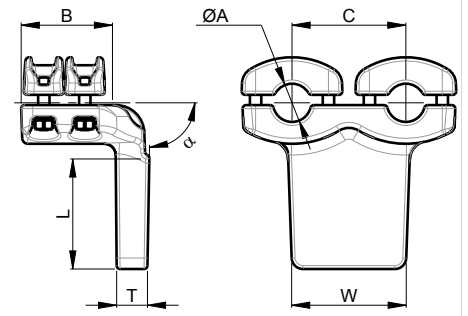
**BIMET**  
CUPAL or TIN



PART NUMBER	A	B	C	COVERS A	L	W	T	A	BOLTS A	CURRENT [A]
JDAK.45.100.010	16,0 - 21,6	66	100	2	100	100	16	45	M8	1500
JDAK.45.100.020	16,0 - 21,6	66	100	2	125	125	16	45	M8	1500
JDAK.45.100.030	16,0 - 21,6	66	100	2	100	200	16	45	M8	1500
JDAK.45.100.040	21,6 - 29,6	74	100	2	100	100	20	45	M10	2000
JDAK.45.100.050	21,6 - 29,6	74	100	2	125	125	16	45	M10	2000
JDAK.45.100.060	21,6 - 29,6	74	100	2	100	200	16	45	M10	2000
JDAK.45.100.070	29,6 - 37,6	74	100	2	100	100	25	45	M10	2500
JDAK.45.100.080	29,6 - 37,6	74	100	2	125	125	20	45	M10	2500
JDAK.45.100.090	29,6 - 37,6	74	100	2	100	200	16	45	M10	2500
JDAK.45.200.010	16,0 - 21,6	66	200	2	100	100	16	45	M8	1500
JDAK.45.200.020	16,0 - 21,6	66	200	2	125	125	16	45	M8	1500
JDAK.45.200.030	16,0 - 21,6	66	200	2	100	200	16	45	M8	1500
JDAK.45.200.040	21,6 - 29,6	74	200	2	100	100	20	45	M10	2000
JDAK.45.200.050	21,6 - 29,6	74	200	2	125	125	16	45	M10	2000
JDAK.45.200.060	21,6 - 29,6	74	200	2	100	200	16	45	M10	2000
JDAK.45.200.070	29,6 - 37,6	74	200	2	100	100	25	45	M10	2500
JDAK.45.200.080	29,6 - 37,6	74	200	2	125	125	20	45	M10	2500
JDAK.45.200.090	29,6 - 37,6	74	200	2	100	200	16	45	M10	2500

# JDAK90

CABLE - PAD



UP TO  
**230kV**

**BIMET**  
CUPAL or TIN

**A2-70**

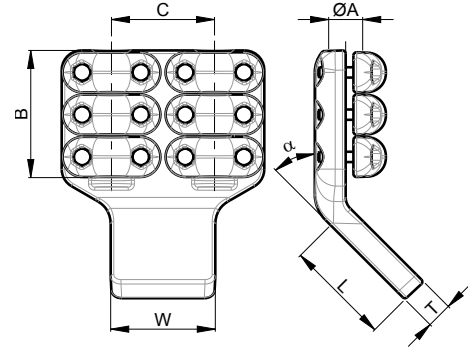
**PAD**



PART NUMBER	A	B	C	COVERS A	L	W	T	A	BOLTS A	CURRENT [A]
JDAK.90.100.010	16,0 - 21,6	66	100	2	100	100	16	90	M8	1500
JDAK.90.100.020	16,0 - 21,6	66	100	2	125	125	16	90	M8	1500
JDAK.90.100.030	16,0 - 21,6	66	100	2	100	200	16	90	M8	1500
JDAK.90.100.040	21,6 - 29,6	74	100	2	100	100	20	90	M10	2000
JDAK.90.100.050	21,6 - 29,6	74	100	2	125	125	16	90	M10	2000
JDAK.90.100.060	21,6 - 29,6	74	100	2	100	200	16	90	M10	2000
JDAK.90.100.070	29,6 - 37,6	74	100	2	100	100	25	90	M10	2500
JDAK.90.100.080	29,6 - 37,6	74	100	2	125	125	20	90	M10	2500
JDAK.90.100.090	29,6 - 37,6	74	100	2	100	200	16	90	M10	2500
JDAK.90.200.010	16,0 - 21,6	66	200	2	100	100	16	90	M8	1500
JDAK.90.200.020	16,0 - 21,6	66	200	2	125	125	16	90	M8	1500
JDAK.90.200.030	16,0 - 21,6	66	200	2	100	200	16	90	M8	1500
JDAK.90.200.040	21,6 - 29,6	74	200	2	100	100	20	90	M10	2000
JDAK.90.200.050	21,6 - 29,6	74	200	2	125	125	16	90	M10	2000
JDAK.90.200.060	21,6 - 29,6	74	200	2	100	200	16	90	M10	2000
JDAK.90.200.070	29,6 - 37,6	74	200	2	100	100	25	90	M10	2500
JDAK.90.200.080	29,6 - 37,6	74	200	2	125	125	20	90	M10	2500
JDAK.90.200.090	29,6 - 37,6	74	200	2	100	200	16	90	M10	2500

# SDAK45

CABLE - PAD



UP TO  
400kV

**BIMET**  
CUPAL or TIN

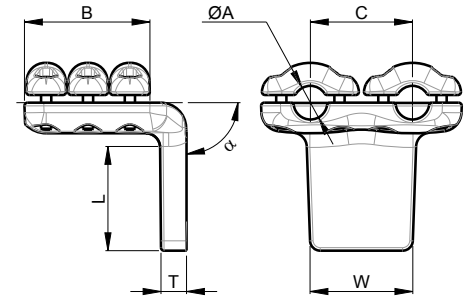


PART NUMBER	A	B	C	COVERS A	L	W	T	$\alpha$	BOLTS A	CURRENT [A]
SDAK.45.100.010	16 - 24	72	100	2	100	100	16	45	M8	1600
SDAK.45.100.020	16 - 24	72	100	2	125	125	16	45	M8	1600
SDAK.45.100.030	16 - 24	72	100	2	100	200	16	45	M8	1600
SDAK.45.100.040	24 - 33	82	100	2	100	100	25	45	M10	2500
SDAK.45.100.050	24 - 33	82	100	2	125	125	20	45	M10	2500
SDAK.45.100.060	24 - 33	82	100	2	100	200	16	45	M10	2500
SDAK.45.100.070	33 - 45	123	113	3	100	100	35	45	M10	3200
SDAK.45.100.080	33 - 45	123	113	3	125	125	25	45	M10	3200
SDAK.45.100.090	33 - 45	123	113	3	100	200	16	45	M10	3200
SDAK.45.100.100	45 - 50	123	118	3	100	100	40	45	M10	4000
SDAK.45.100.110	45 - 50	123	118	3	125	125	35	45	M10	4000
SDAK.45.100.120	45 - 50	123	118	3	100	200	20	45	M10	4000
SDAK.45.200.010	16 - 24	72	200	2	100	100	16	45	M8	1600
SDAK.45.200.020	16 - 24	72	200	2	125	125	16	45	M8	1600
SDAK.45.200.030	16 - 24	72	200	2	100	200	16	45	M8	1600
SDAK.45.200.040	24 - 33	82	200	2	100	100	25	45	M10	2500
SDAK.45.200.050	24 - 33	82	200	2	125	125	20	45	M10	2500
SDAK.45.200.060	24 - 33	82	200	2	100	200	16	45	M10	2500
SDAK.45.200.070	33 - 45	123	200	3	100	100	35	45	M10	3200
SDAK.45.200.080	33 - 45	123	200	3	125	125	25	45	M10	3200
SDAK.45.200.090	33 - 45	123	200	3	100	200	16	45	M10	3200
SDAK.45.200.200	45 - 50	123	200	3	100	100	40	45	M10	4000
SDAK.45.200.110	45 - 50	123	200	3	125	125	35	45	M10	4000
SDAK.45.200.120	45 - 50	123	200	3	100	200	20	45	M10	4000



# SDAK90

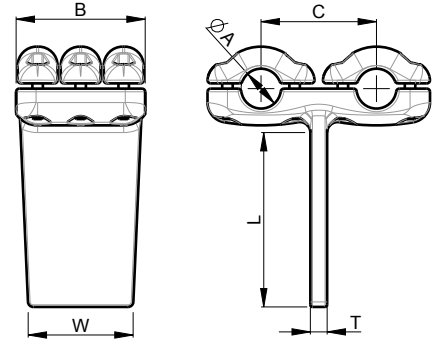
CABLE - PAD



PART NUMBER	A	B	C	COVERS A	L	W	T	α	BOLTS A	CURRENT [A]
SDAK.90.100.010	16 - 24	72	100	2	100	100	16	90	M8	1600
SDAK.90.100.020	16 - 24	72	100	2	125	125	16	90	M8	1600
SDAK.90.100.030	16 - 24	72	100	2	100	200	16	90	M8	1600
SDAK.90.100.040	24 - 33	82	100	2	100	100	25	90	M10	2500
SDAK.90.100.050	24 - 33	82	100	2	125	125	20	90	M10	2500
SDAK.90.100.060	24 - 33	82	100	2	100	200	16	90	M10	2500
SDAK.90.100.070	33 - 45	123	113	3	100	100	35	90	M10	3200
SDAK.90.100.080	33 - 45	123	113	3	125	125	25	90	M10	3200
SDAK.90.100.090	33 - 45	123	113	3	100	200	16	90	M10	3200
SDAK.90.100.100	45 - 50	123	118	3	100	100	40	90	M10	4000
SDAK.90.100.110	45 - 50	123	118	3	125	125	35	90	M10	4000
SDAK.90.100.120	45 - 50	123	118	3	100	200	20	90	M10	4000
SDAK.90.200.010	16 - 24	72	200	2	100	100	16	90	M8	1600
SDAK.90.200.020	16 - 24	72	200	2	125	125	16	90	M8	1600
SDAK.90.200.030	16 - 24	72	200	2	100	200	16	90	M8	1600
SDAK.90.200.040	24 - 33	82	200	2	100	100	25	90	M10	2500
SDAK.90.200.050	24 - 33	82	200	2	125	125	20	90	M10	2500
SDAK.90.200.060	24 - 33	82	200	2	100	200	16	90	M10	2500
SDAK.90.200.070	33 - 45	123	200	3	100	100	35	90	M10	3200
SDAK.90.200.080	33 - 45	123	200	3	125	125	25	90	M10	3200
SDAK.90.200.090	33 - 45	123	200	3	100	200	16	90	M10	3200
SDAK.90.200.200	45 - 50	123	200	3	100	100	40	90	M10	4000
SDAK.90.200.110	45 - 50	123	200	3	125	125	35	90	M10	4000
SDAK.90.200.120	45 - 50	123	200	3	100	200	20	90	M10	4000

## SDF

CABLE - PAD



PART NUMBER	A	B	C	COVERS A	L	W	T	BOLTS A	CURRENT [A]
SDF.100.010	16 - 24	72	100	2	100	100	16	M8	1600
SDF.100.020	16 - 24	72	100	2	125	125	16	M8	1600
SDF.100.030	16 - 24	72	100	2	100	200	16	M8	1600
SDF.100.040	24 - 33	82	100	2	100	100	25	M10	2500
SDF.100.050	24 - 33	82	100	2	125	125	20	M10	2500
SDF.100.060	24 - 33	82	100	2	100	200	16	M10	2500
SDF.100.070	33 - 45	123	113	3	100	100	35	M10	3200
SDF.100.080	33 - 45	123	113	3	125	125	25	M10	3200
SDF.100.090	33 - 45	123	113	3	100	200	16	M10	3200
SDF.100.100	45 - 50	123	118	3	100	100	40	M10	4000
SDF.100.110	45 - 50	123	118	3	125	125	35	M10	4000
SDF.100.120	45 - 50	123	118	3	100	200	20	M10	4000
SDF.200.010	16 - 24	72	200	2	100	100	16	M8	1600
SDF.200.020	16 - 24	72	200	2	125	125	16	M8	1600
SDF.200.030	16 - 24	72	200	2	100	200	16	M8	1600
SDF.200.040	24 - 33	82	200	2	100	100	25	M10	2500
SDF.200.050	24 - 33	82	200	2	125	125	20	M10	2500
SDF.200.060	24 - 33	82	200	2	100	200	16	M10	2500
SDF.200.070	33 - 45	123	200	3	100	100	35	M10	3200
SDF.200.080	33 - 45	123	200	3	125	125	25	M10	3200
SDF.200.090	33 - 45	123	200	3	100	200	16	M10	3200
SDF.200.100	45 - 50	123	200	3	100	100	40	M10	4000
SDF.200.110	45 - 50	123	200	3	125	125	35	M10	4000
SDF.200.120	45 - 50	123	200	3	100	200	20	M10	4000





**SDTD**

AL-BUNDLE T-CONNECTOR FOR CABLE



**SPK**

AL-BUNDLE-T-CONNECTOR FOR CABLE AND TUBE



**SPLD**

AL-BUNDLE-T-CONNECTOR FOR CABLE AND TUBE



**JDTD**

AL-BUNDLE- T-CONNECTOR FOR CABLE



**STDD**

AL-BUNDLE-T-CONNECTOR FOR CABLE AND STUD



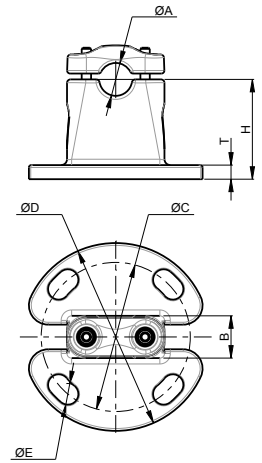
**STDD**

AL-BUNDLE-T-CONNECTOR FOR CABLE AND STUD



# SHB

CABLE

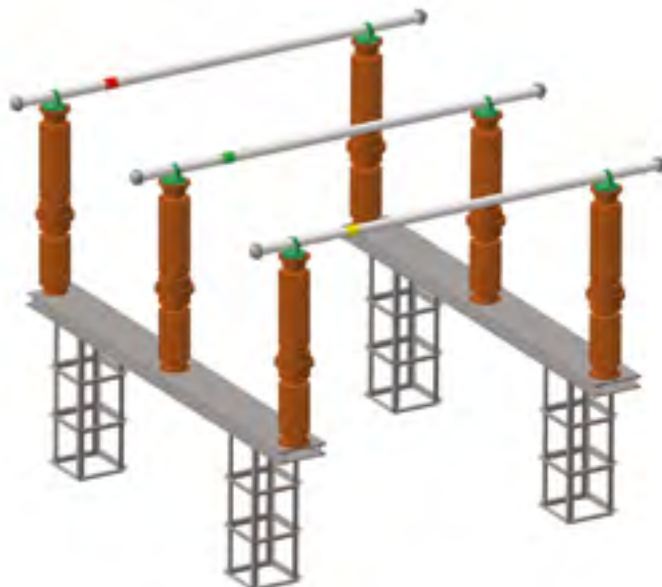


UP TO  
**400kV**

**A2-70**

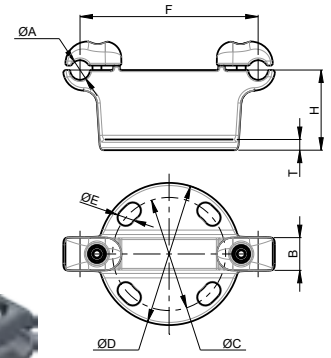
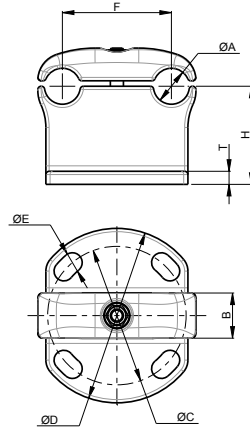


PART NUMBER	A	B	H	C	D	E	T	BOLTS A
SHB.03.300	16 - 24	36	85	76	110	14	12	M8
SHB.05.300	16 - 24	36	85	127	160	18	12	M8
SHB.89.300	16 - 24	36	85	225	265	18	15	M8
SHB.03.310	24 - 33	41	90	76	110	14	12	M10
SHB.05.310	24 - 33	41	90	127	160	18	12	M10
SHB.89.310	24 - 33	41	90	225	265	18	15	M10
SHB.03.320	33 - 45	41	90	76	110	14	12	M10
SHB.05.320	33 - 45	41	90	127	160	18	12	M10
SHB.89.320	33 - 45	41	90	225	265	18	15	M10
SHB.03.330	45 - 50	41	90	76	110	14	12	M10
SHB.05.330	45 - 50	41	90	127	160	18	12	M10
SHB.89.330	45 - 50	41	90	225	265	18	15	M10



# SHDB

CABLE



UP TO  
**400kV**

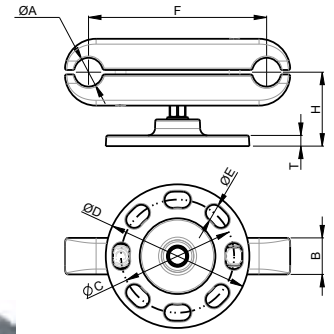
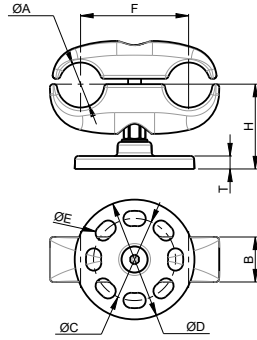
**A2-70**



PART NUMBER	A	B	H	C	D	E	T	F	BOLTS A
SHDB.100.010	16 - 24	36	80	76	110	14	12	100	M10
SHDB.100.020	16 - 24	36	80	127	160	18	12	100	M10
SHDB.100.030	16 - 24	36	80	225	265	18	15	100	M10
SHDB.100.040	24 - 28	36	80	76	110	14	12	100	M10
SHDB.100.050	24 - 28	36	80	127	160	18	12	100	M10
SHDB.100.060	24 - 28	36	80	225	265	18	15	100	M10
SHDB.100.070	28 - 33	41	80	76	110	14	12	100	M12
SHDB.100.080	28 - 33	41	80	127	160	18	12	100	M12
SHDB.100.090	28 - 33	41	80	225	265	18	15	100	M12
SHDB.100.100	33 - 40	41	80	76	110	14	12	100	M12
SHDB.100.110	33 - 40	41	80	127	160	18	12	100	M12
SHDB.100.120	33 - 40	41	80	225	265	18	15	100	M12
SHDB.100.130	40 - 45	41	80	76	110	14	12	100	M12
SHDB.100.140	40 - 45	41	80	127	160	18	12	100	M12
SHDB.100.150	40 - 45	41	80	225	265	18	15	100	M12
SHDB.100.160	45 - 50	41	80	76	110	14	12	100	M12
SHDB.100.170	45 - 50	41	80	127	160	18	12	100	M12
SHDB.100.180	45 - 50	41	80	225	265	18	15	100	M12
SHDB.200.010	16 - 24	36	80	76	110	14	12	200	M10
SHDB.200.020	16 - 24	36	80	127	160	18	12	200	M10
SHDB.200.030	16 - 24	36	80	225	265	18	15	200	M10
SHDB.200.040	24 - 28	36	80	76	110	14	12	200	M10
SHDB.200.050	24 - 28	36	80	127	160	18	12	200	M10
SHDB.200.060	24 - 28	36	80	225	265	18	15	200	M10
SHDB.200.070	28 - 33	41	80	76	110	14	12	200	M12
SHDB.200.080	28 - 33	41	80	127	160	18	12	200	M12
SHDB.200.090	28 - 33	41	80	225	265	18	15	200	M12
SHDB.200.200	33 - 40	41	80	76	110	14	12	200	M12
SHDB.200.110	33 - 40	41	80	127	160	18	12	200	M12
SHDB.200.120	33 - 40	41	80	225	265	18	15	200	M12
SHDB.200.130	40 - 45	41	80	76	110	14	12	200	M12
SHDB.200.140	40 - 45	41	80	127	160	18	12	200	M12
SHDB.200.150	40 - 45	41	80	225	265	18	15	200	M12
SHDB.200.160	45 - 50	41	80	76	110	14	12	200	M12
SHDB.200.170	45 - 50	41	80	127	160	18	12	200	M12
SHDB.200.180	45 - 50	41	80	225	265	18	15	200	M12

# SLHDB

CABLE



UP TO  
**400kV**

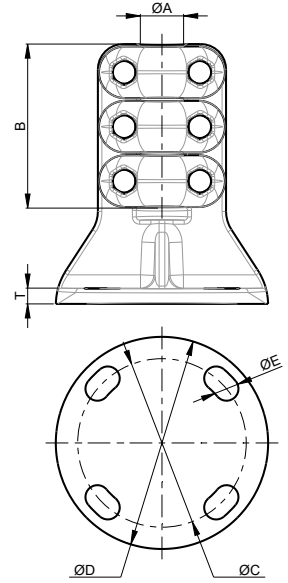
**A2-70**



PART NUMBER	A	B	H	C	D	E	T	F	BOLTS A
SLHDB.100.010	16 - 24	36	80	76	110	14	12	100	M10
SLHDB.100.020	16 - 24	36	80	127	160	18	12	100	M10
SLHDB.100.030	16 - 24	36	80	225	265	18	15	100	M10
SLHDB.100.040	24 - 28	36	80	76	110	14	12	100	M10
SLHDB.100.050	24 - 28	36	80	127	160	18	12	100	M10
SLHDB.100.060	24 - 28	36	80	225	265	18	15	100	M10
SLHDB.100.070	28 - 33	41	80	76	110	14	12	100	M12
SLHDB.100.080	28 - 33	41	80	127	160	18	12	100	M12
SLHDB.100.090	28 - 33	41	80	225	265	18	15	100	M12
SLHDB.100.100	33 - 40	41	80	76	110	14	12	100	M12
SLHDB.100.110	33 - 40	41	80	127	160	18	12	100	M12
SLHDB.100.120	33 - 40	41	80	225	265	18	15	100	M12
SLHDB.100.130	40 - 45	41	80	76	110	14	12	100	M12
SLHDB.100.140	40 - 45	41	80	127	160	18	12	100	M12
SLHDB.100.150	40 - 45	41	80	225	265	18	15	100	M12
SLHDB.100.160	45 - 50	41	80	76	110	14	12	100	M12
SLHDB.100.170	45 - 50	41	80	127	160	18	12	100	M12
SLHDB.100.180	45 - 50	41	80	225	265	18	15	100	M12
SLHDB.200.010	16 - 24	36	80	76	110	14	12	200	M10
SLHDB.200.020	16 - 24	36	80	127	160	18	12	200	M10
SLHDB.200.030	16 - 24	36	80	225	265	18	15	200	M10
SLHDB.200.040	24 - 28	36	80	76	110	14	12	200	M10
SLHDB.200.050	24 - 28	36	80	127	160	18	12	200	M10
SLHDB.200.060	24 - 28	36	80	225	265	18	15	200	M10
SLHDB.200.070	28 - 33	41	80	76	110	14	12	200	M12
SLHDB.200.080	28 - 33	41	80	127	160	18	12	200	M12
SLHDB.200.090	28 - 33	41	80	225	265	18	15	200	M12
SLHDB.200.200	33 - 40	41	80	76	110	14	12	200	M12
SLHDB.200.110	33 - 40	41	80	127	160	18	12	200	M12
SLHDB.200.120	33 - 40	41	80	225	265	18	15	200	M12
SLHDB.200.130	40 - 45	41	80	76	110	14	12	200	M12
SLHDB.200.140	40 - 45	41	80	127	160	18	12	200	M12
SLHDB.200.150	40 - 45	41	80	225	265	18	15	200	M12
SLHDB.200.160	45 - 50	41	80	76	110	14	12	200	M12
SLHDB.200.170	45 - 50	41	80	127	160	18	12	200	M12
SLHDB.200.180	45 - 50	41	80	225	265	18	15	200	M12

# SVHB

CABLE



UP TO  
**400kV**

**A2-70**



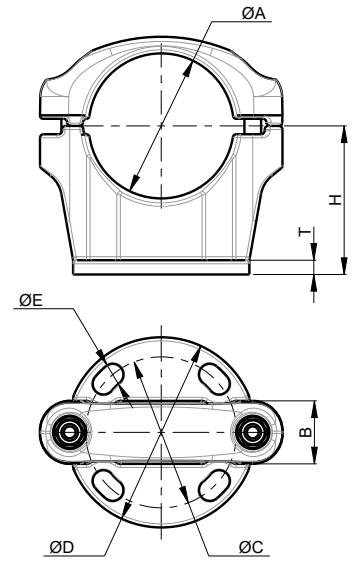
PART NUMBER	A	COVERS A	B	C	D	E	T	BOLTS A
SVHB.02.03.300	16 - 24	2	72	76	110	14	12	M8
SVHB.02.05.300	16 - 24	2	72	127	160	18	12	M8
SVHB.02.89.300	16 - 24	2	72	225	265	18	15	M8
SVHB.02.03.310	24 - 33	3	123	76	110	14	12	M10
SVHB.02.05.310	24 - 33	3	123	127	160	18	12	M10
SVHB.02.89.310	24 - 33	3	123	225	265	18	15	M10
SVHB.02.03.320	33 - 45	3	123	76	110	14	12	M10
SVHB.02.05.320	33 - 45	3	123	127	160	18	12	M10
SVHB.02.89.320	33 - 45	3	123	225	265	18	15	M10
SVHB.02.03.330	45 - 50	3	123	76	110	14	12	M10
SVHB.02.05.330	45 - 50	3	123	127	160	18	12	M10
SVHB.02.89.330	45 - 50	3	123	225	265	18	15	M10





# SHB

TUBE



UP TO  
**400kV**

**A2-70**

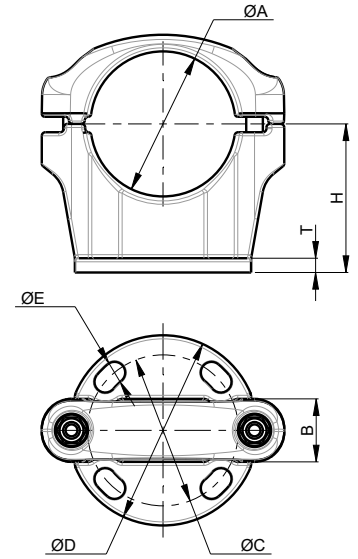


PART NUMBER	A	B	H	C	D	E	T	BOLTS A
SHB.03.010	30 - 40	41	90	76	110	14	12	M10
SHB.05.010	30 - 40	41	90	127	160	18	12	M10
SHB.89.010	30 - 40	41	90	225	265	18	15	M10
SHB.03.020	50 - 60	46	112	76	110	14	12	M12
SHB.05.020	50 - 60	46	112	127	160	18	12	M12
SHB.89.020	50 - 60	46	112	225	265	18	15	M12
SHB.03.030	70 - 80	46	112	76	110	14	12	M12
SHB.05.030	70 - 80	46	112	127	160	18	12	M12
SHB.89.030	70 - 80	46	112	225	265	18	15	M12
SHB.03.040	90 - 100	46	112	76	110	14	12	M12
SHB.05.040	90 - 100	46	112	127	160	18	12	M12
SHB.89.040	90 - 100	46	112	225	265	18	15	M12
SHB.03.050	120	53	125	76	110	14	12	M14
SHB.05.050	120	53	125	127	160	18	12	M14
SHB.89.050	120	53	125	225	265	18	15	M14
SHB.03.060	140 -150	53	150	76	110	14	12	M14
SHB.05.060	140 -150	53	150	127	160	18	12	M14
SHB.89.060	140 -150	53	150	225	265	18	15	M14
SHB.03.070	160-170	53	160	76	110	14	12	M14
SHB.05.070	160-170	53	160	127	160	18	12	M14
SHB.89.070	160-170	53	160	225	265	18	15	M14
SHB.03.080	200	58	190	76	110	14	12	M16
SHB.05.080	200	58	190	127	160	18	12	M16
SHB.89.080	200	58	190	225	265	18	15	M16
SHB.03.090	250	58	212	76	110	14	12	M16
SHB.05.090	250	58	212	127	160	18	12	M16
SHB.89.090	250	58	212	225	265	18	15	M16
SHB.03.100	300	58	236	76	110	14	12	M16
SHB.05.100	300	58	236	127	160	18	12	M16
SHB.89.100	300	58	236	225	265	18	15	M16



# SHB

TUBE



PART NUMBER	A	B	H	C	D	E	T	BOLTS A
SHB.03.500	2"IPS (60,3mm)	46	112	76	110	14	12	M12
SHB.05.500	2"IPS (60,3mm)	46	112	127	160	18	12	M12
SHB.89.500	2"IPS (60,3mm)	46	112	225	265	18	15	M12
SHB.03.510	2,5"IPS (73mm)	46	112	76	110	14	12	M12
SHB.05.510	2,5"IPS (73mm)	46	112	127	160	18	12	M12
SHB.89.510	2,5"IPS (73mm)	46	112	225	265	18	15	M12
SHB.03.520	3"IPS (88,9mm)	46	112	76	110	14	12	M12
SHB.05.520	3"IPS (88,9mm)	46	112	127	160	18	12	M12
SHB.89.520	3"IPS (88,9mm)	46	112	225	265	18	15	M12
SHB.03.530	3,5"IPS (101,6mm)	46	112	76	110	14	12	M12
SHB.05.530	3,5"IPS (101,6mm)	46	112	127	160	18	12	M12
SHB.89.530	3,5"IPS (101,6mm)	46	112	225	265	18	15	M12
SHB.03.540	4"IPS (114,3mm)	53	150	76	110	14	12	M14
SHB.05.540	4"IPS (114,3mm)	53	150	127	160	18	12	M14
SHB.89.540	4"IPS (114,3mm)	53	150	225	265	18	15	M14
SHB.03.550	5"IPS (141,3mm)	53	150	76	110	14	12	M14
SHB.05.550	5"IPS (141,3mm)	53	150	127	160	18	12	M14
SHB.89.550	5"IPS (141,3mm)	53	150	225	265	18	15	M14
SHB.03.560	6"IPS (168,2mm)	53	160	76	110	14	12	M14
SHB.05.560	6"IPS (168,2mm)	53	160	127	160	18	12	M14
SHB.89.560	6"IPS (168,2mm)	53	160	225	265	18	15	M14
SHB.03.570	8"IPS (219mm)	58	212	76	110	14	12	M16
SHB.05.570	8"IPS (219mm)	58	212	127	160	18	12	M16
SHB.89.570	8"IPS (219mm)	58	212	225	265	18	15	M16



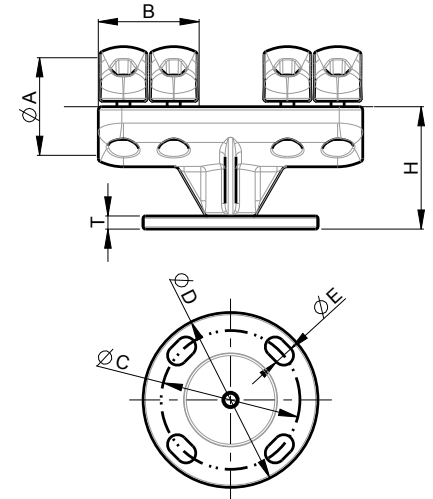
## BUSBARS SUPPORTS FIXED & SLIDING POSITION

A reversible cap allows in the same connector two possible positions



# SHSB

TUBE - TUBE



UP TO  
**400kV**

**A2-70**

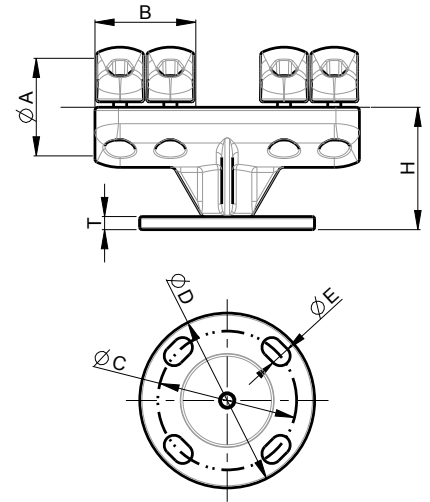


PART NUMBER	A	COVERS A	B	H	C	D	E	T	BOLTS A
SHSB.03.010	50 - 60	2	92	112	76	110	14	12	M12
SHSB.05.010	50 - 60	2	92	112	127	160	18	12	M12
SHSB.89.010	50 - 60	2	92	112	225	265	18	15	M12
SHSB.03.020	70 - 80	2	92	112	76	110	14	12	M12
SHSB.05.020	70 - 80	2	92	112	127	160	18	12	M12
SHSB.89.020	70 - 80	2	92	112	225	265	18	15	M12
SHSB.03.030	90 - 100	2	92	112	76	110	14	12	M12
SHSB.05.030	90 - 100	2	92	112	127	160	18	12	M12
SHSB.89.030	90 - 100	2	92	112	225	265	18	15	M12
SHSB.03.040	120	2	106	125	76	110	14	12	M14
SHSB.05.040	120	2	106	125	127	160	18	12	M14
SHSB.89.040	120	2	106	125	225	265	18	15	M14
SHSB.03.050	140 - 150	2	106	150	76	110	14	12	M14
SHSB.05.050	140 - 150	2	106	150	127	160	18	12	M14
SHSB.89.050	140 - 150	2	106	150	225	265	18	15	M14
SHSB.03.060	160-170	2	106	160	76	110	14	12	M14
SHSB.05.060	160-170	2	106	160	127	160	18	12	M14
SHSB.89.060	160-170	2	106	160	225	265	18	15	M14
SHSB.03.070	200	2	116	190	76	110	14	12	M16
SHSB.05.070	200	2	116	190	127	160	18	12	M16
SHSB.89.070	200	2	116	190	225	265	18	15	M16
SHSB.03.080	250	2	116	212	76	110	14	12	M16
SHSB.05.080	250	2	116	212	127	160	18	12	M16
SHSB.89.080	250	2	116	212	225	265	18	15	M16
SHSB.03.090	300	2	116	236	76	110	14	12	M16
SHSB.05.090	300	2	116	236	127	160	18	12	M16
SHSB.89.090	300	2	116	236	225	265	18	15	M16



# SHSB

TUBE - TUBE

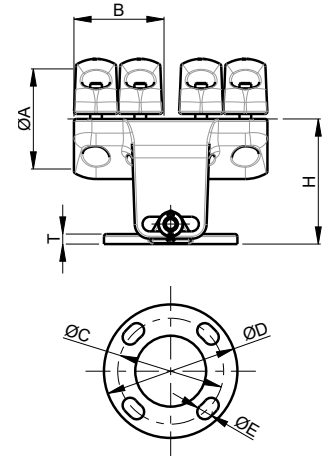


PART NUMBER	A	COVERS A	B	H	C	D	E	T	BOLTS A
SHSB.03.500	2"IPS (60,3mm)	2	92	112	76	110	14	12	M12
SHSB.05.500	2"IPS (60,3mm)	2	92	112	127	160	18	12	M12
SHSB.89.500	2"IPS (60,3mm)	2	92	112	225	265	18	15	M12
SHSB.03.510	2,5"IPS (73mm)	2	92	112	76	110	14	12	M12
SHSB.05.510	2,5"IPS (73mm)	2	92	112	127	160	18	12	M12
SHSB.89.510	2,5"IPS (73mm)	2	92	112	225	265	18	15	M12
SHSB.03.520	3"IPS (88,9mm)	2	92	112	76	110	14	12	M12
SHSB.05.520	3"IPS (88,9mm)	2	92	112	127	160	18	12	M12
SHSB.89.520	3"IPS (88,9mm)	2	92	112	225	265	18	15	M12
SHSB.03.530	3,5"IPS (101,6mm)	2	92	112	76	110	14	12	M12
SHSB.05.530	3,5"IPS (101,6mm)	2	92	112	127	160	18	12	M12
SHSB.89.530	3,5"IPS (101,6mm)	2	92	112	225	265	18	15	M12
SHSB.03.540	4"IPS (114,3mm)	2	106	150	76	110	14	12	M14
SHSB.05.540	4"IPS (114,3mm)	2	106	150	127	160	18	12	M14
SHSB.89.540	4"IPS (114,3mm)	2	106	150	225	265	18	15	M14
SHSB.03.550	5"IPS (141,3mm)	2	106	150	76	110	14	12	M14
SHSB.05.550	5"IPS (141,3mm)	2	106	150	127	160	18	12	M14
SHSB.89.550	5"IPS (141,3mm)	2	106	150	225	265	18	15	M14
SHSB.03.560	6"IPS (168,2mm)	2	106	160	76	110	14	12	M14
SHSB.05.560	6"IPS (168,2mm)	2	106	160	127	160	18	12	M14
SHSB.89.560	6"IPS (168,2mm)	2	106	160	225	265	18	15	M14
SHSB.03.570	8"IPS (219mm)	2	116	212	76	110	14	12	M16
SHSB.05.570	8"IPS (219mm)	2	116	212	127	160	18	12	M16
SHSB.89.570	8"IPS (219mm)	2	116	212	225	265	18	15	M16
SHSB.03.570	8"IPS (219mm)	2	116	212	76	110	14	12	M16
SHSB.05.570	8"IPS (219mm)	2	116	212	127	160	18	12	M16
SHSB.89.570	8"IPS (219mm)	2	116	212	225	265	18	15	M16



# SSHSB

TUBE - TUBE



UP TO  
**400kV**

**A2-70**

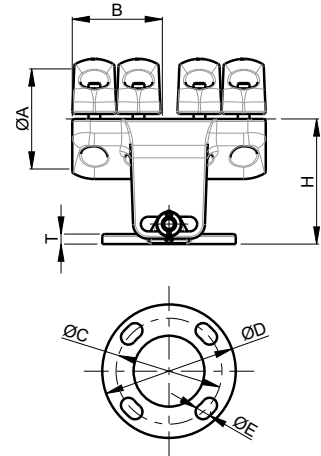


PART NUMBER	A	B	H	C	D	E	T	BOLTS A
SSHSB.03.010	50 - 60	92	112	76	110	14	12	M12
SSHSB.05.010	50 - 60	92	112	127	160	18	12	M12
SSHSB.89.010	50 - 60	92	112	225	265	18	15	M12
SSHSB.03.020	70 - 80	92	112	76	110	14	12	M12
SSHSB.05.020	70 - 80	92	112	127	160	18	12	M12
SSHSB.89.020	70 - 80	92	112	225	265	18	15	M12
SSHSB.03.030	90 - 100	92	112	76	110	14	12	M12
SSHSB.05.030	90 - 100	92	112	127	160	18	12	M12
SSHSB.89.030	90 - 100	92	112	225	265	18	15	M12
SSHSB.03.040	120	106	125	76	110	14	12	M14
SSHSB.05.040	120	106	125	127	160	18	12	M14
SSHSB.89.040	120	106	125	225	265	18	15	M14
SSHSB.03.050	140 -150	106	150	76	110	14	12	M14
SSHSB.05.050	140 -150	106	150	127	160	18	12	M14
SSHSB.89.050	140 -150	106	150	225	265	18	15	M14
SSHSB.03.060	160-170	106	160	76	110	14	12	M14
SSHSB.05.060	160-170	106	160	127	160	18	12	M14
SSHSB.89.060	160-170	106	160	225	265	18	15	M14
SSHSB.03.070	200	116	190	76	110	14	12	M16
SSHSB.05.070	200	116	190	127	160	18	12	M16
SSHSB.89.070	200	116	190	225	265	18	15	M16
SSHSB.03.080	250	116	212	76	110	14	12	M16
SSHSB.05.080	250	116	212	127	160	18	12	M16
SSHSB.89.080	250	116	212	225	265	18	15	M16
SSHSB.03.090	300	116	236	76	110	14	12	M16
SSHSB.05.090	300	116	236	127	160	18	12	M16
SSHSB.89.090	300	116	236	225	265	18	15	M16



# SSHSB

TUBE - TUBE



UP TO  
**400kV**

**A2-70**

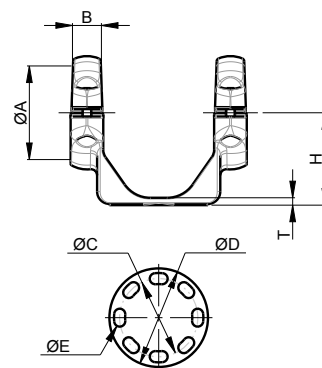


PART NUMBER	A	B	H	C	D	E	T	BOLTS A
SSHSB.03.500	2"IPS (60,3mm)	92	112	76	110	14	12	M12
SSHSB.05.500	2"IPS (60,3mm)	92	112	127	160	18	12	M12
SSHSB.89.500	2"IPS (60,3mm)	92	112	225	265	18	15	M12
SSHSB.03.510	2,5"IPS (73mm)	92	112	76	110	14	12	M12
SSHSB.05.510	2,5"IPS (73mm)	92	112	127	160	18	12	M12
SSHSB.89.510	2,5"IPS (73mm)	92	112	225	265	18	15	M12
SSHSB.03.520	3"IPS (88,9mm)	92	112	76	110	14	12	M12
SSHSB.05.520	3"IPS (88,9mm)	92	112	127	160	18	12	M12
SSHSB.89.520	3"IPS (88,9mm)	92	112	225	265	18	15	M12
SSHSB.03.530	3,5"IPS (101,6mm)	92	112	76	110	14	12	M12
SSHSB.05.530	3,5"IPS (101,6mm)	92	112	127	160	18	12	M12
SSHSB.89.530	3,5"IPS (101,6mm)	92	112	225	265	18	15	M12
SSHSB.03.540	4"IPS (114,3mm)	106	150	76	110	14	12	M14
SSHSB.05.540	4"IPS (114,3mm)	106	150	127	160	18	12	M14
SSHSB.89.540	4"IPS (114,3mm)	106	150	225	265	18	15	M14
SSHSB.03.550	5"IPS (141,3mm)	106	150	76	110	14	12	M14
SSHSB.05.550	5"IPS (141,3mm)	106	150	127	160	18	12	M14
SSHSB.89.550	5"IPS (141,3mm)	106	150	225	265	18	15	M14
SSHSB.03.560	6"IPS (168,2mm)	106	160	76	110	14	12	M14
SSHSB.05.560	6"IPS (168,2mm)	106	160	127	160	18	12	M14
SSHSB.89.560	6"IPS (168,2mm)	106	160	225	265	18	15	M14
SSHSB.03.570	8"IPS (219mm)	116	212	76	110	14	12	M16
SSHSB.05.570	8"IPS (219mm)	116	212	127	160	18	12	M16
SSHSB.89.570	8"IPS (219mm)	116	212	225	265	18	15	M16
SSHSB.03.090	300	116	236	76	110	14	12	M16
SSHSB.05.090	300	116	236	127	160	18	12	M16
SSHSB.89.090	300	116	236	225	265	18	15	M16



# SXHB

TUBE - TUBE



UP TO  
**400kV**

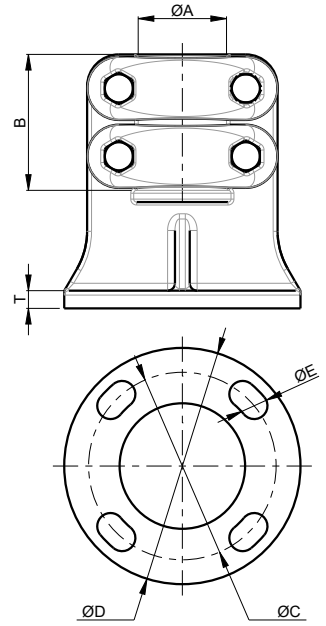
**A2-70**



PART NUMBER	A	B	H	C	D	E	T	BOLTS A
SXHB.05.010	50 - 60	46	112	127	160	18	12	M12
SXHB.89.010	50 - 60	46	112	225	265	18	15	M12
SXHB.05.020	70 - 80	46	112	127	160	18	12	M12
SXHB.89.020	70 - 80	46	112	225	265	18	15	M12
SXHB.05.030	90 - 100	46	112	127	160	18	12	M12
SXHB.89.030	90 - 100	46	112	225	265	18	15	M12
SXHB.05.040	120	53	125	127	160	18	12	M14
SXHB.89.040	120	53	125	225	265	18	15	M14
SXHB.05.050	140 - 150	53	150	127	160	18	12	M14
SXHB.89.050	140 - 150	53	150	225	265	18	15	M14
SXHB.05.060	160-170	53	160	127	160	18	12	M14
SXHB.89.060	160-170	53	160	225	265	18	15	M14
SXHB.05.070	200	58	190	127	160	18	12	M16
SXHB.89.070	200	58	190	225	265	18	15	M16
SXHB.05.080	250	58	212	127	160	18	12	M16
SXHB.89.080	250	58	212	225	265	18	15	M16
SXHB.05.090	300	58	236	127	160	18	12	M16
SXHB.89.090	300	58	236	225	265	18	15	M16
SXHB.05.500	2"IPS (60,3mm)	46	112	127	160	18	12	M12
SXHB.89.500	2"IPS (60,3mm)	46	112	225	265	18	15	M12
SXHB.05.510	2,5"IPS (73mm)	46	112	127	160	18	12	M12
SXHB.89.510	2,5"IPS (73mm)	46	112	225	265	18	15	M12
SXHB.05.520	3"IPS (88,9mm)	46	112	127	160	18	12	M12
SXHB.89.520	3"IPS (88,9mm)	46	112	225	265	18	15	M12
SXHB.05.530	3,5"IPS (101,6mm)	46	112	127	160	18	12	M12
SXHB.89.530	3,5"IPS (101,6mm)	46	112	225	265	18	15	M12
SXHB.05.540	4"IPS (114,3mm)	53	125	127	160	18	12	M14
SXHB.89.540	4"IPS (114,3mm)	53	125	225	265	18	15	M14
SXHB.05.550	5"IPS (141,3mm)	53	150	127	160	18	12	M14
SXHB.89.550	5"IPS (141,3mm)	53	150	225	265	18	15	M14
SXHB.05.560	6"IPS (168,2mm)	53	160	127	160	18	12	M14
SXHB.89.560	6"IPS (168,2mm)	53	160	225	265	18	15	M14
SXHB.05.570	8"IPS (219mm)	58	212	127	160	18	12	M16
SXHB.89.570	8"IPS (219mm)	58	212	225	265	18	15	M16

# SVHB

TUBE



UP TO  
**400kV**

**A2-70**



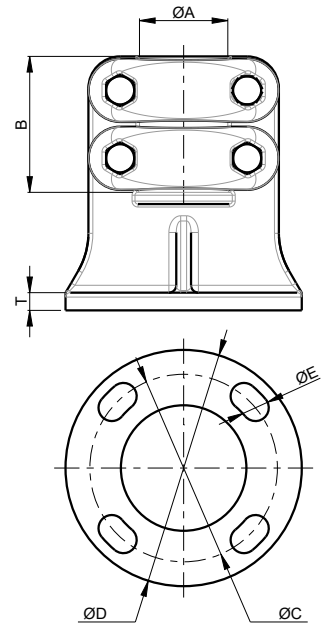
PART NUMBER	A	COVERS A	B	C	D	E	T	BOLTS A
SVHB.01.03.010	30 - 40	2	82	76	110	14	12	M10
SVHB.01.05.010	30 - 40	2	82	127	160	18	12	M10
SVHB.01.89.010	30 - 40	2	82	225	265	18	15	M10
SVHB.01.03.020	50 - 60	2	92	76	110	14	12	M12
SVHB.01.05.020	50 - 60	2	92	127	160	18	12	M12
SVHB.01.89.020	50 - 60	2	92	225	265	18	15	M12
SVHB.01.03.030	70 - 80	2	92	76	110	14	12	M12
SVHB.01.05.030	70 - 80	2	92	127	160	18	12	M12
SVHB.01.89.030	70 - 80	2	92	225	265	18	15	M12
SVHB.01.03.040	90 - 100	2	92	76	110	14	12	M12
SVHB.01.05.040	90 - 100	2	92	127	160	18	12	M12
SVHB.01.89.040	90 - 100	2	92	225	265	18	15	M12
SVHB.01.03.050	120	2	106	76	110	14	12	M14
SVHB.01.05.050	120	2	106	127	160	18	12	M14
SVHB.01.89.050	120	2	106	225	265	18	15	M14
SVHB.01.03.060	140 - 150	2	106	76	110	14	12	M14
SVHB.01.05.060	140 - 150	2	106	127	160	18	12	M14
SVHB.01.89.060	140 - 150	2	106	225	265	18	15	M14
SVHB.01.03.070	160-170	2	106	76	110	14	12	M14
SVHB.01.05.070	160-170	2	106	127	160	18	12	M14
SVHB.01.89.070	160-170	2	106	225	265	18	15	M14
SVHB.01.03.080	200	2	116	76	110	14	12	M16
SVHB.01.05.080	200	2	116	127	160	18	12	M16
SVHB.01.89.080	200	2	116	225	265	18	15	M16
SVHB.01.03.090	250	2	116	76	110	14	12	M16
SVHB.01.05.090	250	2	116	127	160	18	12	M16
SVHB.01.89.090	250	2	116	225	265	18	15	M16
SVHB.01.03.100	300	2	116	76	110	14	12	M16
SVHB.01.05.100	300	2	116	127	160	18	12	M16
SVHB.01.89.100	300	2	116	225	265	18	15	M16





# SVHB

TUBE



UP TO  
**400kV**

**A2-70**



PART NUMBER	A	COVERS A	B	C	D	E	T	BOLTS A
SVHB.01.03.500	2"IPS (60,3mm)	2	92	76	110	14	12	M12
SVHB.01.05.500	2"IPS (60,3mm)	2	92	127	160	18	12	M12
SVHB.01.89.500	2"IPS (60,3mm)	2	92	225	265	18	15	M12
SVHB.01.03.510	2,5"IPS (73mm)	2	92	76	110	14	12	M12
SVHB.01.05.510	2,5"IPS (73mm)	2	92	127	160	18	12	M12
SVHB.01.89.510	2,5"IPS (73mm)	2	92	225	265	18	15	M12
SVHB.01.03.520	3"IPS (88,9mm)	2	92	76	110	14	12	M12
SVHB.01.05.520	3"IPS (88,9mm)	2	92	127	160	18	12	M12
SVHB.01.89.520	3"IPS (88,9mm)	2	92	225	265	18	15	M12
SVHB.01.03.530	3,5"IPS (101,6mm)	2	92	76	110	14	12	M12
SVHB.01.05.530	3,5"IPS (101,6mm)	2	92	127	160	18	12	M12
SVHB.01.89.530	3,5"IPS (101,6mm)	2	92	225	265	18	15	M12
SVHB.01.03.540	4"IPS (114,3mm)	2	106	76	110	14	12	M14
SVHB.01.05.540	4"IPS (114,3mm)	2	106	127	160	18	12	M14
SVHB.01.89.540	4"IPS (114,3mm)	2	106	225	265	18	15	M14
SVHB.01.03.550	5"IPS (141,3mm)	2	106	76	110	14	12	M14
SVHB.01.05.550	5"IPS (141,3mm)	2	106	127	160	18	12	M14
SVHB.01.89.550	5"IPS (141,3mm)	2	106	225	265	18	15	M14
SVHB.01.03.560	6"IPS (168,2mm)	2	106	76	110	14	12	M14
SVHB.01.05.560	6"IPS (168,2mm)	2	106	127	160	18	12	M14
SVHB.01.89.560	6"IPS (168,2mm)	2	106	225	265	18	15	M14
SVHB.01.03.570	8"IPS (219mm)	2	116	76	110	14	12	M16
SVHB.01.05.570	8"IPS (219mm)	2	116	127	160	18	12	M16
SVHB.01.89.570	8"IPS (219mm)	2	116	225	265	18	15	M16
SVHB.01.03.570	8"IPS (219mm)	2	116	76	110	14	12	M16
SVHB.01.05.570	8"IPS (219mm)	2	116	127	160	18	12	M16
SVHB.01.89.570	8"IPS (219mm)	2	116	225	265	18	15	M16





**SHB01**  
AL SUPPORT



**SHB02**  
AL SUPPORT

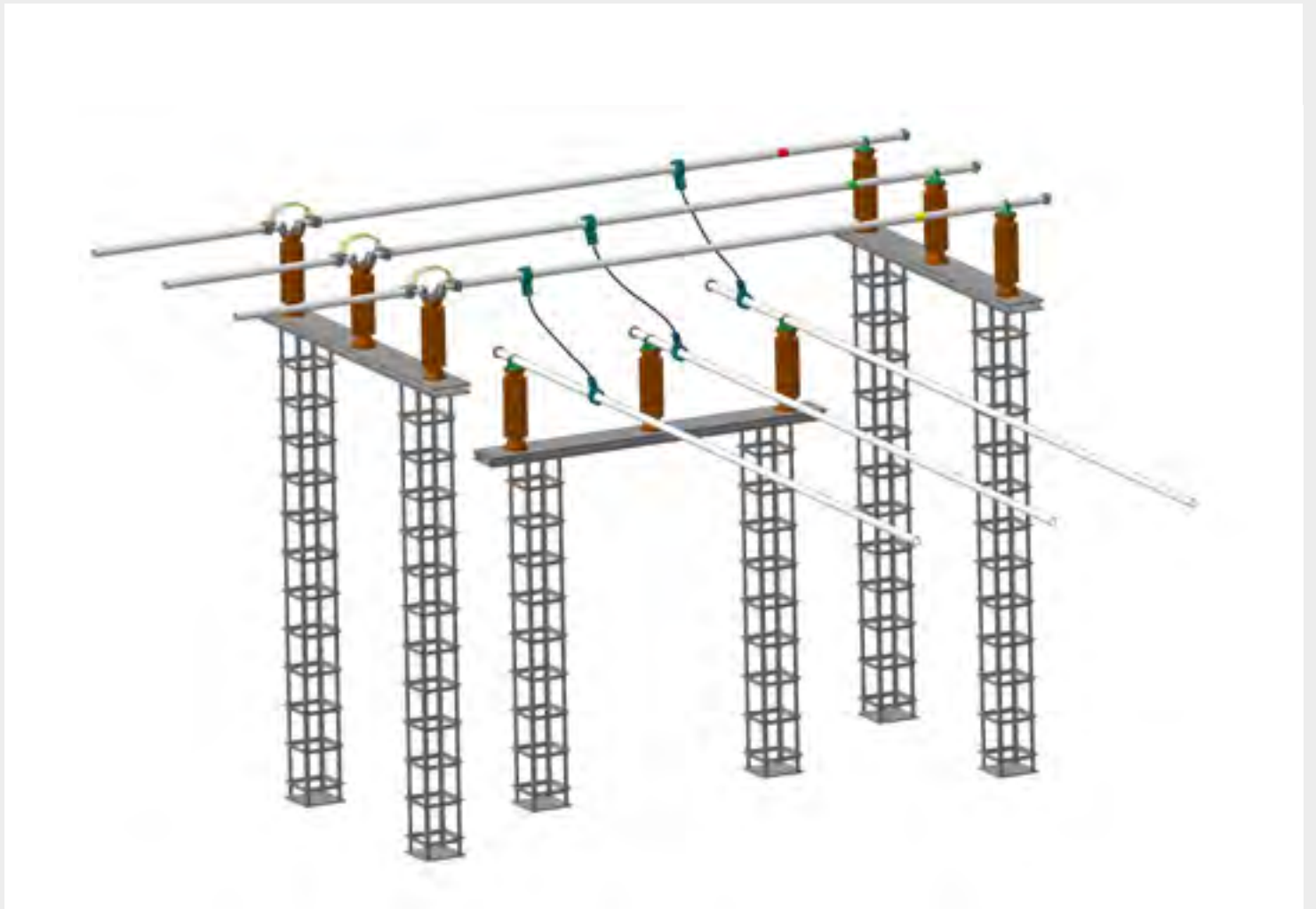


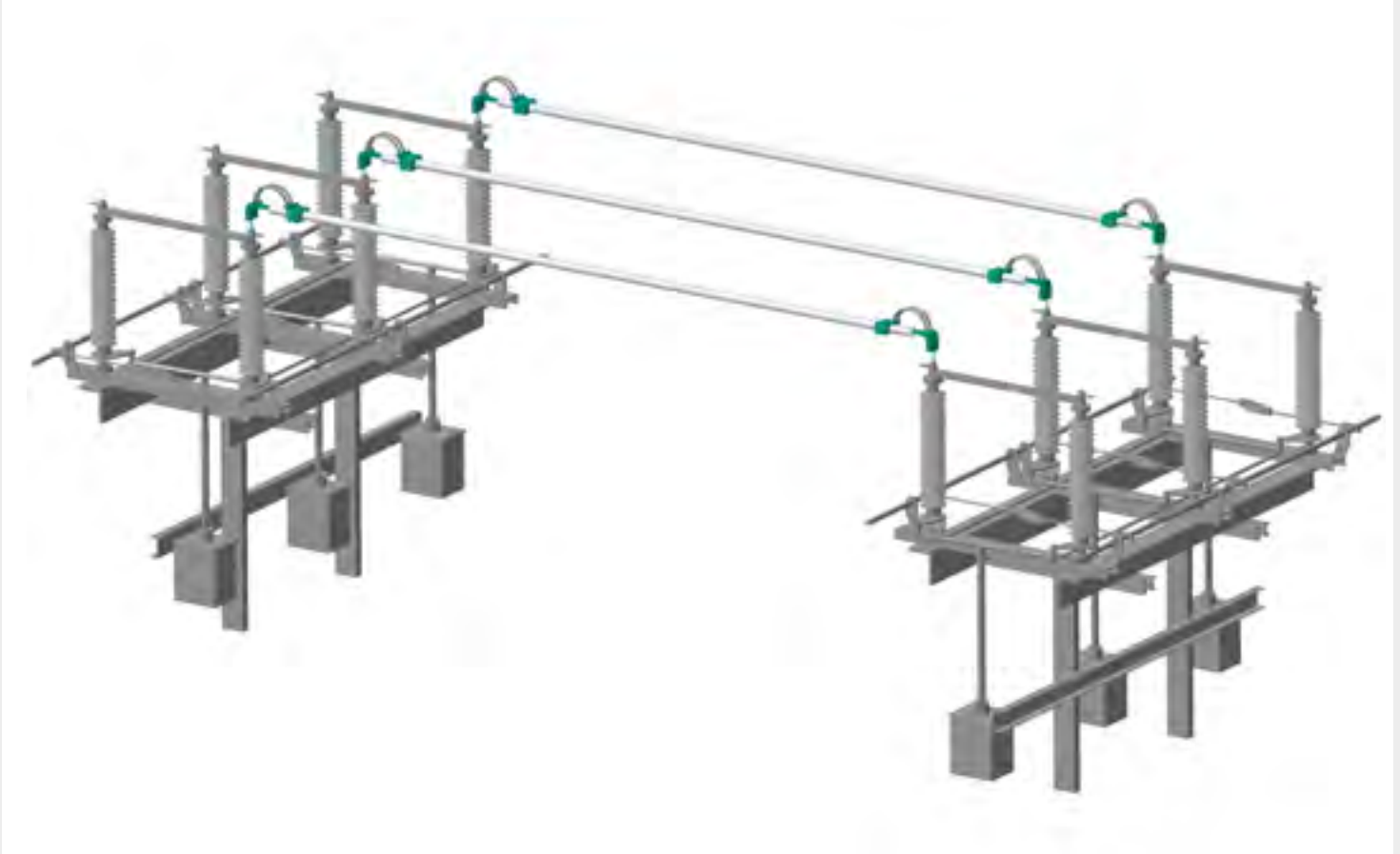
**SHBD**  
AL SUPPORT



**SVHDTB**  
AL BUNDLE T-CONNECTOR SUPPORT

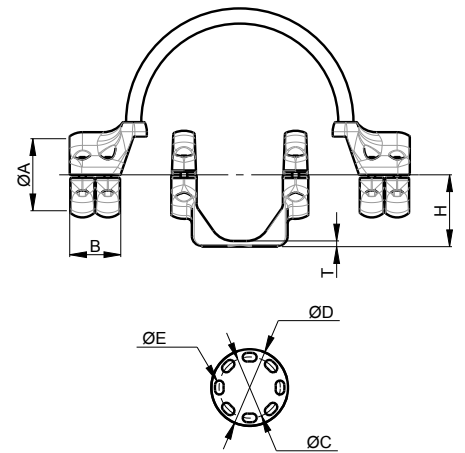






# SXHSB

TUBE - TUBE



UP TO  
400kV

A2-70

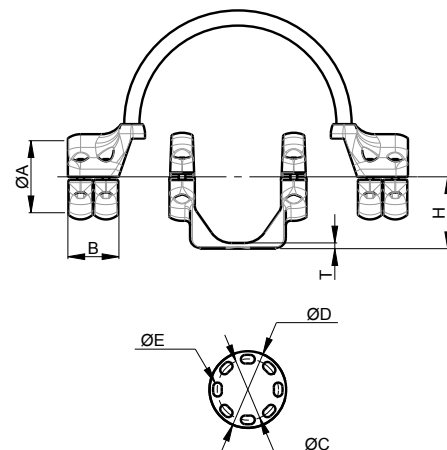


PART NUMBER	A	B	COVERS A	H	C	D	E	T	N° CABLES	Ø	BOLTS A	CURRENT [A]
SXHSB.05.010	50 - 60	92	2	112	127	160	18	12	2	31,7	M12	2000
SXHSB.89.010	50 - 60	92	2	112	225	265	18	15	2	31,7	M12	2000
SXHSB.05.020	70 - 80	92	2	112	127	160	18	12	2	31,7	M12	2000
SXHSB.05.021	70 - 80	92	2	112	127	160	18	12	2	39,2	M12	2400
SXHSB.05.022	70 - 80	92	2	112	127	160	18	12	2	44,8	M12	3200
SXHSB.89.020	70 - 80	92	2	112	225	265	18	15	2	31,7	M12	2000
SXHSB.89.021	70 - 80	92	2	112	225	265	18	15	2	39,2	M12	2400
SXHSB.89.022	70 - 80	92	2	112	225	265	18	15	2	44,8	M12	3200
SXHSB.05.030	90 - 100	92	2	112	127	160	18	12	2	39,2	M12	2400
SXHSB.05.031	90 - 100	92	2	112	127	160	18	12	2	44,8	M12	3200
SXHSB.05.032	90 - 100	92	2	112	127	160	18	12	3	39,2	M12	3600
SXHSB.89.030	90 - 100	92	2	112	225	265	18	15	2	39,2	M12	2400
SXHSB.89.031	90 - 100	92	2	112	225	265	18	15	2	44,8	M12	3200
SXHSB.89.032	90 - 100	92	2	112	225	265	18	15	3	39,2	M12	3600
SXHSB.05.040	120	106	2	125	127	160	18	12	2	39,2	M14	2400
SXHSB.05.041	120	106	2	125	127	160	18	12	2	44,8	M14	3200
SXHSB.05.042	120	106	2	125	127	160	18	12	3	39,2	M14	3600
SXHSB.05.043	120	106	2	125	127	160	18	12	4	39,2	M14	4000
SXHSB.89.040	120	106	2	125	225	265	18	15	2	39,2	M14	2400
SXHSB.89.041	120	106	2	125	225	265	18	15	2	44,8	M14	3200
SXHSB.89.042	120	106	2	125	225	265	18	15	3	39,2	M14	3600
SXHSB.89.043	120	106	2	125	225	265	18	15	4	39,2	M14	4000
SXHSB.05.050	140 - 150	106	2	150	127	160	18	12	2	44,8	M14	3200
SXHSB.05.051	140 - 150	106	2	150	127	160	18	12	3	39,2	M14	3600
SXHSB.05.052	140 - 150	106	2	150	127	160	18	12	4	39,2	M14	4500
SXHSB.89.050	140 - 150	106	2	150	225	265	18	15	2	44,8	M14	3200
SXHSB.89.051	140 - 150	106	2	150	225	265	18	15	3	39,2	M14	3600
SXHSB.89.052	140 - 150	106	2	150	225	265	18	15	4	39,2	M14	4500
SXHSB.05.060	160-170	106	2	160	127	160	18	12	2	39,2	M14	2400
SXHSB.05.061	160-170	106	2	160	127	160	18	12	2	44,8	M14	3200



# SXHSB

TUBE - TUBE



UP TO  
**400kV**

**A2-70**

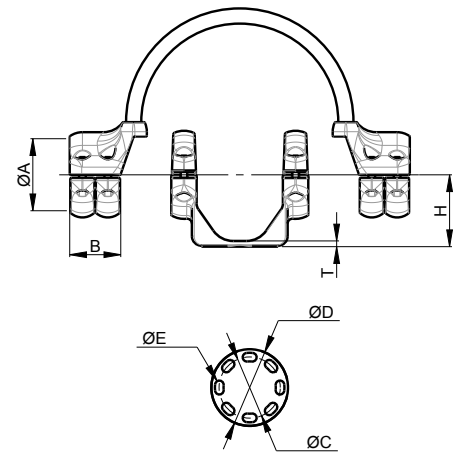


PART NUMBER	A	B	COVERS A	H	C	D	E	T	N° CABLES	Ø	BOLTS A	CURRENT [A]
SXHSB.05.062	160-170	106	2	160	127	160	18	12	3	39,2	M14	3600
SXHSB.05.063	160-170	106	2	160	127	160	18	12	4	39,2	M14	4500
SXHSB.89.060	160-170	106	2	160	225	265	18	15	2	39,2	M14	2400
SXHSB.89.061	160-170	106	2	160	225	265	18	15	2	44,8	M14	3200
SXHSB.89.062	160-170	106	2	160	225	265	18	15	3	39,2	M14	3600
SXHSB.89.063	160-170	106	2	160	225	265	18	15	4	39,2	M14	4500
SXHSB.05.070	200	116	2	190	127	160	18	12	2	44,8	M16	3200
SXHSB.05.071	200	116	2	190	127	160	18	12	3	39,2	M16	3600
SXHSB.05.072	200	116	2	190	127	160	18	12	4	39,2	M16	4500
SXHSB.05.073	200	174	3	190	127	160	18	12	4	44,8	M16	6000
SXHSB.89.070	200	116	2	190	225	265	18	15	2	44,8	M16	3200
SXHSB.89.071	200	116	2	190	225	265	18	15	3	39,2	M16	3600
SXHSB.89.072	200	116	2	190	225	265	18	15	4	39,2	M16	4500
SXHSB.89.073	200	174	3	190	225	265	18	15	4	44,8	M16	6000
SXHSB.05.080	250	116	2	212	127	160	18	12	2	44,8	M16	3200
SXHSB.05.081	250	116	2	212	127	160	18	12	3	39,2	M16	3600
SXHSB.05.082	250	116	2	212	127	160	18	12	4	39,2	M16	4500
SXHSB.05.083	250	174	3	212	127	160	18	12	4	44,8	M16	6000
SXHSB.89.080	250	116	2	212	225	265	18	15	2	44,8	M16	3200
SXHSB.89.081	250	116	2	212	225	265	18	15	3	39,2	M16	3600
SXHSB.89.082	250	116	2	212	225	265	18	15	4	39,2	M16	4500
SXHSB.89.083	250	174	3	212	225	265	18	15	4	44,8	M16	6000
SXHSB.05.090	300	116	2	236	127	160	18	12	2	44,8	M16	3200
SXHSB.05.091	300	116	2	236	127	160	18	12	3	39,2	M16	3600
SXHSB.05.092	300	116	2	236	127	160	18	12	4	39,2	M16	4500
SXHSB.05.093	300	174	3	236	127	160	18	12	4	44,8	M16	6000
SXHSB.89.090	300	116	2	236	225	265	18	15	2	44,8	M16	3200
SXHSB.89.091	300	116	2	236	225	265	18	15	3	39,2	M16	3600
SXHSB.89.092	300	116	2	236	225	265	18	15	4	39,2	M16	4500
SXHSB.89.093	300	174	3	236	225	265	18	15	4	44,8	M16	6000



# SXHSB

TUBE - TUBE



UP TO  
**400kV**

**A2-70**



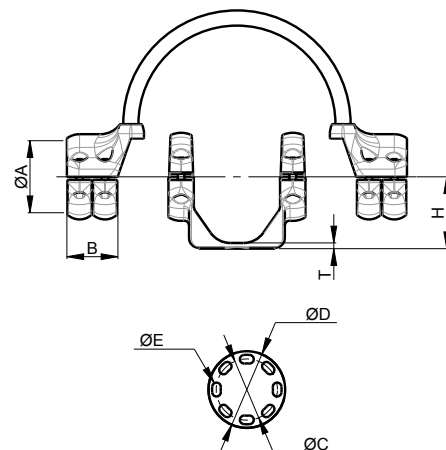
PART NUMBER	A	B	COVERS A	H	C	D	E	T	N° CABLES	Ø	BOLTS A	CURRENT [A]
SXHSB.05.500	2"IPS (60,3mm)	92	2	112	127	160	18	12	2	31,7	M12	2000
SXHSB.89.500	2"IPS (60,3mm)	92	2	112	225	265	18	15	2	31,7	M12	2000
SXHSB.05.510	2,5"IPS (73mm)	92	2	112	127	160	18	12	2	31,7	M12	2000
SXHSB.05.511	2,5"IPS (73mm)	92	2	112	127	160	18	12	2	39,2	M12	2400
SXHSB.89.510	2,5"IPS (73mm)	92	2	112	225	265	18	15	2	31,7	M12	2000
SXHSB.89.511	2,5"IPS (73mm)	92	2	112	225	265	18	15	2	39,2	M12	2400
SXHSB.05.520	3"IPS (88,9mm)	92	2	112	127	160	18	12	2	39,2	M12	2400
SXHSB.05.521	3"IPS (88,9mm)	92	2	112	127	160	18	12	2	44,8	M12	3200
SXHSB.89.520	3"IPS (88,9mm)	92	2	112	225	265	18	15	2	39,2	M12	2400
SXHSB.89.521	3"IPS (88,9mm)	92	2	112	225	265	18	15	2	44,8	M12	3200
SXHSB.05.530	3,5"IPS (101,6mm)	92	2	112	127	160	18	12	2	39,2	M12	2400
SXHSB.05.531	3,5"IPS (101,6mm)	92	2	112	127	160	18	12	2	44,8	M12	3200
SXHSB.89.530	3,5"IPS (101,6mm)	92	2	112	225	265	18	15	2	39,2	M12	2400
SXHSB.89.531	3,5"IPS (101,6mm)	92	2	112	225	265	18	15	2	44,8	M12	3200





# SXHSB

TUBE - TUBE



UP TO  
**400kV**

**A2-70**

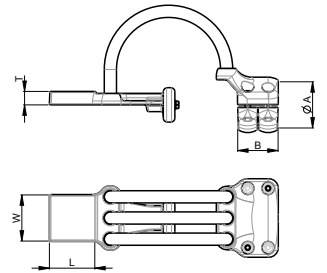
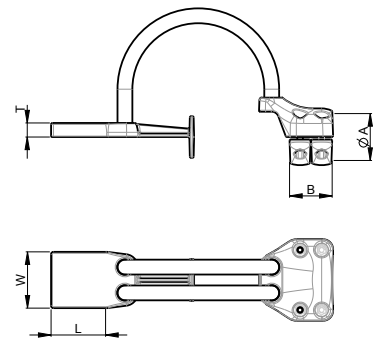


PART NUMBER	A	B	COVERS A	H	C	D	E	T	N° CABLES	Ø	BOLTS A	CURRENT [A]
SXHSB.05.540	4"IPS (114,3mm)	106	2	125	127	160	18	12	2	44,8	M14	3200
SXHSB.05.541	4"IPS (114,3mm)	106	2	125	127	160	18	12	4	31,7	M14	3600
SXHSB.89.540	4"IPS (114,3mm)	106	2	125	225	265	18	15	2	44,8	M14	3200
SXHSB.89.541	4"IPS (114,3mm)	106	2	125	225	265	18	15	4	31,7	M14	3600
SXHSB.05.550	5"IPS (141,3mm)	106	2	150	127	160	18	12	4	31,7	M14	3600
SXHSB.05.551	5"IPS (141,3mm)	106	2	150	127	160	18	12	4	39,2	M14	4500
SXHSB.89.550	5"IPS (141,3mm)	106	2	150	225	265	18	15	4	31,7	M14	3600
SXHSB.89.551	5"IPS (141,3mm)	106	2	150	225	265	18	15	4	39,2	M14	4500
SXHSB.05.560	6"IPS (168,2mm)	106	2	160	127	160	18	12	4	39,2	M14	4500
SXHSB.05.561	6"IPS (168,2mm)	106	2	160	127	160	18	12	4	44,8	M14	6000
SXHSB.89.560	6"IPS (168,2mm)	106	2	160	225	265	18	15	4	39,2	M14	4500
SXHSB.89.561	6"IPS (168,2mm)	106	2	160	225	265	18	15	4	44,8	M14	6000
SXHSB.05.570	8"IPS (219mm)	174	3	212	127	160	18	12	4	44,8	M16	6000
SXHSB.89.570	8"IPS (219mm)	174	3	212	225	265	18	15	4	44,8	M16	6000



## SXA

TUBE - PAD



OPTIONAL DELRING IN THE TROMPET FOR A BETTER MECHANICAL BEHAVIOR AND FATIGUE RESISTANCE

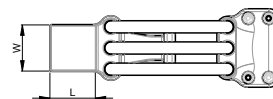
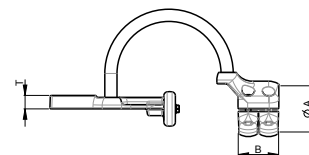
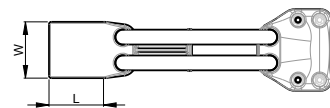
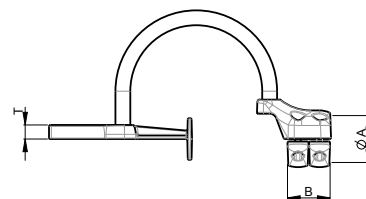


PART NUMBER	A	COVERS A	B	L	W	T	N° CABLES	Ø	BOLTS A	CURRENT [A]
SXA.010	50 - 60	2	92	100	100	20	2	31,7	M12	2000
SXA.020	50 - 60	2	92	125	125	16	2	31,7	M12	2000
SXA.030	50 - 60	2	92	100	200	16	2	31,7	M12	2000
SXA.040	70 - 80	2	92	100	100	25	2	39,2	M12	2500
SXA.050	70 - 80	2	92	125	125	20	2	39,2	M12	2500
SXA.060	70 - 80	2	92	100	200	16	2	44,8	M12	3200
SXA.070	90 - 100	2	92	100	100	30	2	44,8	M12	3200
SXA.080	90 - 100	2	92	125	125	25	2	44,8	M12	3200
SXA.090	90 - 100	2	92	100	200	16	2	44,8	M12	3200
SXA.100	120	2	106	100	100	30	2	44,8	M14	3200
SXA.110	120	2	106	125	125	35	4	39,2	M14	4000
SXA.120	120	2	106	100	200	20	4	39,2	M14	4000
SXA.130	140 -150	2	106	100	100	30	2	44,8	M14	3200
SXA.140	140 -150	2	106	125	125	35	4	39,2	M14	4000
SXA.150	140 -150	2	106	100	200	20	4	39,2	M14	4000
SXA.160	160-170	2	106	100	100	30	2	44,8	M14	3200
SXA.170	160-170	2	106	125	125	35	4	39,2	M14	4000
SXA.180	160-170	2	106	100	200	20	4	39,2	M14	4000
SXA.190	200	2	116	100	100	35	3	39,2	M16	3600
SXA.200	200	2	116	125	125	35	4	39,2	M16	4000
SXA.210	200	2	116	100	200	20	4	39,2	M16	4000
SXA.220	250	2	116	100	100	35	3	39,2	M16	3600
SXA.230	250	2	116	125	125	35	4	39,2	M16	4000
SXA.240	250	2	116	100	200	20	4	39,2	M16	4000



## SXA

TUBE - PAD



OPTIONAL DELRING IN THE TROMPET FOR A BETTER MECHANICAL BEHAVIOR AND FATIGUE RESISTANCE

UP TO 400kV

**BIMET**  
CUPAL or TIN

A2-70

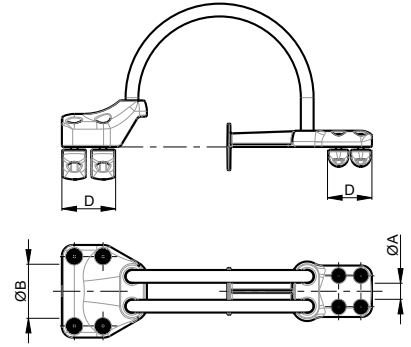
PAD

PART NUMBER	A	COVERS A	B	L	W	T	N° CABLES	Ø	BOLTS A	CURRENT [A]
SXA.510	2"IPS (60,3mm)	2	92	100	100	20	2	31,7	M12	2000
SXA.520	2"IPS (60,3mm)	2	92	125	125	16	2	31,7	M12	2000
SXA.530	2"IPS (60,3mm)	2	92	100	200	16	2	31,7	M12	2000
SXA.540	2,5"IPS (73mm)	2	92	100	100	20	2	31,7	M12	2000
SXA.550	2,5"IPS (73mm)	2	92	125	125	16	2	31,7	M12	2000
SXA.560	2,5"IPS (73mm)	2	92	100	200	16	2	31,7	M12	2000
SXA.570	3"IPS (88,9mm)	2	92	100	100	25	2	39,2	M12	2500
SXA.580	3"IPS (88,9mm)	2	92	125	125	20	2	39,2	M12	2500
SXA.590	3"IPS (88,9mm)	2	92	100	200	16	2	39,2	M12	2500
SXA.600	3,5"IPS (101,6mm)	2	106	100	100	30	2	44,8	M12	3200
SXA.610	3,5"IPS (101,6mm)	2	106	125	125	25	2	44,8	M12	3200
SXA.620	3,5"IPS (101,6mm)	2	106	100	200	16	2	44,8	M12	3200
SXA.630	4"IPS (114,3mm)	2	106	100	100	30	2	44,8	M14	3200
SXA.640	4"IPS (114,3mm)	2	106	125	125	25	2	44,8	M14	3200
SXA.650	4"IPS (114,3mm)	2	106	100	200	16	2	44,8	M14	3200
SXA.660	"5"IPS (141,3mm)	2	106	100	100	30	2	44,8	M14	3200
SXA.670	"5"IPS (141,3mm)	2	106	125	125	35	4	39,2	M14	4000
SXA.680	"5"IPS (141,3mm)	2	106	100	200	20	4	39,2	M14	4000
SXA.690	6"IPS (168,2mm)	2	106	100	100	30	3	39,2	M14	3200
SXA.700	6"IPS (168,2mm)	2	106	125	125	35	4	39,2	M14	4000
SXA.710	6"IPS (168,2mm)	2	106	100	200	20	4	39,2	M14	4000
SXA.720	8"IPS (219mm)	2	116	100	100	30	3	39,2	M16	3200
SXA.730	8"IPS (219mm)	2	116	125	125	35	4	39,2	M16	4000
SXA.740	8"IPS (219mm)	2	116	100	200	20	4	39,2	M16	4000



# SXS

STUD - TUBE



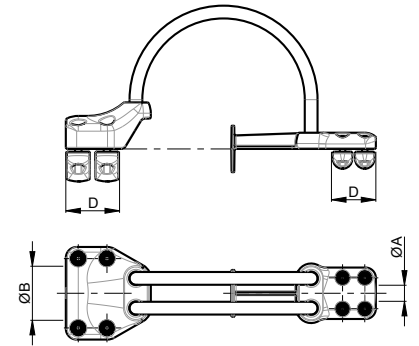
UP TO **400kV** **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	N° CABLES	Ø	BOLTS A	BOLTS B	IN MAX. [A]
SXS.010	30	50 - 60	2	82	2	92	2	31,7	M10	M12	1250
SXS.020	30	70 - 80	2	82	2	92	2	31,7	M10	M12	1250
SXS.030	30	90 - 100	2	82	2	92	2	31,7	M10	M12	1250
SXS.040	30	120	2	82	2	106	2	31,7	M10	M14	1250
SXS.050	30	140 -150	2	82	2	106	2	31,7	M10	M14	1250
SXS.060	30	160-170	2	82	2	106	2	31,7	M10	M14	1250
SXS.070	30	200	2	82	2	116	2	31,7	M10	M16	1250
SXS.080	30	250	2	82	2	116	2	31,7	M10	M16	1250
SXS.090	30	300	2	82	2	116	2	31,7	M10	M16	1250
SXS.100	40	50 - 60	2	82	2	92	2	31,7	M10	M12	2000
SXS.110	40	70 - 80	2	82	2	92	2	31,7	M10	M12	2000
SXS.120	40	90 - 100	2	82	2	92	2	31,7	M10	M12	2000
SXS.130	40	120	2	82	2	106	2	31,7	M10	M14	2000
SXS.140	40	140 -150	2	82	2	106	2	31,7	M10	M14	2000
SXS.150	40	160-170	2	82	2	106	2	31,7	M10	M14	2000
SXS.160	40	200	2	82	2	116	2	31,7	M10	M16	2000
SXS.170	40	250	2	82	2	116	2	31,7	M10	M16	2000
SXS.180	40	300	2	82	2	116	2	31,7	M10	M16	2000
SXS.190	50	50 - 60	2	92	2	92	2	31,7	M12	M12	2000
SXS.200	50	70 - 80	2	92	2	92	2	39,2	M12	M12	2500
SXS.210	50	90 - 100	2	92	2	92	2	44,8	M12	M12	3150
SXS.220	50	120	2	92	2	106	2	44,8	M12	M14	3150
SXS.230	50	140 -150	2	92	2	106	2	44,8	M12	M14	3150
SXS.240	50	160-170	2	92	2	106	2	44,8	M12	M14	3150
SXS.250	50	200	2	92	2	116	2	44,8	M12	M16	3150
SXS.260	50	250	2	92	2	116	2	44,8	M12	M16	3150
SXS.270	50	300	2	92	2	116	2	44,8	M12	M16	3150
SXS.280	60	50 - 60	2	92	2	92	2	31,7	M12	M12	2000
SXS.290	60	70 - 80	2	92	2	92	2	39,2	M12	M12	2500
SXS.300	60	90 - 100	2	92	2	92	2	44,8	M12	M12	3200
SXS.310	60	120	2	92	2	106	4	39,2	M12	M14	4000
SXS.320	60	140 -150	2	92	2	106	4	39,2	M12	M14	4000
SXS.330	60	160-170	2	92	2	106	4	39,2	M12	M14	4000
SXS.340	60	200	2	92	2	116	4	39,2	M12	M16	4000
SXS.350	60	250	2	92	2	116	4	39,2	M12	M16	4000
SXS.360	60	300	2	92	2	116	4	39,2	M12	M16	4000



# SXS

STUD - TUBE



UP TO  
**400kV**

**BIMET**  
CUPAL or TIN

**A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	N° CABLES	Ø	BOLTS A	BOLTS B	IN MAX. [A]
SXS.500	30	2"IPS (60,3mm)	2	82	2	92	2	31,7	M10	M12	1250
SXS.510	30	2,5"IPS (73mm)	2	82	2	92	2	31,7	M10	M12	1250
SXS.520	30	3"IPS (88,9mm)	2	82	2	92	2	31,7	M10	M12	1250
SXS.530	30	3,5"IPS (101,6mm)	2	82	2	92	2	31,7	M10	M12	1250
SXS.540	30	4"IPS (114,3mm)	2	82	2	106	2	31,7	M10	M14	1250
SXS.550	30	5"IPS (141,3mm)	2	82	2	106	2	31,7	M10	M14	1250
SXS.560	30	6"IPS (168,2mm)	2	82	2	106	2	31,7	M10	M14	1250
SXS.570	30	8"IPS (219mm)	2	82	2	116	2	31,7	M10	M16	1250
SXS.580	40	2"IPS (60,3mm)	2	82	2	92	2	31,7	M10	M12	2000
SXS.590	40	2,5"IPS (73mm)	2	82	2	92	2	31,7	M10	M12	2000
SXS.600	40	3"IPS (88,9mm)	2	82	2	92	2	31,7	M10	M12	2000
SXS.610	40	3,5"IPS (101,6mm)	2	82	2	92	2	31,7	M10	M12	2000
SXS.620	40	4"IPS (114,3mm)	2	82	2	106	2	31,7	M10	M14	2000
SXS.630	40	5"IPS (141,3mm)	2	82	2	106	2	31,7	M10	M14	2000
SXS.640	40	6"IPS (168,2mm)	2	82	2	106	2	31,7	M10	M14	2000
SXS.650	40	8"IPS (219mm)	2	82	2	116	2	31,7	M10	M16	2000
SXS.660	50	2"IPS (60,3mm)	2	92	2	92	2	31,7	M12	M12	2000
SXS.670	50	2,5"IPS (73mm)	2	92	2	92	2	31,7	M12	M12	2000
SXS.680	50	3"IPS (88,9mm)	2	92	2	92	2	39,2	M12	M12	2500
SXS.690	50	3,5"IPS (101,6mm)	2	92	2	92	2	44,8	M12	M12	3150
SXS.700	50	4"IPS (114,3mm)	2	92	2	106	2	44,8	M12	M14	3150
SXS.710	50	5"IPS (141,3mm)	2	92	2	106	2	44,8	M12	M14	3150
SXS.720	50	6"IPS (168,2mm)	2	92	2	106	2	44,8	M12	M14	3150
SXS.730	50	8"IPS (219mm)	2	92	2	116	2	44,8	M12	M16	3150
SXS.740	60	2"IPS (60,3mm)	2	92	2	92	2	31,7	M12	M12	2000
SXS.750	60	2,5"IPS (73mm)	2	92	2	92	2	31,7	M12	M12	2000
SXS.760	60	3"IPS (88,9mm)	2	92	2	92	2	39,2	M12	M12	2500
SXS.770	60	3,5"IPS (101,6mm)	2	92	2	92	2	44,8	M12	M12	3200
SXS.780	60	4"IPS (114,3mm)	2	92	2	106	4	39,2	M12	M14	4000
SXS.790	60	5"IPS (141,3mm)	2	92	2	106	4	39,2	M12	M14	4000
SXS.800	60	6"IPS (168,2mm)	2	92	2	106	4	39,2	M12	M14	4000
SXS.810	60	8"IPS (219mm)	2	92	2	116	4	39,2	M12	M16	4000

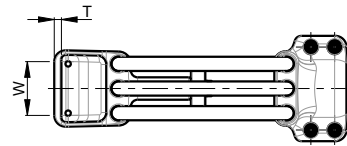
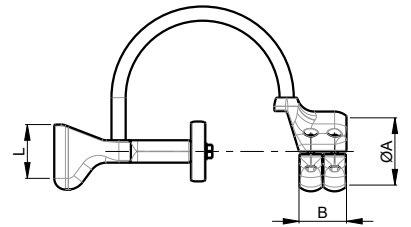
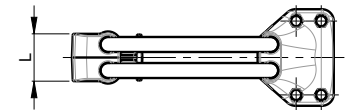
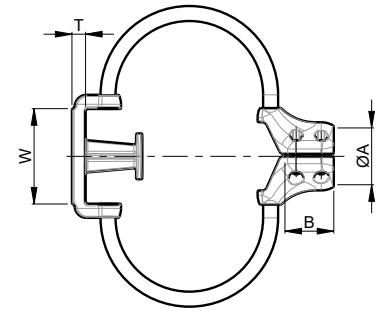


# SXAT

TUBE - PAD



OPTIONAL DELRING IN THE TROMPET FOR A BETTER MECHANICAL BEHAVIOR AND FATIGUE RESISTANCE



UP TO 400kV

**BIMET**  
CUPAL or TIN

A2-70

PAD

PART NUMBER	A	B	L	W	T	N° CABLES	Ø	BOLTS A	IN MAX. [A]
SXAT.01.010	50 - 60	92	100	100	20	2	31,7	M12	2000
SXAT.01.020	50 - 60	92	125	125	16	2	31,7	M12	2000
SXAT.01.030	50 - 60	92	100	200	16	2	31,7	M12	2000
SXAT.01.040	70 - 80	92	100	100	25	2	39,2	M12	2500
SXAT.01.050	70 - 80	92	125	125	20	2	39,2	M12	2500
SXAT.01.060	70 - 80	92	100	200	16	2	44,8	M12	3200
SXAT.01.070	90 - 100	92	100	100	30	2	44,8	M12	3200
SXAT.01.080	90 - 100	92	125	125	25	2	44,8	M12	3200
SXAT.01.090	90 - 100	92	100	200	16	2	44,8	M12	3200
SXAT.01.100	120	106	100	100	30	2	44,8	M14	3200
SXAT.01.110	120	106	125	125	35	4	39,2	M14	4000
SXAT.01.120	120	106	100	200	20	4	39,2	M14	4000
SXAT.01.130	140 - 150	106	100	100	30	2	44,8	M14	3200
SXAT.01.140	140 - 150	106	125	125	35	4	39,2	M14	4000
SXAT.01.150	140 - 150	106	100	200	20	4	39,2	M14	4000
SXAT.01.160	160-170	106	100	100	30	2	44,8	M14	3200
SXAT.01.170	160-170	106	125	125	35	4	39,2	M14	4000
SXAT.01.180	160-170	106	100	200	20	4	39,2	M14	4000
SXAT.01.190	200	116	125	125	35	4	39,2	M16	4000
SXAT.01.200	200	116	100	200	20	4	39,2	M16	4000
SXAT.01.210	250	116	125	125	35	4	39,2	M16	4000
SXAT.01.220	250	116	100	200	20	4	39,2	M16	4000

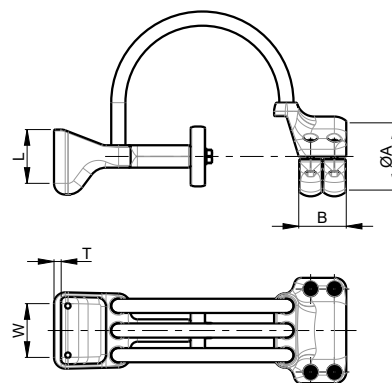
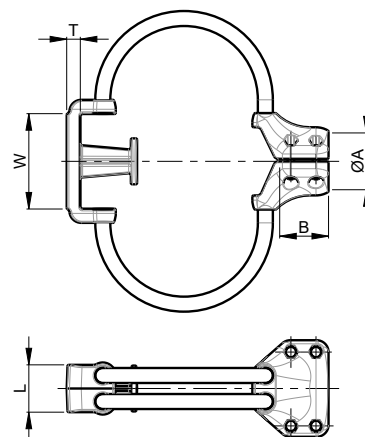


# SXAT

TUBE - PAD



OPTIONAL DELRING IN THE TROMPET FOR A BETTER MECHANICAL BEHAVIOR AND FATIGUE RESISTANCE



UP TO 400kV

**BIMET**  
CUPAL or TIN

A2-70

PAD

PART NUMBER	A	B	L	W	T	N° CABLES	Ø	BOLTS A	IN MAX. [A]
SXAT.01.510	2"IPS (60,3mm)	92	100	100	20	2	31,7	M12	2000
SXAT.01.520	2"IPS (60,3mm)	92	125	125	16	2	31,7	M12	2000
SXAT.01.530	2"IPS (60,3mm)	92	100	200	16	2	31,7	M12	2000
SXAT.01.540	2,5"IPS (73mm)	92	100	100	20	2	31,7	M12	2000
SXAT.01.550	2,5"IPS (73mm)	92	125	125	16	2	31,7	M12	2000
SXAT.01.560	2,5"IPS (73mm)	92	100	200	16	2	31,7	M12	2000
SXAT.01.570	3"IPS (88,9mm)	92	100	100	25	2	39,2	M12	2500
SXAT.01.580	3"IPS (88,9mm)	92	125	125	20	2	39,2	M12	2500
SXAT.01.590	3"IPS (88,9mm)	92	100	200	16	2	39,2	M12	2500
SXAT.01.600	3,5"IPS (101,6mm)	106	100	100	30	2	44,8	M12	3200
SXAT.01.610	3,5"IPS (101,6mm)	106	125	125	25	2	44,8	M12	3200
SXAT.01.620	3,5"IPS (101,6mm)	106	100	200	16	2	44,8	M12	3200
SXAT.01.630	4"IPS (114,3mm)	106	100	100	30	2	44,8	M14	3200
SXAT.01.640	4"IPS (114,3mm)	106	125	125	25	2	44,8	M14	3200
SXAT.01.650	4"IPS (114,3mm)	106	100	200	16	2	44,8	M14	3200
SXAT.01.660	"5"IPS (141,3mm)	106	100	100	30	2	44,8	M14	3200
SXAT.01.670	"5"IPS (141,3mm)	106	125	125	35	4	39,2	M14	4000
SXAT.01.680	"5"IPS (141,3mm)	106	100	200	20	4	39,2	M14	4000
SXAT.01.690	6"IPS (168,2mm)	106	125	125	35	4	39,2	M14	4000
SXAT.01.700	6"IPS (168,2mm)	106	100	200	20	4	39,2	M14	4000
SXAT.01.710	8"IPS (219mm)	116	125	125	35	4	39,2	M16	4000
SXAT.01.720	8"IPS (219mm)	116	100	200	20	4	39,2	M16	4000

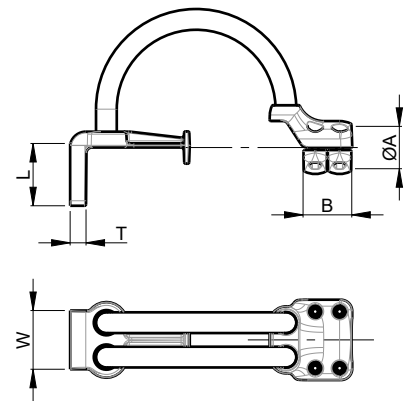
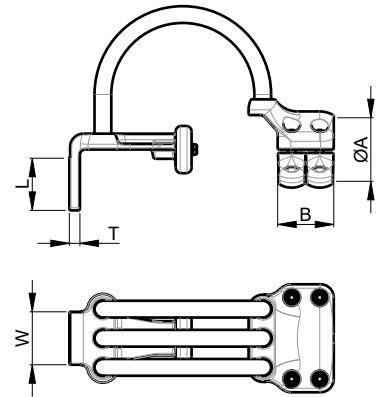


## SXAK

TUBE - PAD



OPTIONAL DELRING IN THE TROMPET FOR A BETTER MECHANICAL BEHAVIOR AND FATIGUE RESISTANCE



UP TO 400kV

**BIMET**  
CUPAL or TIN

A2-70

PAD

PART NUMBER	A	COVERS A	B	L	W	T	N° CABLES	Ø	A	BOLTS A	CURRENT [A]
SXAK.90.010	50 - 60	2	92	100	100	20	2	31,7	90	M12	2000
SXAK.90.020	50 - 60	2	92	125	125	16	2	31,7	90	M12	2000
SXAK.90.030	50 - 60	2	92	100	200	16	2	31,7	90	M12	2000
SXAK.90.040	70 - 80	2	92	100	100	25	2	39,2	90	M12	2500
SXAK.90.050	70 - 80	2	92	125	125	20	2	39,2	90	M12	2500
SXAK.90.060	70 - 80	2	92	100	200	16	2	44,8	90	M12	3200
SXAK.90.070	90 - 100	2	92	100	100	30	2	44,8	90	M12	3200
SXAK.90.080	90 - 100	2	92	125	125	25	2	44,8	90	M12	3200
SXAK.90.090	90 - 100	2	92	100	200	16	2	44,8	90	M12	3200
SXAK.90.100	120	2	106	100	100	30	2	44,8	90	M14	3200
SXAK.90.110	120	2	106	125	125	35	4	39,2	90	M14	4000
SXAK.90.120	120	2	106	100	200	20	4	39,2	90	M14	4000
SXAK.90.130	140 - 150	2	106	100	100	30	2	44,8	90	M14	3200
SXAK.90.140	140 - 150	2	106	125	125	35	4	39,2	90	M14	4000
SXAK.90.150	140 - 150	2	106	100	200	20	4	39,2	90	M14	4000
SXAK.90.160	160-170	2	106	100	100	30	2	44,8	90	M14	3200
SXAK.90.170	160-170	2	106	125	125	35	4	39,2	90	M14	4000
SXAK.90.180	160-170	2	106	100	200	20	4	39,2	90	M14	4000
SXAK.90.190	200	2	174	100	100	35	3	39,2	90	M16	3600
SXAK.90.200	200	2	174	125	125	35	4	39,2	90	M16	4000
SXAK.90.210	200	2	174	100	200	20	4	39,2	90	M16	4000
SXAK.90.220	250	2	174	100	100	35	3	39,2	90	M16	3600
SXAK.90.230	250	2	174	125	125	35	4	39,2	90	M16	4000
SXAK.90.240	250	2	174	100	200	20	4	39,2	90	M16	4000



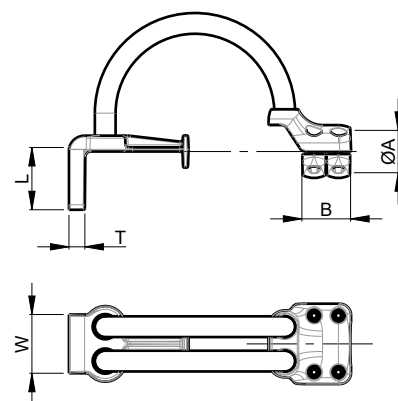
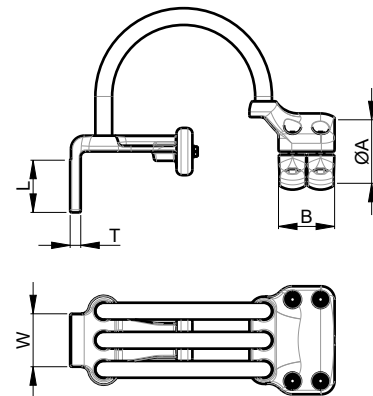


## SXAK

TUBE - PAD



OPTIONAL DELRING IN THE TROMPET FOR A BETTER MECHANICAL BEHAVIOR AND FATIGUE RESISTANCE



UP TO 400kV

**BIMET**  
CUPAL or TIN

A2-70

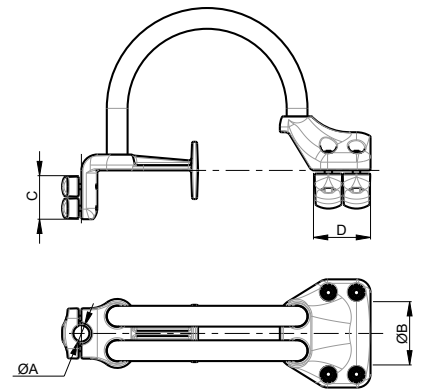
PAD

PART NUMBER	A	COVERS A	B	L	W	T	N° CABLES	Ø	A	BOLTS A	CURRENT [A]
SXAK.90.510	2"IPS (60,3mm)	2	72	100	100	20	2	31,7	90	M12	2000
SXAK.90.520	2"IPS (60,3mm)	2	72	125	125	16	2	31,7	90	M12	2000
SXAK.90.530	2"IPS (60,3mm)	2	72	100	200	16	2	31,7	90	M12	2000
SXAK.90.540	2,5"IPS (73mm)	2	72	100	100	20	2	31,7	90	M12	2000
SXAK.90.550	2,5"IPS (73mm)	2	72	125	125	16	2	31,7	90	M12	2000
SXAK.90.560	2,5"IPS (73mm)	2	72	100	200	16	2	31,7	90	M12	2000
SXAK.90.570	3"IPS (88,9mm)	2	72	100	100	25	2	39,2	90	M12	2500
SXAK.90.580	3"IPS (88,9mm)	2	72	125	125	20	2	39,2	90	M12	2500
SXAK.90.590	3"IPS (88,9mm)	2	72	100	200	16	2	39,2	90	M12	2500
SXAK.90.600	3,5"IPS (101,6mm)	2	72	100	100	30	2	44,8	90	M12	3200
SXAK.90.610	3,5"IPS (101,6mm)	2	72	125	125	25	2	44,8	90	M12	3200
SXAK.90.620	3,5"IPS (101,6mm)	2	72	100	200	16	2	44,8	90	M12	3200
SXAK.90.630	4"IPS (114,3mm)	2	72	100	100	30	2	44,8	90	M14	3200
SXAK.90.640	4"IPS (114,3mm)	2	72	125	125	25	2	44,8	90	M14	3200
SXAK.90.650	4"IPS (114,3mm)	2	72	100	200	16	2	44,8	90	M14	3200
SXAK.90.660	5"IPS (141,3mm)	2	72	100	100	30	2	44,8	90	M14	3200
SXAK.90.670	5"IPS (141,3mm)	2	72	125	125	35	4	39,2	90	M14	4000
SXAK.90.680	5"IPS (141,3mm)	2	72	100	200	20	4	39,2	90	M14	4000
SXAK.90.690	6"IPS (168,2mm)	2	72	100	100	30	3	39,2	90	M14	3200
SXAK.90.700	6"IPS (168,2mm)	2	72	125	125	35	4	39,2	90	M14	4000
SXAK.90.710	6"IPS (168,2mm)	2	72	100	200	20	4	39,2	90	M14	4000
SXAK.90.720	8"IPS (219mm)	2	72	100	100	30	3	39,2	90	M16	3200
SXAK.90.730	8"IPS (219mm)	2	72	125	125	35	4	39,2	90	M16	4000
SXAK.90.740	8"IPS (219mm)	2	72	100	200	20	4	39,2	90	M16	4000



## SXK

STUD - TUBE



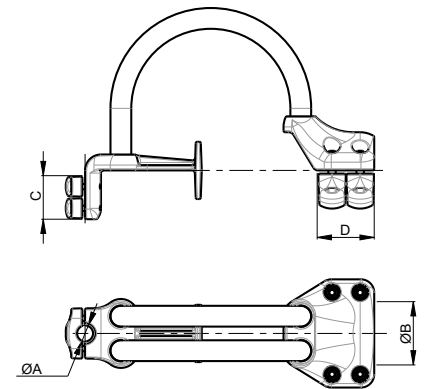
UP TO **400kV** **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	N° CABLES	Ø	BOLTS A	BOLTS B	CURRENT [A]
SXK.010	30	50 - 60	2	82	2	92	2	31,7	M10	M12	1250
SXK.020	30	70 - 80	2	82	2	92	2	31,7	M10	M12	1250
SXK.030	30	90 - 100	2	82	2	92	2	31,7	M10	M12	1250
SXK.040	30	120	2	82	2	106	2	31,7	M10	M14	1250
SXK.050	30	140 -150	2	82	2	106	2	31,7	M10	M14	1250
SXK.060	30	160-170	2	82	2	106	2	31,7	M10	M14	1250
SXK.070	30	200	2	82	2	116	2	31,7	M10	M16	1250
SXK.080	30	250	2	82	2	116	2	31,7	M10	M16	1250
SXK.090	30	300	2	82	2	116	2	31,7	M10	M16	1250
SXK.100	40	50 - 60	2	82	2	92	2	31,7	M10	M12	2000
SXK.110	40	70 - 80	2	82	2	92	2	31,7	M10	M12	2000
SXK.120	40	90 - 100	2	82	2	92	2	31,7	M10	M12	2000
SXK.130	40	120	2	82	2	106	2	31,7	M10	M14	2000
SXK.140	40	140 -150	2	82	2	106	2	31,7	M10	M14	2000
SXK.150	40	160-170	2	82	2	106	2	31,7	M10	M14	2000
SXK.160	40	200	2	82	2	116	2	31,7	M10	M16	2000
SXK.170	40	250	2	82	2	116	2	31,7	M10	M16	2000
SXK.180	40	300	2	82	2	116	2	31,7	M10	M16	2000
SXK.190	50	50 - 60	2	92	2	92	2	31,7	M12	M12	2000
SXK.200	50	70 - 80	2	92	2	92	2	39,2	M12	M12	2500
SXK.210	50	90 - 100	2	92	2	92	2	44,8	M12	M12	3150
SXK.220	50	120	2	92	2	106	2	44,8	M12	M14	3150
SXK.230	50	140 -150	2	92	2	106	2	44,8	M12	M14	3150
SXK.240	50	160-170	2	92	2	106	2	44,8	M12	M14	3150
SXK.250	50	200	2	92	2	116	2	44,8	M12	M16	3150
SXK.260	50	250	2	92	2	116	2	44,8	M12	M16	3150
SXK.270	50	300	2	92	2	116	2	44,8	M12	M16	3150
SXK.280	60	50 - 60	2	92	2	92	2	31,7	M12	M12	2000
SXK.290	60	70 - 80	2	92	2	92	2	39,2	M12	M12	2500
SXK.300	60	90 - 100	2	92	2	92	2	44,8	M12	M12	3200
SXK.310	60	120	2	92	2	106	4	39,2	M12	M14	4000
SXK.320	60	140 -150	2	92	2	106	4	39,2	M12	M14	4000
SXK.330	60	160-170	2	92	2	106	4	39,2	M12	M14	4000
SXK.340	60	200	2	92	2	116	4	39,2	M12	M16	4000
SXK.350	60	250	2	92	2	116	4	39,2	M12	M16	4000
SXK.360	60	300	2	92	2	116	4	39,2	M12	M16	4000



# SXX

STUD - TUBE



UP TO **400kV** **BIMET** CUPAL or TIN **A2-70**

PART NUMBER	A	B	COVERS A	C	COVERS B	D	N° CABLES	Ø	BOLTS A	BOLTS B	CURRENT [A]
SXX.500	30	2"IPS (60,3mm)	2	82	2	92	2	31,7	M10	M12	1250
SXX.510	30	2,5"IPS (73mm)	2	82	2	92	2	31,7	M10	M12	1250
SXX.520	30	3"IPS (88,9mm)	2	82	2	92	2	31,7	M10	M12	1250
SXX.530	30	3,5"IPS (101,6mm)	2	82	2	92	2	31,7	M10	M12	1250
SXX.540	30	4"IPS (114,3mm)	2	82	2	106	2	31,7	M10	M14	1250
SXX.550	30	5"IPS (141,3mm)	2	82	2	106	2	31,7	M10	M14	1250
SXX.560	30	6"IPS (168,2mm)	2	82	2	106	2	31,7	M10	M14	1250
SXX.570	30	8"IPS (219mm)	2	82	2	116	2	31,7	M10	M16	1250
SXX.580	40	2"IPS (60,3mm)	2	82	2	92	2	31,7	M10	M12	2000
SXX.590	40	2,5"IPS (73mm)	2	82	2	92	2	31,7	M10	M12	2000
SXX.600	40	3"IPS (88,9mm)	2	82	2	92	2	31,7	M10	M12	2000
SXX.610	40	3,5"IPS (101,6mm)	2	82	2	92	2	31,7	M10	M12	2000
SXX.620	40	4"IPS (114,3mm)	2	82	2	106	2	31,7	M10	M14	2000
SXX.630	40	5"IPS (141,3mm)	2	82	2	106	2	31,7	M10	M14	2000
SXX.640	40	6"IPS (168,2mm)	2	82	2	106	2	31,7	M10	M14	2000
SXX.650	40	8"IPS (219mm)	2	82	2	116	2	31,7	M10	M16	2000
SXX.660	50	2"IPS (60,3mm)	2	92	2	92	2	31,7	M12	M12	2000
SXX.670	50	2,5"IPS (73mm)	2	92	2	92	2	31,7	M12	M12	2000
SXX.680	50	3"IPS (88,9mm)	2	92	2	92	2	39,2	M12	M12	2500
SXX.690	50	3,5"IPS (101,6mm)	2	92	2	92	2	44,8	M12	M12	3150
SXX.700	50	4"IPS (114,3mm)	2	92	2	106	2	44,8	M12	M14	3150
SXX.710	50	5"IPS (141,3mm)	2	92	2	106	2	44,8	M12	M14	3150
SXX.720	50	6"IPS (168,2mm)	2	92	2	106	2	44,8	M12	M14	3150
SXX.730	50	8"IPS (219mm)	2	92	2	116	2	44,8	M12	M16	3150
SXX.740	60	2"IPS (60,3mm)	2	92	2	92	2	31,7	M12	M12	2000
SXX.750	60	2,5"IPS (73mm)	2	92	2	92	2	31,7	M12	M12	2000
SXX.760	60	3"IPS (88,9mm)	2	92	2	92	2	39,2	M12	M12	2500
SXX.770	60	3,5"IPS (101,6mm)	2	92	2	92	2	44,8	M12	M12	3200
SXX.780	60	4"IPS (114,3mm)	2	92	2	106	4	39,2	M12	M14	4000
SXX.790	60	5"IPS (141,3mm)	2	92	2	106	4	39,2	M12	M14	4000
SXX.800	60	6"IPS (168,2mm)	2	92	2	106	4	39,2	M12	M14	4000
SXX.810	60	8"IPS (219mm)	2	92	2	116	4	39,2	M12	M16	4000



# SSAXHSB



# SXFL



# SXHLB

AL EXPANSION ELBOW SUPPORT



# SXHSB

AL EXPANSION SUPPORT COUPLER



# SXAK-REG

AL EXPANSION ANGULAR TERMINAL



# SXHSB-N

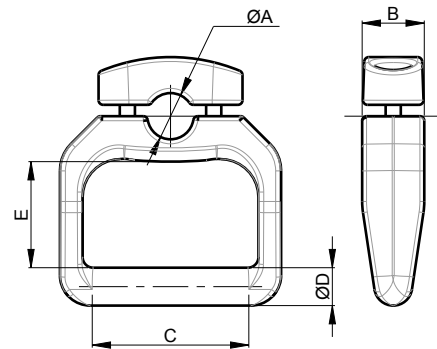
AL EXPANSION SUPPORT COUPLER





# SGP01

CABLE

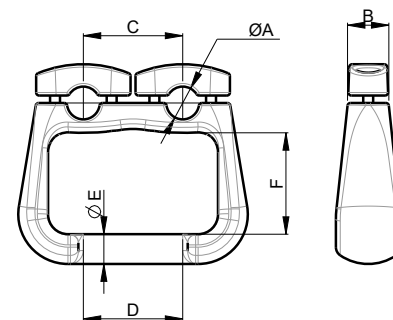


UP TO 400kV A2-70

PART NUMBER	A	COVERS A	B	C	D	E	BOLTS A
SGP01.010	16 - 24	1	36	100	30	100	M8
SGP01.020	24 - 33	1	41	100	30	100	M10
SGP01.030	33 - 45	1	41	100	30	100	M10
SGP01.040	45 - 50	1	41	100	30	70	M10

# SGDPL

CABLE BUNDLE

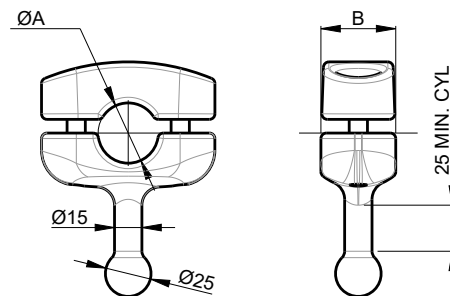


UP TO 400kV A2-70

PART NUMBER	A	COVERS A	B	C	D	E	F	BOLTS A
SGDPL.100.010	16 - 24	1	36	100	150	30	100	M8
SGDPL.100.020	24 - 33	1	41	100	100	30	100	M10
SGDPL.100.030	24 - 33	1	41	100	150	30	100	M10
SGDPL.100.040	24 - 33	1	41	100	200	30	100	M10
SGDPL.100.050	33 - 45	1	41	100	100	30	105	M10
SGDPL.100.060	33 - 45	1	41	100	150	30	105	M10
SGDPL.100.070	45 - 50	1	41	100	150	30	105	M10
SGDPL.200.010	16 - 24	1	36	200	150	30	105	M8
SGDPL.200.020	24 - 33	1	41	200	100	30	105	M10
SGDPL.200.030	24 - 33	1	41	200	200	30	105	M10
SGDPL.200.040	33 - 45	1	41	200	100	30	105	M10
SGDPL.200.050	33 - 45	1	41	200	200	30	105	M10
SGDPL.200.060	45 - 50	1	41	200	200	30	105	M10

# SGDIA01

CABLE



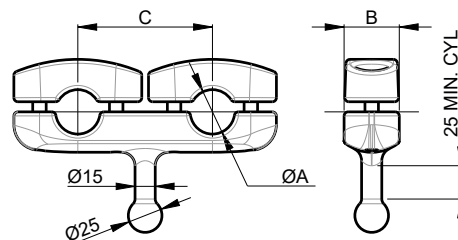
UP TO  
**400kV**

**A2-70**

PART NUMBER	A	COVERS A	B	BOLTS A
SGDIA.01.010	16 - 24	1	36	M8
SGDIA.01.020	24 - 33	1	41	M10
SGDIA.01.030	33 - 45	1	41	M10
SGDIA.01.040	45 - 50	1	41	M10

# SGDIA02

CABLE BUNDLE



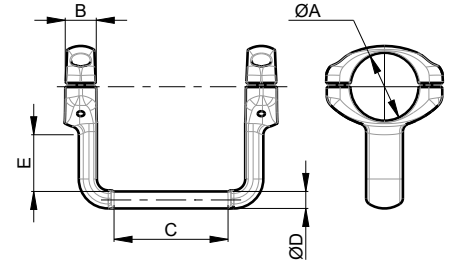
UP TO  
**400kV**

**A2-70**

PART NUMBER	A	COVERS A	B	C	BOLTS A
SGDIA.02.010	16 - 24	1	36	100	M8
SGDIA.02.020	24 - 33	1	41	100	M10
SGDIA.02.030	33 - 45	1	41	100	M10
SGDIA.02.040	45 - 50	1	41	100	M10

## SGP02

TUBE

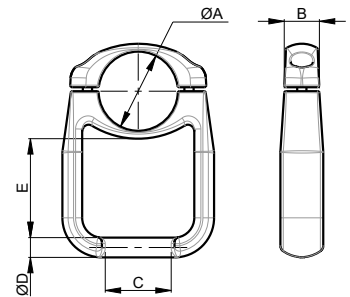


UP TO **400kV** **A2-70**

PART NUMBER	A	COVERS A	B	C	D	E	BOLTS A
SGP.02.010	90 - 100	2	46	200	30	125	M12
SGP.02.020	120	2	53	200	30	125	M14
SGP.02.030	140 - 150	2	53	200	30	110	M14
SGP.02.040	160-170	2	53	200	30	100	M14
SGP.02.050	200	2	58	200	30	145	M16
SGP.02.060	250	2	58	200	30	145	M16
SGP.02.070	300	2	58	200	30	120	M16
SGP.02.500	3"IPS (88,9mm)	2	46	200	30	125	M12
SGP.02.510	3,5"IPS (101,6mm)	2	46	200	30	125	M12
SGP.02.520	4"IPS (114,3mm)	2	53	200	30	125	M14
SGP.02.530	5"IPS (141,3mm)	2	53	200	30	110	M14
SGP.02.540	6"IPS (168,2mm)	2	53	200	30	100	M14
SGP.02.550	8"IPS (219mm)	2	58	200	30	135	M16

## SGP03

TUBE



UP TO **400kV** **A2-70**

PART NUMBER	A	COVERS A	B	C	D	E	BOLTS A
SGP.03.010	50 - 60	1	46	100	30	70	M12
SGP.03.020	70 - 80	1	46	100	30	70	M12
SGP.03.030	90 - 100	1	46	100	30	125	M12
SGP.03.040	120	1	53	100	30	100	M14
SGP.03.050	140 - 150	1	53	100	30	95	M14
SGP.03.060	160-170	1	53	200	30	95	M14
SGP.03.070	200	1	58	200	30	95	M16
SGP.03.080	250	1	58	200	30	95	M16
SGP.03.090	300	1	58	200	30	95	M16
SGP.03.500	2"IPS (60,3mm)	1	46	100	30	70	M12
SGP.03.510	2,5"IPS (73mm)	1	46	100	30	70	M12
SGP.03.520	3"IPS (88,9mm)	1	46	100	30	125	M12
SGP.03.530	3,5"IPS (101,6mm)	1	46	100	30	125	M12
SGP.03.540	4"IPS (114,3mm)	1	53	100	30	100	M14
SGP.03.550	5"IPS (141,3mm)	1	53	200	30	95	M14
SGP.03.560	6"IPS (168,2mm)	1	53	200	30	95	M14
SGP.03.570	8"IPS (219mm)	1	58	200	30	95	M16



# SGA



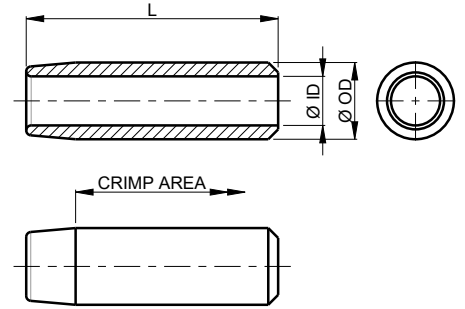
# SGDPL

AL BUNDLE GROUNDING CLAMP



## YCAK

AL COMP. TERMINAL



UP TO  
**400kV**

CABLE PART NUMBER	CABLE RANGE	ID	OD	B	L	CRIMPING DIE	N° CRIMPS
203	16,4 - 19,2	20	30	105	90,5	L717	3
218	18,4 - 20,7	21,7	33,4	107	90,5	L719	3
235	20,6 - 22,4	23,4	36,7	113	97	L720	3
246	22,5 - 24,2	24,6	38	121	103	L722	3
269	24,3 - 26,2	26,7	41	122	103	L724	3
300	25,4 - 29,3	29,8	46,6	123	103	L725	3
336	28,8 - 33,0	33,6	50	124	103	L727	3
372	33,1 - 36,2	37,2	57	194	170	L728	5
383	36,3 - 37,2	38,3	57,5	193	171,5	L728	5
416	37,3 - 39,2	41,6	63	186	160	L729	5
430	39,3 - 41,5	43	63	185	160	L735	5
450	41,6 - 44,1	45	63	185	160	L735	5
473	44,2 - 45,1	47,3	63	181	160	L735	5
488	45,2 - 47,5	48,8	66	193	156,5	L740	5

IN CASE OF ORDER INDICATE THE CABLE PART NUMBER AND THE FAMILY TYPE (SYS, YCAKA,...)

### SYS

STRAIGHT CONNECTOR



### SYT

T CONNECTOR



### YCAKA

TERMINAL



### SYS D

BUNDLE STRAIGHT CONNECTOR



### SY D T

BUNDLE T CONNECTOR



### YCAK D A

BUNDLE TERMINAL





## STP36-220

### GAS ENGINE HYDRAULIC PUMP

**Nominal power**

1500 W

**Oil tank**

2.2 L.

**Pressure**

70 MPa

**Size**

470 x 330 x 445 mm

**Weight**

37.0 kg

**Single acting gas engine hydraulic pump with double speed.**

This tool builds pressure and the bypass valve release when preset pressure is reached.

**Wire remote control 5m**

advance, open, retract

**Operating energy**

Unleaded petrol engine 4 strokes

**Oil delivery**

0 to 2 MPa: 2,6L/min

2 to 70 MPa: 0,5L/min

**Mechanism**

Double speed

**Tool operation**

Hand hydraulic distributor

Wire remote control two channels

**Tool release:**

Audible relief valve, Pressure sensor



## SB550

### SINGLE ACTING CONNECTABLE CRIMPING TOOL

**Operating energy**

Hydraulic pressure

**Type of head**

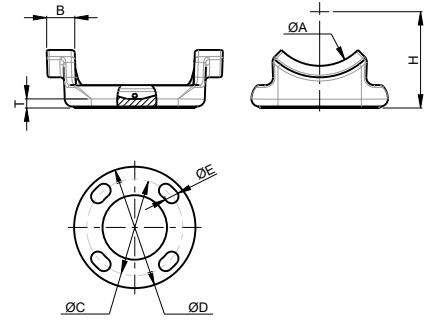
U type head which is robust

**Mechanism**

Single acting, spring return.

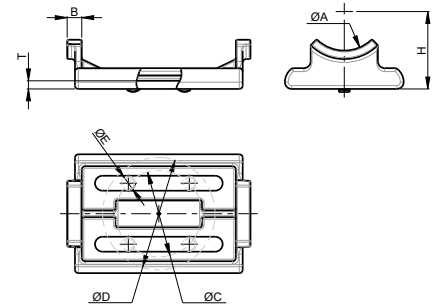
# SWOH

AL WELD FIXED SUPPORT



PART NUMBER	A	B	H	C	D	E	T
SWOH18A3	2"IPS (60mm)	21	70	76	110	14	12
SWOH18A5	2"IPS (60mm)	21	70	127	160	18	12
SWOH19A3	2,5"IPS (73mm)	21	79	76	110	14	12
SWOH19A5	2,5"IPS (73mm)	21	79	127	160	18	12
SWOH20A3	3"IPS (88,9mm)	21	92	76	110	14	12
SWOH20A5	3"IPS (88,9mm)	21	92	127	160	18	12
SWOH21A3	3,5"IPS (101,6mm)	21	102	76	110	14	12
SWOH21A5	3,5"IPS (101,6mm)	21	102	127	160	18	12
SWOH22A3	4"IPS (114,3mm)	21	114	76	110	14	12
SWOH22A5	4"IPS (114,3mm)	21	114	127	160	18	12
SWOH24A5	5"IPS (141,3mm)	38	127	127	160	18	12
SWOH86A5	6"IPS (168mm)	38	140	127	160	18	12

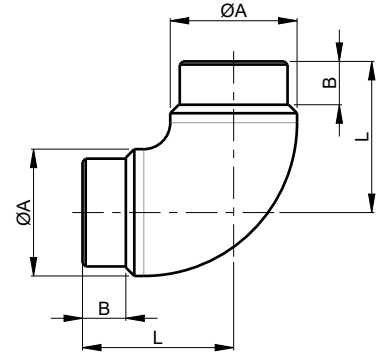
# SWSUS



PART NUMBER	A	B	H	C	D	E	T
SWSUS18A3	2"IPS (60mm)	21	70	76	110	14	12
SWSUS18A5	2"IPS (60mm)	21	70	127	160	18	12
SWSUS19A3	2,5"IPS (73mm)	21	79	76	110	14	12
SWSUS19A5	2,5"IPS (73mm)	21	79	127	160	18	12
SWSUS20A3	3"IPS (88,9mm)	21	92	76	110	14	12
SWSUS20A5	3"IPS (88,9mm)	21	92	127	160	18	12
SWSUS21A3	3,5"IPS (101,6mm)	21	102	76	110	14	12
SWSUS21A5	3,5"IPS (101,6mm)	21	102	127	160	18	12
SWSUS22A3	4"IPS (114,3mm)	21	114	76	110	14	12
SWSUS22A5	4"IPS (114,3mm)	21	114	127	160	18	12
SWSUS24A5	5"IPS (141,3mm)	38	127	127	160	18	12
SWSUS86A5	6"IPS (168mm)	38	140	127	160	18	12

## SWL

AL ANGULAR CONNECTOR

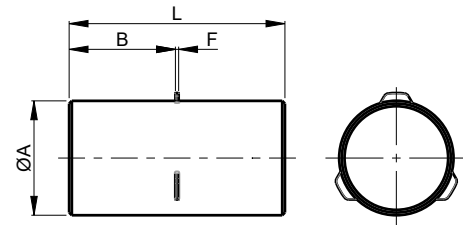


UP TO  
**400kV**

PART NUMBER SCH.40	PART NUMBER SCH.80	A	B	L
SWL18A	SWL58A	2"IPS (60mm)	25	90
SWL19A	SWL59A	2,5"IPS (73mm)	35	100
SWL20A	SWL90A	3"IPS (88,9mm)	35	120
SWL21A	SWL91A	3,5"IPS (101,6mm)	35	130
SWL22A	SWL92A	4"IPS (114,3mm)	35	145
SWL24A	SWL94A	5"IPS (141,3mm)	35	155
SWL86A	SWL96A	6"IPS (168mm)	41	155

## WS

AL WELD STRAIGHT COUPLER

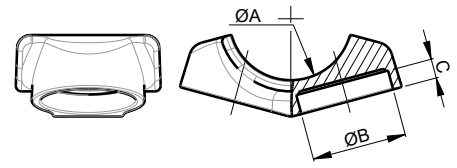


UP TO  
**400kV**

PART NUMBER SCH.40	PART NUMBER SCH.80	A	B	F	L
WS18A	WS58A	2"IPS (60mm)	150	8	305
WS19A	WS59A	2,5"IPS (73mm)	185	10	380
WS20A	WS90A	3"IPS (88,9mm)	224	11	455
WS21A	WS91A	3,5"IPS (101,6mm)	223	12	455
WS22A	WS92A	4"IPS (114,3mm)	222	12	455
WS24A	WS94A	5"IPS (141,3mm)	222	13	455
WS86A	WS96A	6"IPS (168mm)	222	14	455

# SWAT30

AL WELD A-FRAME CONNECTOR

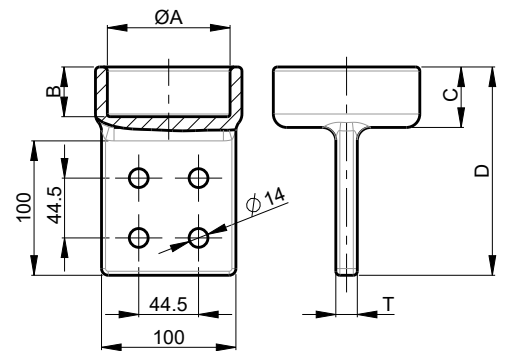


UP TO  
400kV

PART NUMBER	A (RUN)	B (TAP)	C
SWAT18A16A30		1,25"IPS (42mm)	25
SWAT18A17A30	2"IPS (60mm)	1,5"IPS (48mm)	25
SWAT18A18A30		2"IPS (60mm)	25
SWAT19A16A30		1,25"IPS (42mm)	25
SWAT19A17A30	2,5"IPS (73mm)	1,5"IPS (48mm)	25
SWAT19A18A30		2"IPS (60mm)	25
SWAT20A17A30		1,5"IPS (48mm)	25
SWAT20A18A30	3"IPS (88,9mm)	2"IPS (60mm)	25
SWAT20A19A30		2,5"IPS (73mm)	35
SWAT21A16A30		1,25"IPS (42mm)	25
SWAT21A17A30		1,5"IPS (48mm)	25
SWAT21A18A30	3,5"IPS (101,6mm)	2"IPS (60mm)	25
SWAT21A19A30		2,5"IPS (73mm)	35
SWAT21A20A30		3"IPS (88,9mm)	35
SWAT22A18A30		2"IPS (60mm)	25
SWAT22A19A30	4"IPS (114,3mm)	2,5"IPS (73mm)	35
SWAT22A20A30		3"IPS (88,9mm)	35
SWAT24A18A30		4"IPS (114,3mm)	35
SWAT24A19A30	"5"IPS (141,3mm)	2,5"IPS (73mm)	35
SWAT24A20A30		3"IPS (88,9mm)	35
SWAT86A20A30		3"IPS (88,9mm)	35
SWAT86A21A30	"6"IPS (168mm)	3,5"IPS (101,6mm)	35
SWAT86A22A30		4"IPS (114,3mm)	35

# SWAC

AL WELD COUPLER TERMINAL



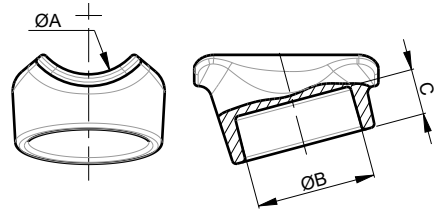
UP TO  
400kV



PART NUMBER SCH.40	PART NUMBER SCH.80	80A	B	C	D	T
SWAC18A4NAWS	SWAC58A4NAWS	2"IPS (60mm)	35	45	155	16
SWAC19A4NAWS	SWAC59A4NAWS	2,5"IPS (73mm)	35	45	155	16
SWAC20A4NAWS	SWAC90A4NAWS	3"IPS (88,9mm)	35	47	157	16
SWAC21A4NAWS	SWAC91A4NAWS	3,5"IPS (101,6mm)	35	47	157	16
SWAC22A4NAWS	SWAC92A4NAWS	4"IPS (114,3mm)	35	47	157	20
SWAC24A4NAWS	SWAC94A4NAWS	5"IPS (141,3mm)	35	47	157	20
SWAC86A4NAWS	SWAC96A4NAWS	6"IPS (168mm)	41	53	163	25

# SWT75

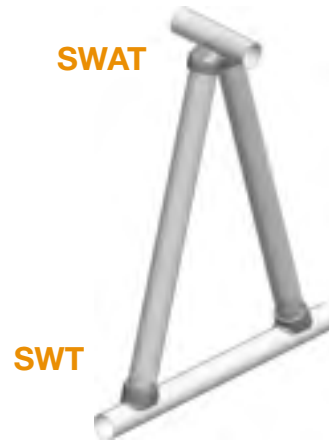
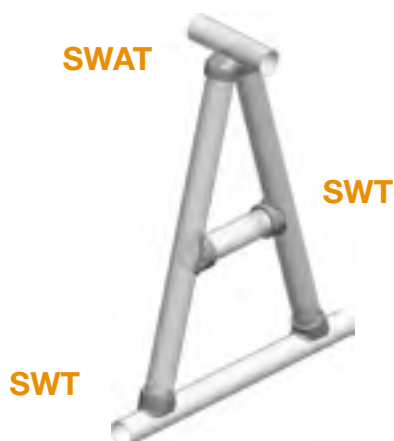
AL WELD T-CONNECTOR



UP TO  
**400kV**

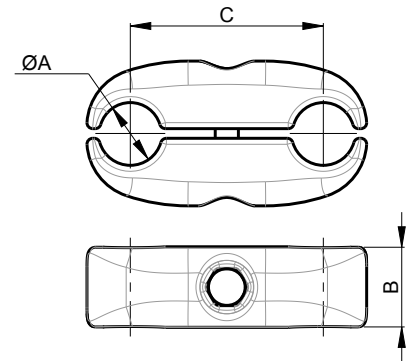
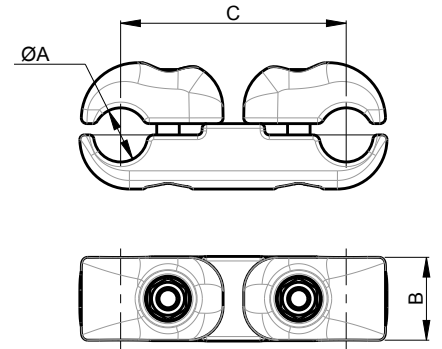
PART NUMBER	A (RUN)	B (TAP)	C
SWT18A16A75	2"IPS (60mm)	1,25"IPS (42mm)	25
SWT18A17A75		1,5"IPS (48mm)	25
SWT19A16A75	2,5"IPS (73mm)	1,25"IPS (42mm)	25
SWT19A17A75		1,5"IPS (48mm)	25
SWT19A18A75		2"IPS (60mm)	25
SWT20A17A75	3"IPS (88,9mm)	1,5"IPS (48mm)	25
SWT20A18A75		2"IPS (60mm)	25
SWT20A19A75		2,5"IPS (73mm)	35
SWT21A16A75	3,5"IPS (101,6mm)	1,25"IPS (42mm)	25
SWT21A17A75		1,5"IPS (48mm)	25
SWT21A18A75		2"IPS (60mm)	25
SWT21A19A75		2,5"IPS (73mm)	35
SWT22A18A75	4"IPS (114,3mm)	2"IPS (60mm)	25
SWT22A19A75		2,5"IPS (73mm)	35
SWT22A20A75		3"IPS (88,9mm)	35
SWT24A18A75	5"IPS (141,3mm)	2"IPS (60mm)	25
SWT24A19A75		2,5"IPS (73mm)	35
SWT24A20A75		3"IPS (88,9mm)	35
SWT86A20A75	6"IPS (168mm)	3"IPS (88,9mm)	35
SWT86A21A75		3,5"IPS (101,6mm)	35
SWT86A22A75		4"IPS (114,3mm)	35

# A-FRAME



**SD**

AL SPACER



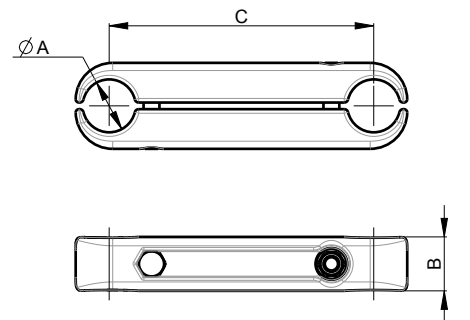
UP TO  
**400kV**

**A2-70**



PART NUMBER	A	B	C	BOLTS A	FIGURE
SD.100.010	16 - 24	36	100	M10	1
SD.100.030	24 - 33	41	100	M12	2
SD.100.050	33 - 45	41	100	M12	2
SD.100.060	45 - 50	41	100	M12	2

FOR OTHER DESIGNS, DISTANCES BETWEEN CABLE OR NUMBER OF CABLE CONSULT TO OUR R&D DEPARTMENT



UP TO  
**400kV**

**A2-70**

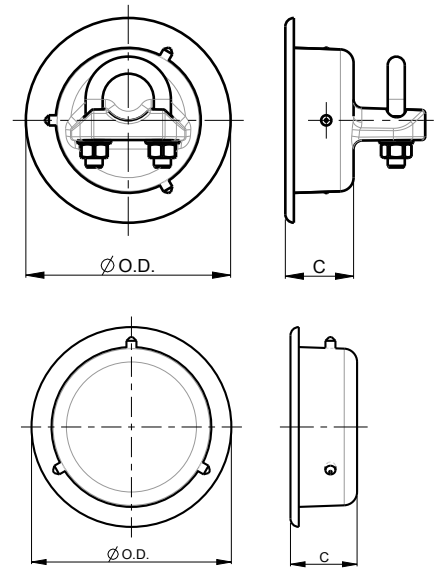


PART NUMBER	A	B	C	BOLTS A	FIGURE
SD.200.010	16 - 24	36	200	M10	3
SD.200.030	24 - 33	41	200	M12	3
SD.200.050	33 - 45	41	200	M12	3
SD.200.060	45 - 50	41	200	M12	3



# LB

AL END CAP



M6X12 - DIN914

UP TO  
**400kV**

**A2-70**

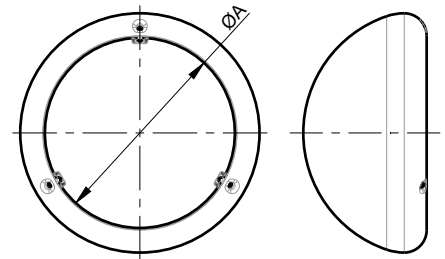
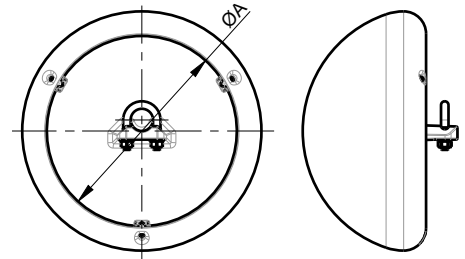
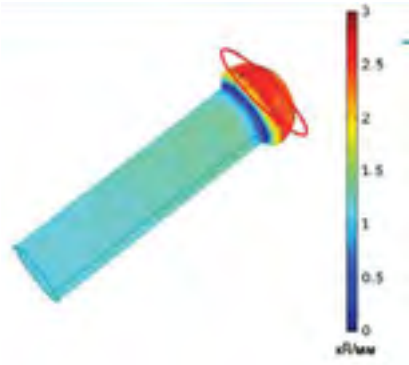
PART NUMBER	OD	ID TUBE MIN.	ID TUBE MAX.	C
LB5X3M6GE10	50	28	36	40
LB5X4M5GE10	50	37	45	40
LB6X4M6GE10	60	38	46	40
LB6X5M5GE10	60	47	56	40
LB6M3X5M3GE10	63	45	53	30
LB6M3X4M9GE10	63	41	49	30
LB7X5M6GE10	70	48	56	40
LB7X6M5GE10	70	57	65	40
LB7M5X6M5GE10	75	57	65	40
LB8X6M6GE10	80	58	66	40
LB8X7M5GE10	80	67	75	40
LB9X7M5GE10	90	67	75	40
LB9X7M6GE10	90	68	76	40
LB9X8M5GE10	90	77	85	40
LB10X8M6GE10	100	78	86	40
LB10X9M5GE10	100	87	95	40
LB12X9M5GE10	120	87	96	40
LB12X9M7GE10	120	89	97	40
LB12X10M6GE10	120	98	106	40
LB12X11GE10	120	100	110	40
LB12X11M5GE10	120	107	115	40
LB12M7X11M5GE10	127	107	115	40

PART NUMBER	OD	ID TUBE MIN.	ID TUBE MAX.	C
LB14X12M6GE10	140	118	126	40
LB14X13M5GE10	140	127	135	40
LB15X13M6GE10	150	128	136	40
LB15X14M5GE10	150	137	145	40
LB16X13M7GE10	160	129	137	40
LB16X14M6GE10	160	138	146	40
LB16X15M5GE10	160	147	155	40
LB17X15M6GE10	170	148	156	40
LB17X16M5GE10	170	157	165	40
LB19X17M7GE10	190	169	177	40
LB20X18M6GE10	200	176	186	40
LB20X19M5GE10	200	187	195	40
LB22X20M6GE10	220	198	206	40
LB22X21M5GE10	220	207	215	40
LB25X22M7GE10	250	219	227	40
LB25X23GE10	250	224	230	40
LB25X23M5GE10	250	228	235	40
LB25X23M6GE10	250	228	236	40
LB25X24M5GE10	250	234	245	40
LB30X27M8GE10	300	268	278	40
LB30X28M6GE10	300	278	286	40
LB30X29M5GE10	300	287	295	40

FOR DAMPING CABLE VERSION SUBSTITUTE THE END OF THE PART NUMBER (GE10) TO: GE16 (Ø15.0-21.0) GE11 (Ø21.0-29.5) GE13 (Ø29.5-35.0) GE15 (Ø35.0-42.0)

# SCBB

AL CORONA END CAP



UP TO  
**400kV**

**A2-70**

PART NUMBER	A	BOLTS
SCBB172A	50	M6X12 - DIN914
SCBB18A	60	M6X12 - DIN914
SCBB188A	70	M6X12 - DIN914
SCBB195A	80	M6X12 - DIN914
SCBB201A	90	M6X12 - DIN914
SCBB209A	100	M6X12 - DIN914
SCBB225A	120	M6X12 - DIN914
SCBB229A	125	M6X12 - DIN914
SCBB248A	150	M6X12 - DIN914
SCBB855A	160	M6X12 - DIN914
SCBB873A	200	M6X12 - DIN914
SCBB250A	250	M8X20 - DIN914
SCBB300A	300	M8X20 - DIN914

FOR DAMPING CABLE VERSION ADD AT THE END OF THE PART NUMBER: GE16 (Ø15.0-21.0) GE11 (Ø21.0-29.5) GE13 (Ø29.5-35.0) GE15 (Ø35.0-42.0)

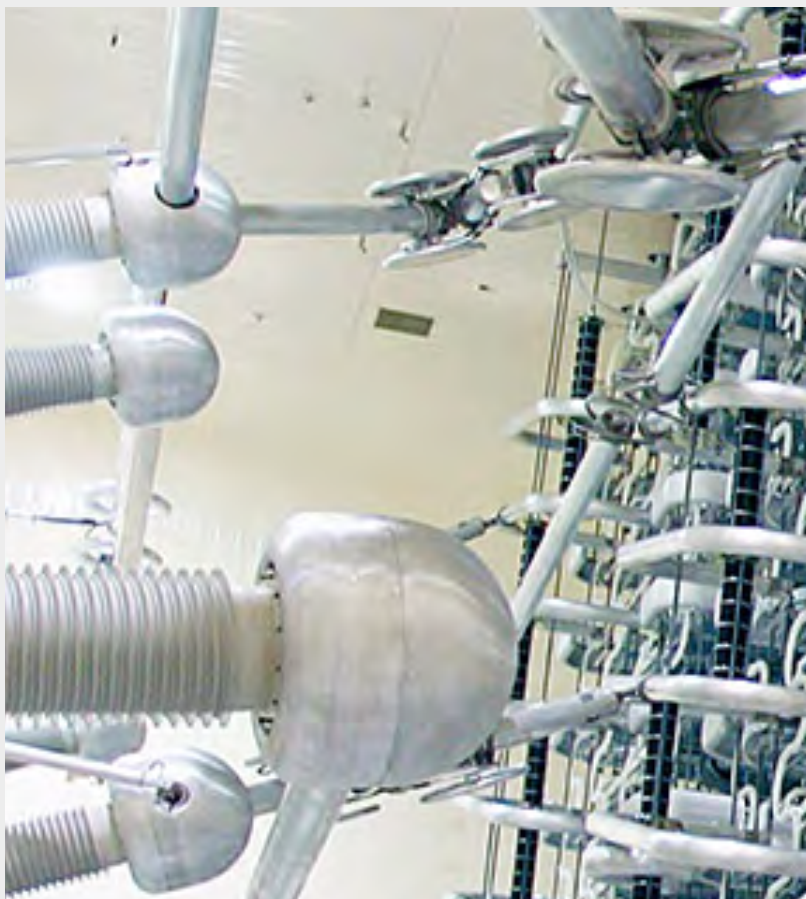


# SCD

CU SPACER

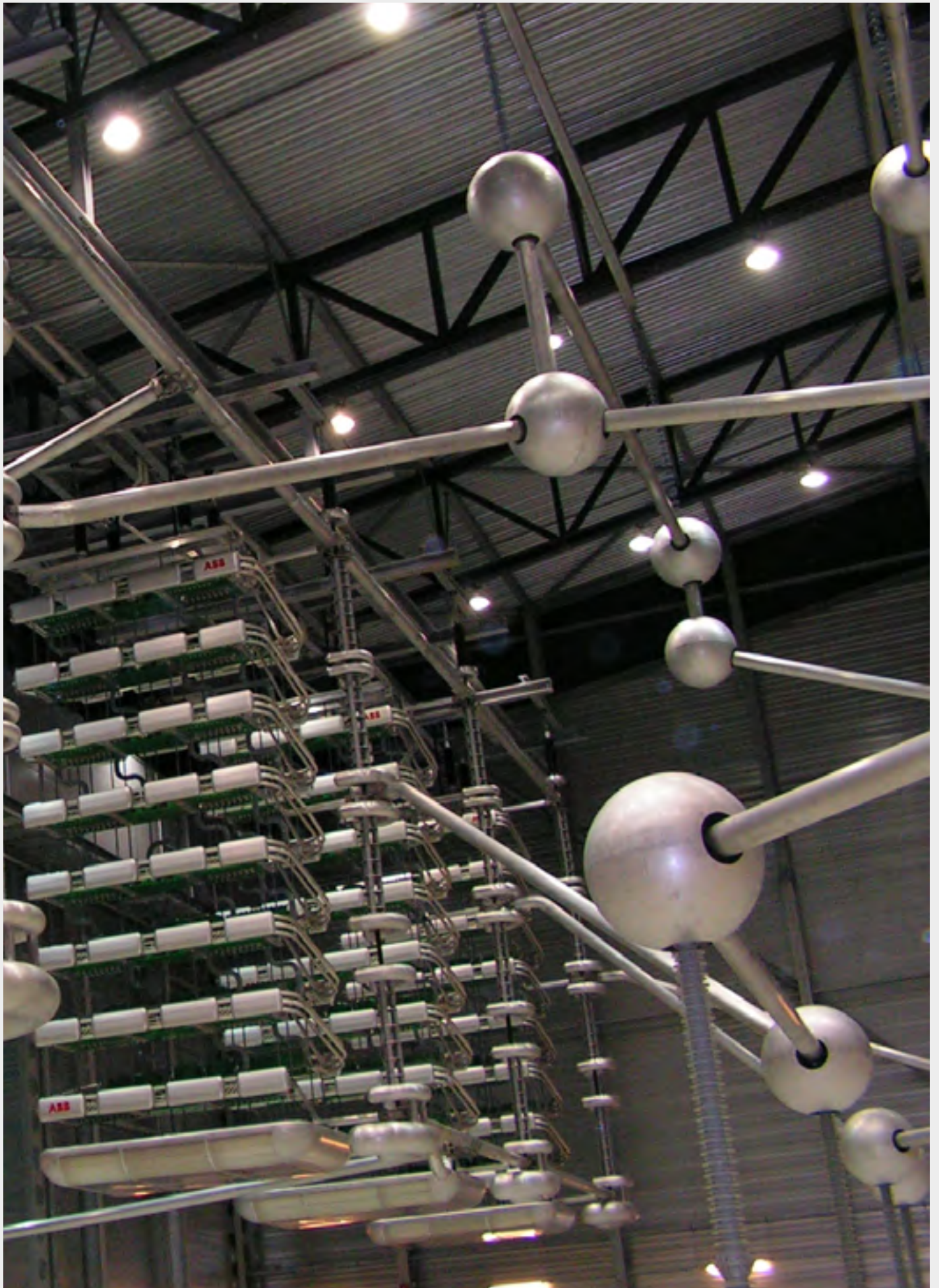


# SPHERE



# SRC





# ZDAK

AL BUNDLE ANGULAR TERMINAL



## DUPLEX T-CONNECTOR

Conductor Ø59mm

Electric field in  $\text{kV}\cdot\text{mm}^{-1}$ .

Colour simulation results show the peak stress points.

Nominal Voltage:

$V_{\text{ph-ph}} = 765\text{kV}$

Ground elevation 9,5m

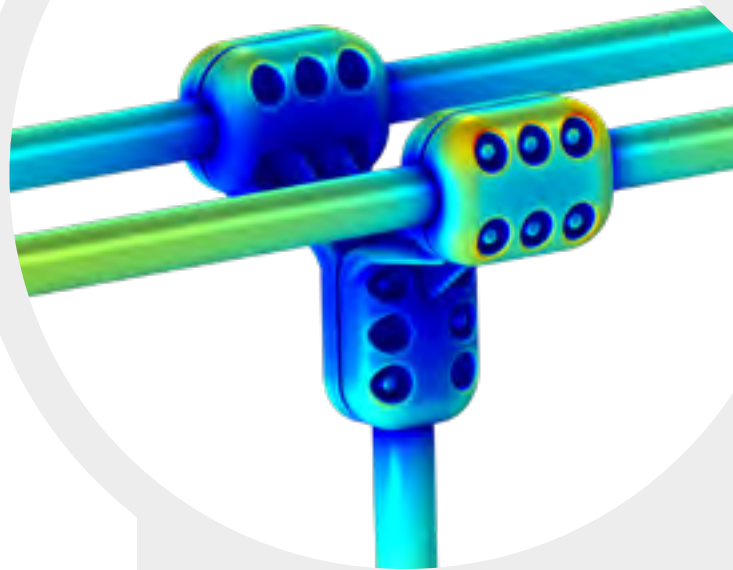
# ZDT

AL BUNDLE T-CONNECTOR



# ZDT

AL BUNDLE T-CONNECTOR



*Our special designs for UHV substation connectors upper than 500kV are totally protected from corona effect*



**EXPANSION  
FRICTION  
ADJUSTABLE  
CONNECTOR**

Tube Ø160mm

Electric field in  $\text{kV}\cdot\text{mm}^{-1}$ .  
Colour simulation results  
show the peak stress points.

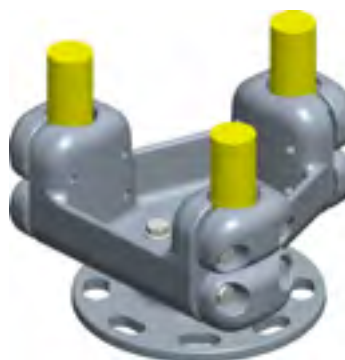
Nominal Voltage:  
 $V_{\text{ph-ph}} = 550\text{kV}$   
Ground elevation 8m



**ZPD**  
AL SINGLE-BUNDLE  
PARALLEL CONNECTOR



**ZSD**  
AL SINGLE-BUNDLE  
STRAIGHT COUPLER



**ZVHDB**  
AL BUNDLE VERTICAL SUPPORT

# SD

AL SPACER



# SHDB

AL BUNDLE SUPPORT



# ZDAK

AL BUNDLE ANGULAR TERMINAL







**ZDTD**  
AL BUNDLE-BUNDLE T-CONNECTOR



**ZSD**  
AL SINGLE-BUNDLE STRAIGHT COUPLER



**ZTD**  
AL SINGLE-BUNDLE T-CONNECTOR

# SDAM

High voltage (HV) and ultra high voltage (UHV) substations are, depending upon their geographical location, exposed to climatic conditions: special wind.

The wind causes sinusoidal turbulence to the substation busbars that in return causes variations in the carrying capacity with the fluid (air) moving in the same way as on an aeroplane's wing.

In certain frequency conditions, busbars that are exposed to the wind can reach their natural resonance frequency (low frequency) that creates severe vibrations that can damage the installation.

To resolve this problem, a means of shock-absorption must be fitted to the tube that opposes and dissipates the vibration, taking into account the tube's natural resonance frequency.

The most common solution to date is to place a cable within the tube. But this cheap method is not satisfactory as the cable subjected to the vibrations may come out of the tube if the end caps are not properly tightened or welded then could be loose, creating a short circuit when they touch the ground.

Furthermore, if the cable within the conductor starts to vibrate, it may produce a noise that would be registered as a false-positive for a malfunction.

Being aware that the various current solutions are neither technically nor economically satisfactory, SBI Connectors in consultation with SALVI requested the participation of Milan (Italy) and Stellenbosh (South Africa) Polytechnic Universities in researching a new generation of dampers: the busbar damper.

This new generation is suitable for the majority of situations and is highly efficient. Following positive results from experimental tests, the new damper offers the following advantages:

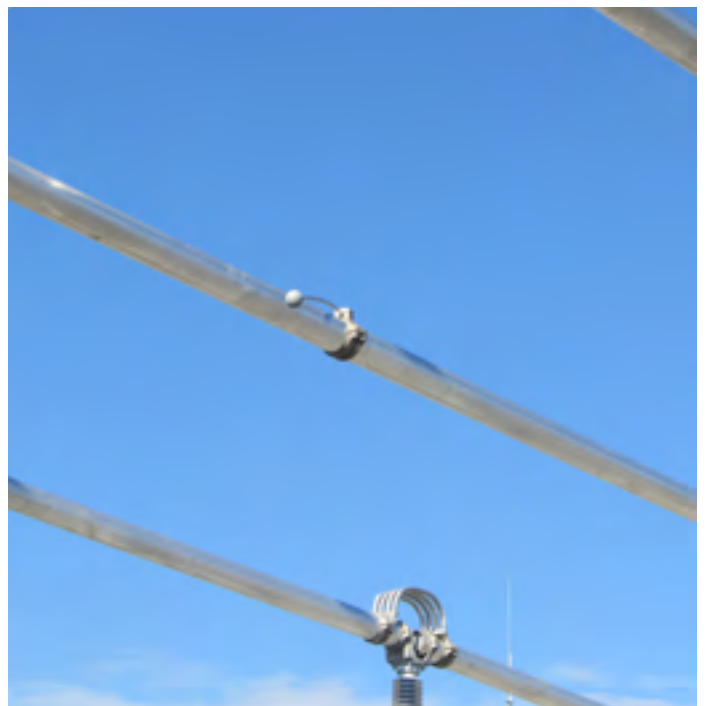
- Protects and lengthens the lifetime of station equipment.
- No maintenance is required because of the counterpoise's initial fixed setting.
- Provides almost total dissipation of vibrations caused by wind.
- Can be adapted to all existing stations.
- Simple, quick configuration.
- Cost effective.

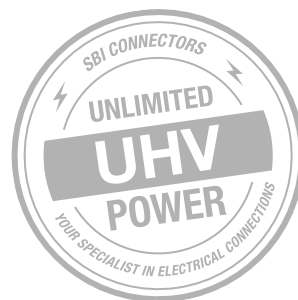


O.D. (MM)	MODEL	SBI P/NR	L (MM)	G (MM)	H (MM)	WEIGHT (KG)
63	B	SDAM63BNS	1130	120	330	10.0
63	D	SDAM63DNS	565	57	106	4.3
63	E	SDAM63ENS	695	57	106	4.6
63	F	SDAM63FNS	770	57	106	13.8
70	B	SDAM70BNS	1130	120	330	10.2
70	D	SDAM70DNS	565	57	110	4.5
70	E	SDAM70ENS	695	57	110	4.6
80	A	SDAM80ANS	1300	120	440	13.9
80	B	SDAM80BNS	1130	120	330	10.5
80	D	SDAM80DNS	565	57	115	4.5
80	E	SDAM80ENS	695	57	115	4.8
80	F	SDAM80FNS	770	57	115	14.0
90	B	SDAM90BNS	1130	120	330	10.8
90	D	SDAM90DNS	565	57	120	4.7
90	E	SDAM90ENS	695	57	120	4.9
90	F	SDAM90FNS	770	57	120	14.1
100	B	SDAM100BNS	1130	120	330	11.1
100	D	SDAM100DNS	565	57	125	4.8
100	E	SDAM100ENS	695	57	125	5.0
100	F	SDAM100FNS	770	57	125	14.3
120	A	SDAM120ANS	1300	120	440	15.0
120	B	SDAM120BNS	1130	120	330	11.6
120	D	SDAM120DNS	565	57	135	5.0
120	E	SDAM120ENS	695	57	135	5.3
120	F	SDAM120FNS	770	57	135	14.5
140	A	SDAM140ANS	1300	120	440	15.3
140	B	SDAM140BNS	1130	120	330	11.9
140	C	SDAM140CNS	1540	120	670	16.4
140	D	SDAM140DNS	565	57	145	4.6
140	E	SDAM140ENS	695	57	145	4.8
140	F	SDAM140FNS	770	57	145	14.1
150	A	SDAM150ANS	1300	120	440	15.5
150	B	SDAM150BNS	1130	120	330	12.1
150	C	SDAM150CNS	1540	120	670	16.6
150	D	SDAM150DNS	565	57	150	4.6

O.D. (MM)	MODEL	SBI P/NR	L (MM)	G (MM)	H (MM)	WEIGHT (KG)
150	E	SDAM150ENS	695	57	150	4.9
150	F	SDAM150FNS	770	57	150	14.1
160	A	SDAM160ANS	1300	120	440	15.8
160	B	SDAM160BNS	1130	120	330	12.4
160	C	SDAM160CNS	1540	120	670	16.9
160	D	SDAM160DNS	565	57	155	4.7
160	E	SDAM160ENS	695	57	155	4.9
160	F	SDAM160FNS	770	57	155	14.2
180	A	SDAM180ANS	1300	120	440	16.3
180	B	SDAM180BNS	1130	120	330	12.9
180	C	SDAM180CNS	1540	120	670	17.4
180	D	SDAM180DNS	565	57	165	4.9
180	E	SDAM180ENS	695	57	165	5.1
180	F	SDAM180FNS	770	57	165	14.4
200	A	SDAM200ANS	1300	120	440	16.8
200	B	SDAM200BNS	1130	120	330	13.4
200	C	SDAM200CNS	1540	120	670	17.9
200	D	SDAM200DNS	565	57	175	5.0
200	E	SDAM200ENS	695	57	175	5.2
220	A	SDAM220ANS	1300	120	440	17.3
220	B	SDAM220BNS	1130	120	330	13.9
220	C	SDAM220CNS	1540	120	670	18.4
220	D	SDAM220DNS	565	57	185	5.1
220	E	SDAM220ENS	695	57	185	5.4
220	F	SDAM220FNS	770	57	185	14.7
250	A	SDAM250ANS	1300	120	440	18.1
250	B	SDAM250BNS	1130	120	330	14.7
250	C	SDAM250CNS	1540	120	670	19.2
250	E	SDAM250ENS	695	57	200	5.6
250	F	SDAM250FNS	770	57	200	14.9
300	A	SDAM300ANS	1300	120	440	18.6
300	B	SDAM300BNS	1130	120	330	15.2
300	C	SDAM300CNS	1540	120	670	19.7
300	E	SDAM300ENS	695	57	225	5.9
300	F	SDAM300FNS	770	57	225	15.2

CONSULT OTHER DIMENSIONS OF DIAMETERS AND LONGITUDES





# ADJUSTABLE CONNECTOR

**SBI CONNECTORS**  
by SICAME GROUP

## CURRENT SOLUTION

### Disadvantages of the current solution

- ✘ Angled busbar connections in most of the substations are obtained either by bending the tube or by welding an aluminum sphere to join the tubes.
- ✘ Welding operation must be made on site, difficult to perform due to the precision required, the weather conditions and construction site constraints.
- ✘ Bending busbar operation must be done at the manufacturing plant using a special aluminum alloy and heat treatment. This special manufacturing process increase the product cost. Special transport for bending busbars is also an additional expense.

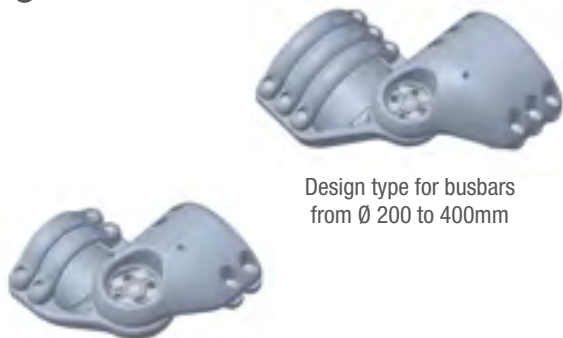


## NEW SBI SOLUTION

## MOST USUAL ANGLE CONFIGURATIONS

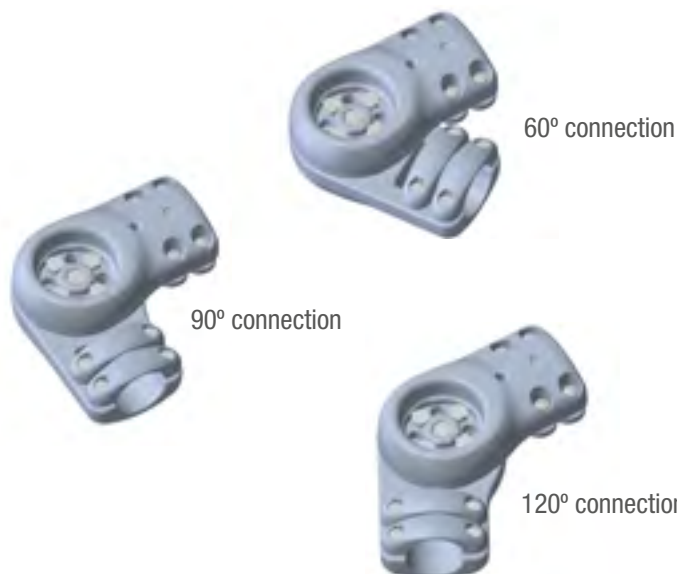
### Elbow connector for busbar from 60° to 180°

- ✔ Adjustable on site.
- ✔ Easy and fast installation
- ✔ Cost effective.



Design type for busbars from Ø 200 to 400mm

Design type for busbars from Ø 80 to 180mm



60° connection

90° connection

120° connection

**SBI CONNECTORS has developed an adjustable connector that allows angular connections between aluminum busbars from 60° to 180°.**

**Adjustable connector solution avoids bending or welding busbars in the substation and makes installation work faster, easier and more cost effective.**



Special adjustable system with 5 bolts that assure a right contact surface performance and allow different angle configurations from 60° to 180° depends on the tube diameter.

Angle adjustment is possible by keeping the central bolt fixed without connection disassembly.

Screw, washer and hexagonal nut A2 stainless steel. Available under requirement in A4 stainless steel.

Caps in gravity casting silicon aluminium alloy primary fusion. En AC-42200 T6

Possibility to connect different busbar diameters using the same adjustable system

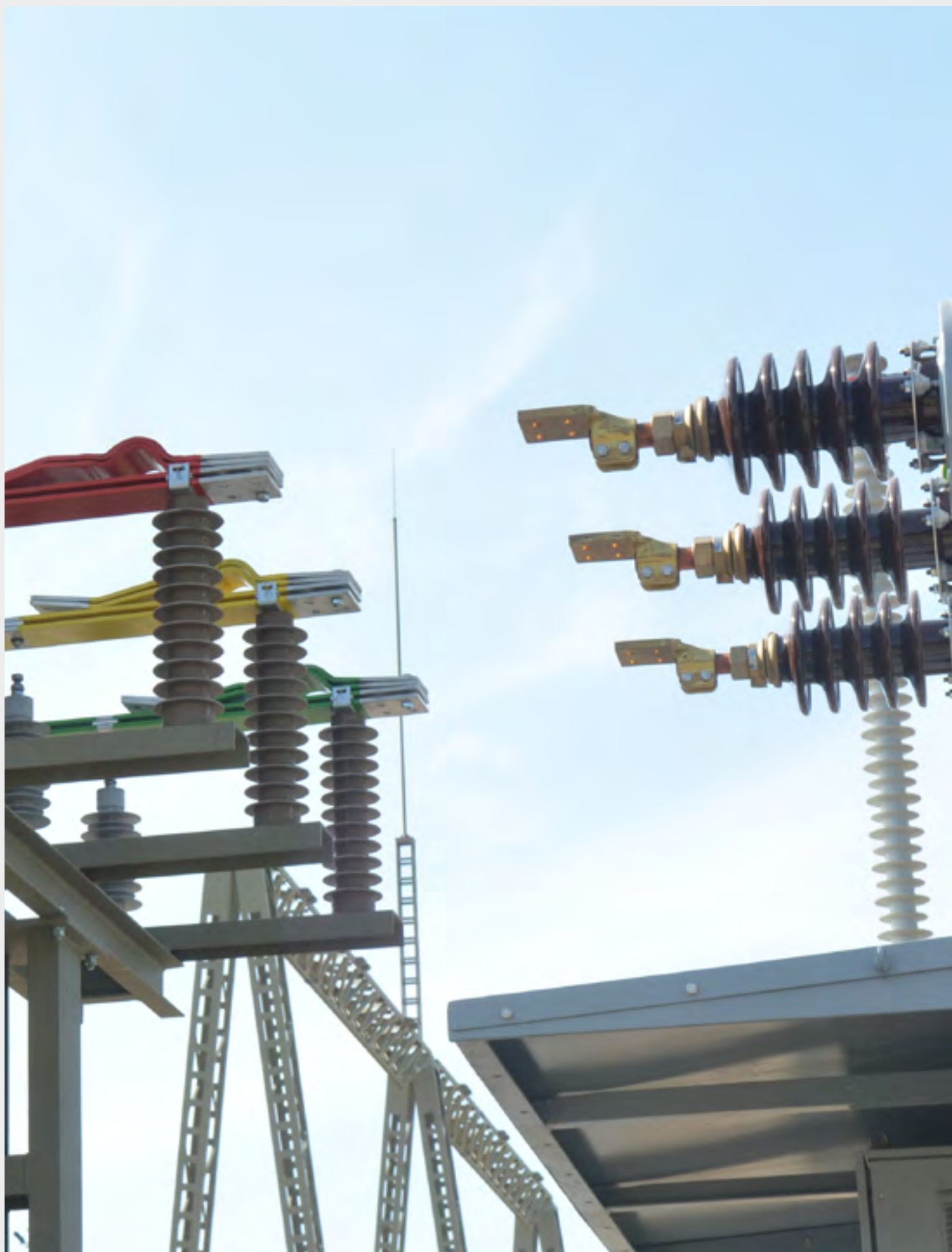
Body in sand casting silicon aluminium alloy primary fusion. EN AC-42100 T6

**CORONA SIMULATION  
SIMULATION PARAMETERS**

Tube Ø160mm for 135° vertical configuration. Electric field in kV·mm<sup>-1</sup>. Colour simulation results show the peak stress points.

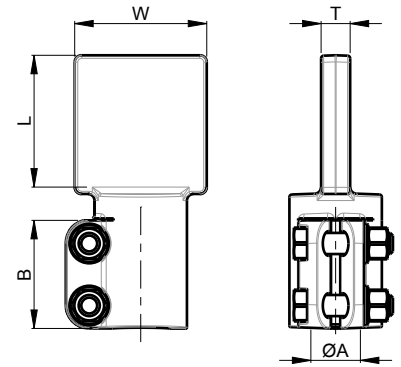
- Electric potential:  $V_{\text{phase-to-ground}}=400 \text{ kV}_{\text{peak}}$
- Relative permeability for air:  $\epsilon_r=1$





# FD

STUD-TERMINAL



UP TO  
**150kV**

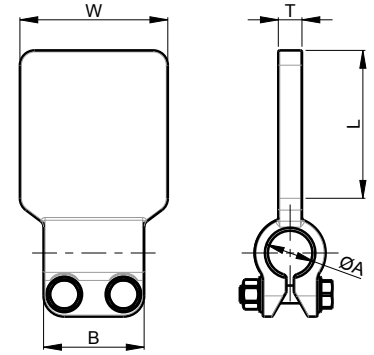
**A2-70**

**PAD**

PART NUMBER	A	B	L	W	T	BOLTS A
FD.01.010	30	51	60	60	10	M10
FD.01.020	30	51	80	80	10	M10
FD.01.030	30	51	100	100	10	M10
FD.01.040	40	68	60	60	10	M12
FD.01.050	40	68	80	80	10	M12
FD.01.060	40	68	100	100	10	M12
FD.01.070	50	68	60	60	12	M12
FD.01.080	50	68	80	80	10	M12
FD.01.090	50	68	100	100	15	M12
FD.02.010	M12	35	50	50	8	M10
FD.02.020	M16	35	50	50	8	M10
FD.02.030	M20	51	50	50	8	M10
FD.02.040	M24	51	50	50	8	M10
FD.02.050	M30	51	50	50	8	M10
FD.02.060	M30	51	80	80	10	M10
FD.02.070	M36	68	80	80	10	M12
FD.02.080	M36	68	100	100	10	M12

# FDR

STUD-TERMINAL

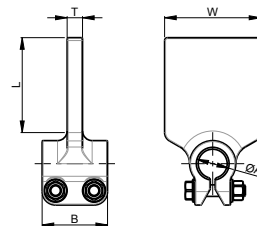


PART NUMBER	A	B	L	W	T	BOLTS A
FDR.01.010	30	68	60	60	10	M10
FDR.01.020	30	68	80	80	10	M10
FDR.01.030	30	68	100	100	10	M10
FDR.01.040	40	68	60	60	10	M12
FDR.01.050	40	68	80	80	10	M12
FDR.01.060	40	68	100	100	10	M12
FDR.01.070	50	68	60	60	12	M12
FDR.01.080	50	68	80	80	10	M12
FDR.01.090	50	68	100	100	15	M12
FDR.02.010	M12	35	50	50	8	M10
FDR.02.020	M16	35	50	50	8	M10
FDR.02.030	M20	51	50	50	8	M10
FDR.02.040	M24	51	50	50	8	M10
FDR.02.050	M30	51	50	50	8	M10
FDR.02.060	M30	51	80	80	10	M10
FDR.02.070	M36	68	80	80	10	M12
FDR.02.080	M36	68	100	100	10	M12



## FDA

STUD-TERMINAL



UP TO  
**150kV**

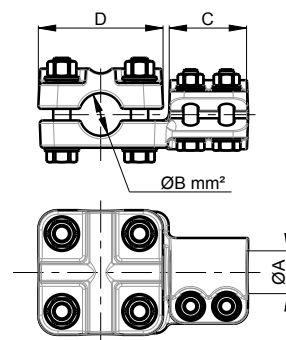
**A2-70**



PART NUMBER	A	B	L	W	T	BOLTS A
FDA.01.010	30	68	60	60	10	M10
FDA.01.020	30	68	80	80	10	M10
FDA.01.030	30	68	100	100	10	M10
FDA.01.040	40	68	60	60	10	M12
FDA.01.050	40	68	80	80	10	M12
FDA.01.060	40	68	100	100	10	M12
FDA.01.070	50	68	60	60	12	M12
FDA.01.080	50	68	80	80	10	M12
FDA.01.090	50	68	100	100	15	M12
FDA.02.010	M12	35	50	50	8	M10
FDA.02.020	M16	35	50	50	8	M10
FDA.02.030	M20	51	50	50	8	M10
FDA.02.040	M24	51	50	50	8	M10
FDA.02.050	M30	51	50	50	8	M10
FDA.02.060	M30	51	80	80	10	M10
FDA.02.070	M36	68	80	80	10	M12
FDA.02.080	M36	68	100	100	10	M12

## NDR

STUD-CABLE



UP TO  
**150kV**

**A2-70**

PART NUMBER	A	B [MM2]	C	D	BOLTS A	BOLTS B
NDR.01.010	30	16-240	55	72	M10	M10
NDR.01.020	30	35-500	55	85	M10	M12
NDR.01.030	40	16-240	55	72	M12	M10
NDR.01.040	40	35-500	55	85	M12	M12
NDR.01.050	50	16-240	55	72	M12	M10
NDR.01.060	50	35-500	55	85	M12	M12

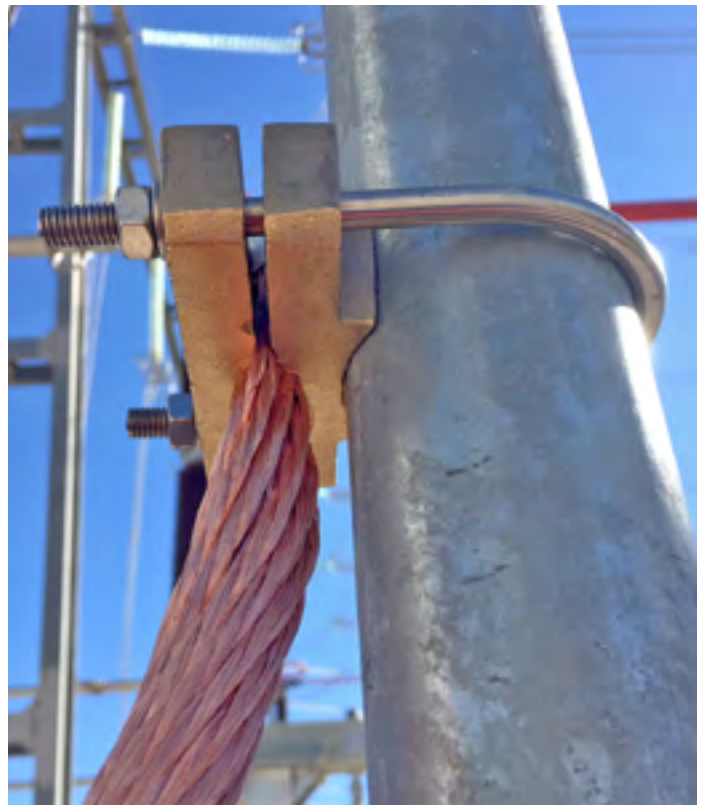
PART NUMBER	A	B [MM2]	C	D	BOLTS A	BOLTS B
NDR.02.010	M12	16-240	55	72	M10	M10
NDR.02.020	M16	16-240	55	72	M10	M10
NDR.02.030	M20	16-240	55	72	M12	M10
NDR.02.040	M24	16-240	55	72	M12	M10
NDR.02.050	M24	35-500	55	85	M10	M12
NDR.02.060	M30	16-240	55	72	M12	M10
NDR.02.070	M30	35-500	55	85	M12	M12

# GROUNDING

## GROUNDING CONNECTORS RANGE

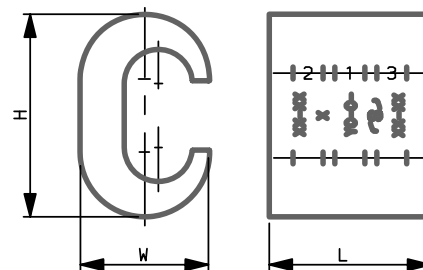
- Compression connectors..... 156
- Compression tooling..... 168
- Mechanical connectors..... 177
- Exothermic welding ..... 200





## YC-C

CRIMPING TAP-OFF COPPER CONNECTORS TYPE C

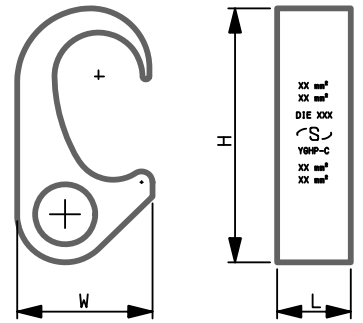


CATALOGUE NO.	APPLICATION										DIMENSIONS		
	CONDUCTOR "A" (RUN)					CONDUCTOR "B" (TAP)							
	DIAMETER		STR	SOL	ROD			STR	SOL	H	W	L	
	MIN	MAX	mm <sup>2</sup>	mm <sup>2</sup>	mm/in	MIN	MAX	mm <sup>2</sup>	mm <sup>2</sup>				
YC10C10	2,1	3,3	2,5-6	4-6	-	2,1	3,3	2,5-6	4-6	9,5	5,9	8	
YC8C8	3,3	3,7	10	10	-	1,7	3,7	1,5-10	10	11,8	7,8	12,5	
YC4C8	3,7	6,6	10-25	16-25	-	2,1	4,2	2,5-10	10-10	19	12	17,5	
YC4C6	3,7	6,6	10-25	16-25	-	2,1	5,3	2,5-16	16	19,4	12	17,5	
YC4C4	3,7	6,6	10-25	16-25	-	3,7	6,6	10-25	16-25	20,6	12	17,5	
YC2C4	6,6	8,1	35-40	25-35	-	3,7	8,1	10-35	10-35	25	15,6	21	
YC2C2	6,6	8,1	35-40	25-35	-	6,6	8,1	35-40	35	26,5	15,6	21	
YC26C2	7,8	11	50-70	-	10	3,7	8,1	10-35	10-35	33,6	21	28	
YC26C26	7,8	11	50-70	-	10	7,8	11	50-70	-	33,9	21	28	
YC28C2	11	13,4	95-100	-	12-1/2"	4,1	8,1	10-35	16-35	41,9	23,7	29	
YC28C26	11	13,4	95-100	-	12-1/2"	7,8	11	40-70	-	40,9	25,2	29	
YC28C28	11	13,4	95-100	-	12-1/2"	11	13,4	95-100	-	40,2	25,1	29	
YC29C29	13,4	16,5	100-125	-	14-5/8"	6,6	16,5	25-125	-	44,1	27,2	30	
YC291C291	14,5	16,5	125	-	-	14,5	16,5	125	-	44,3	27,4	47	
YC31C28	15,4	18	150-185	-	3/4"	6,6	13,4	25-100	-	44,1	27,2	27	
YC150C	15,4	15,4	150	-	-	11	15,4	70-150	-	44,6	27,4	30	
YC185C	14,5	18	120-185	-	3/4"	11	18	95-185	-	54	33,3	36	
YC035C	4,1	7,6	10-35	-	-	4,1	7,6	10-35	-	29,4	14,3	18,5	
YC070C035	7,6	10,9	35-70	-	-	4,1	7,6	10-35	-	35,7	18,2	18,5	
YC070C	7,6	10,9	35-70	-	-	7,6	10,9	35-70	-	39,1	18,8	18,5	
YC120C070C	12,5	14,4	95-120	-	-	4,1	10,9	10-70	-	49,9	23,6	18,5	
YC120C	12,5	14,4	95-120	-	-	12,5	14,4	95-120	-	52,3	23,9	21,8	
YC240C070C	16	20,3	150-240	-	-	4,1	10,9	10-70	-	60,8	31,1	22,4	
YC240C120	16	20,3	150-240	-	-	12,5	14,4	95-120	-	68	34	22,4	
YC240	16	20,3	150-240	-	-	16	20,3	150-240	-	74	34	32	

CONSULT COMPRESSION TOOLING AND DIES IN PAGE 150

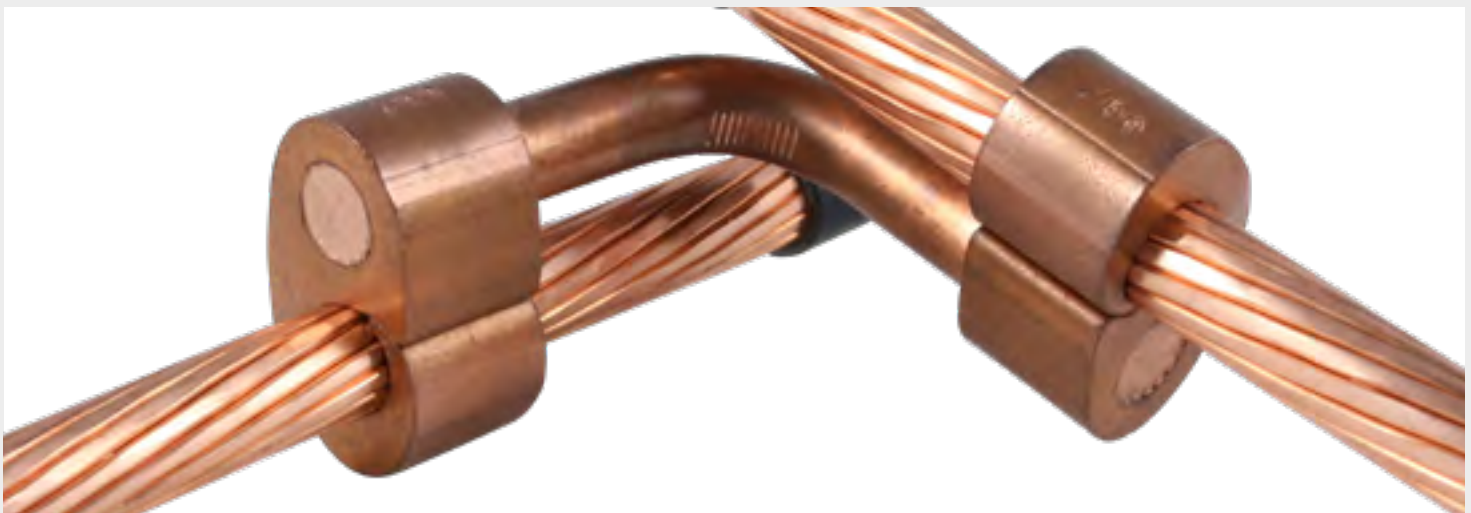
# YGHP

CRIMPING TAP-OFF COPPER CONNECTORS TYPE 6



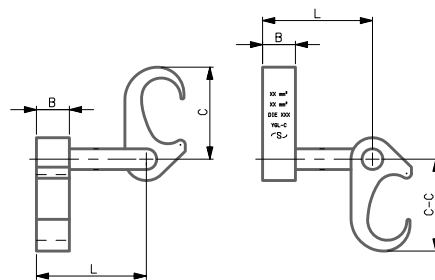
CATALOGUE NO.	APPLICATION										
	CABLE TO CABLE							CABLE TO REBAR			
	RUN				TAP			RUN REBAR	TAP		
	DIAMETER		SECTION	ROD	DIAMETER		SECTION		DIAMETER		SECTION
	MIN	MAX	MIN - MAX	MIN - MAX	MIN	MAX	MIN - MAX	MIN - MAX	MIN	MAX	MIN - MAX
YGHP035C035	4,1	7,6	10 - 35	---	4,1	7,6	10 - 35	---	---	---	---
YGHP120C035	9,4	14,4	50 - 120	12,7 - 15,9	5,2	7,6	20 - 35	9,5 - 12,7	7,6	7,6	35 - 35
YGHP120C070	9,4	14,4	50 - 120	12,7 - 15,9	9,4	10,9	50 - 70	9,5 - 12,7	9,4	10,9	50 - 70
YGHP120C120	9,4	14,4	50 - 120	12,7 - 15,9	11,9	14,4	85 - 120	9,5 - 12,7	11,9	14,4	85 - 120
YGHP240C035	14,4	20,4	120 - 240	15,9 - 19,1	5,2	7,6	20 - 35	15,9 - 19,1	5,2	7,6	20 - 35
YGHP240C070	14,4	20,4	120 - 240	15,9 - 19,1	9,4	10,9	50 - 70	15,9 - 19,1	9,4	10,9	50 - 70
YGHP240C120	14,4	20,4	120 - 240	15,9 - 19,1	11,9	14,4	85 - 120	15,9 - 19,1	11,9	14,4	85 - 120
YGHP240C240	14,4	20,4	120 - 240	15,9 - 19,1	17,5	20,4	185 - 240	15,9 - 19,1	17,5	20,4	185 - 240

CONSULT COMPRESSION TOOLING AND DIES IN PAGE 150



# YGL

GROUNDING GRID CROSS CONNECTOR

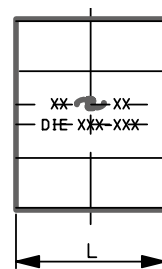
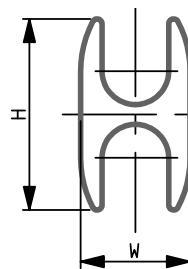


CATALOGUE NO.	APPLICATION										DIMENSIONS			
	CABLE TO CABLE						CABLE TO REBAR							
	GROOVE A			GROOVE B			GROOVE A	GROOVE B			C	C-C	B	L
	DIAMETER		SECTION	DIAMETER		SECTION	ROD	DIAMETER		SECTION				
MIN	MAX	MIN - MAX	MIN	MAX	MIN - MAX	MIN - MAX	MIN	MAX	MIN - MAX					
YGL035C035	4,1	7,6	10 - 35	4,1	7,6	10 - 35	---	---	---	---	28	28	19	64
YGL120C035	9,4	14,4	40 - 120	4,1	7,6	10 - 35	12,7 - 15,9	4,1	7,6	10 - 35	42	28	19	64
YGL120C070	7,6	14,4	35 - 120	7,6	14,4	35 - 120	12,7 - 15,9	7,6	14,4	35 - 120	42	42	19	64
YGL120C120	14,4	20,4	120 - 240	4,1	7,6	10 - 35	15,9 - 19,1	4,1	7,6	10 - 35	53	28	19	64
YGL240C035	14,4	20,4	120 - 240	7,6	14,4	35 - 120	15,9 - 19,1	7,6	14,4	35 - 120	53	42	19	64
YGL240C070	14,4	20,4	120 - 240	14,4	20,4	120 - 240	15,9 - 19,1	14,4	20,4	120 - 240	58	58	28	75

CONSULT COMPRESSION TOOLING AND DIES IN PAGE 152

## YH

CRIMPING TAP-OFF COPPER CONNECTORS TYPE H

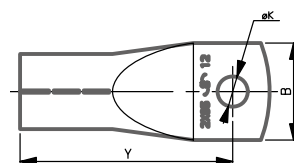
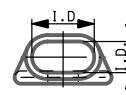
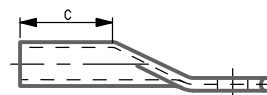


CATALOGUE NO.	APPLICATION						DIMENSIONS		
	CONDUCTOR "A" (RUN)			CONDUCTOR "B" (TAP)			H	W	L
	DIAMETER		STR	DIAMETER		STR			
	MIN	MAX	mm <sup>2</sup>	MIN	MAX	mm <sup>2</sup>			
YH50C50	9	9	50	6,6	9	35 - 50	26	15	28
YH95C95	12,5	12,5	95	11	12,5	70 - 95	38,4	22	30
YH120C120	14,5	14,5	120	11	14,5	70 - 120	44	24	25

CONSULT COMPRESSION TOOLING AND DIES IN PAGE 153

## YCA2X

NON INSULATED TIN PLATED COPPER TERMINALS 2 X 95 mm<sup>2</sup>

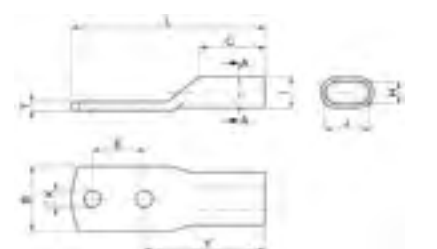
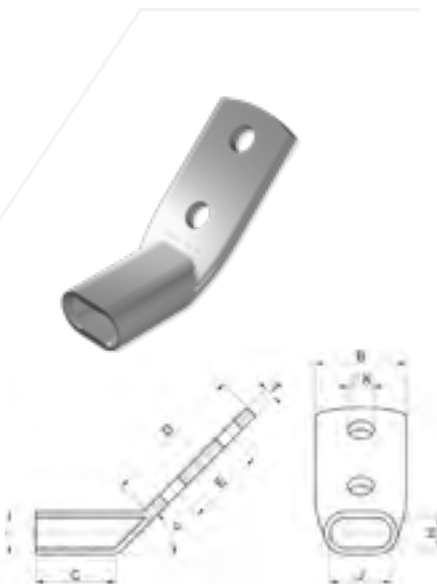


CABLE SECTION	STUD HOLE	CATALOGUE NO.	DIMENSIONS					WAPPLICATION TOOLING			
			I.D.	Y	B	C	ØK	HYDRAULIC			
								Y35	Y35BH	Y750	Y750BH
2x95	M12	YCA2X95M12TN	19x27	78	42	40	13,2	U2X95 (3x)		U2X95 (3x)	

CONSULT COMPRESSION TOOLING AND DIES IN PAGE 153

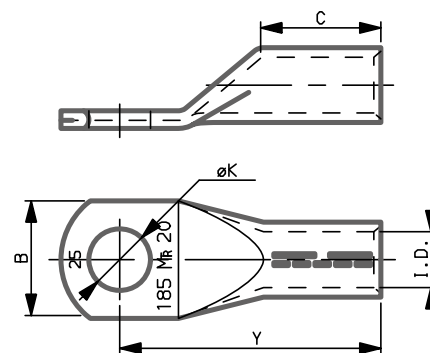
CABLE SECTION	STUD HOLE	PART NUMBER	DIMENSIONS DIMENSIONES (mm)									
			ØK	H	I	J	B	C	D	T	E	α°
2X70	M12	YCA2X0702M12TN45	13	11.5	16.5	23	38	35	73	4.5	40	45
2X95	M12	YCA2X0952M12TN45	13	13.5	19	27	42	40	73	5.5	40	45
2X120	M12	YCA2X1202M12TN45	13	15.5	21.7	31	46	40	73	6.2	40	45
2X150	M12	YCA2X1502M12TN45	13	17	24	34	50	50	73	7	40	45
2X185	M12	YCA2X1852M12TN45	13	19	26.5	38	57	50	73	7.3	40	45

CABLE SECTION	STUD HOLE	PART NUMBER	DIMENSIONS DIMENSIONES (mm)									
			ØK	H	I	J	B	C	Y	T	L	E
2X70	M12	YCA2X0702M12TN	13	11.5	16.5	23	38	35	70	4.5	126	40
2X95	M12	YCA2X0952M12TN	13	13.5	19	27	42	40	78	5.5	134	40
2X120	M12	YCA2X1202M12TN	13	15.5	21.7	31	46	40	80	6.2	136	40
2X150	M12	YCA2X1502M12TN	13	17	24	34	50	50	93	7	149	40
2X185	M12	YCA2X1852M12TN	13	19	26.5	38	57	50	97	7.3	153	40



# YCA

NON INSULATED TERMINALS FROM 6 TO 1000 mm<sup>2</sup> ACCORDING DIN46235



**DIN**

CABLE SECTION	STUD HOLE M	CATALOGUE NO.	DIE CODE KZ	DIMENSIONS				
				I.D.	Y	B	C	ØK
6	5	YCA06M5	5	3,8	24	8,5	10	5,3
	6	YCA06M6			24	8,5		6,4
	8	YCA06M8			24	13		8,4
10	5	YCA010M5	6	4,5	27	9	10	5,3
	6	YCA010M6			27	9		6,4
	8	YCA010M8			29	13		8,4
16	6	YCA016M6	8	5,5	36	13	20	6,4
	8	YCA016M8			36	13		8,4
	10	YCA016M10			36	17		10,5
	12	YCA016M12			36	18		13,2
25	6	YCA025M6	10	7	38	14	20	6,4
	8	YCA025M8			38	16		8,4
	10	YCA025M10			38	17		10,5
	12	YCA025M12			38	19		13,2
35	6	YCA035M6	12	8,2	42	17	20	6,4
	8	YCA035M8			42	17		8,4
	10	YCA035M10			42	19		10,5
	12	YCA035M12			42	21		13,2
	14	YCA035M14			42	21		15
50	8	YCA050M8	14	10	52	20	28	8,4
	10	YCA050M10			52	22		10,5
	12	YCA050M12			52	24		13,2
	14	YCA050M14			52	24		15
	16	YCA050M16			52	28		17
70	8	YCA070M8	16	11,5	55	24	28	8,4
	10	YCA070M10			55	24		10,5
	12	YCA070M12			55	24		13,2
	14	YCA070M14			55	24		15
	16	YCA070M16			55	30		17
95	8	YCA095M8	18	13,5	65	28	35	8,4
	10	YCA095M10			65	28		10,5
	12	YCA095M12			65	28		13,2
	14	YCA095M14			65	28		15
	16	YCA095M16			65	32		17

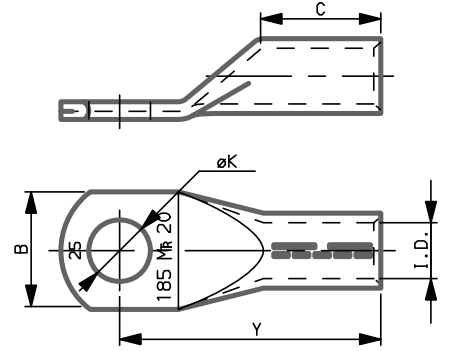
ADD "TN" AT THE END FOR THE PART NUMBER FOR TIN PLATED CONNECTORS - CONSULT COMPRESSION TOOLING AND DIES IN PAGE 154





# YCA

NON INSULATED TERMINALS FROM 6 TO 1000 mm<sup>2</sup> ACCORDING DIN46235



**DIN**

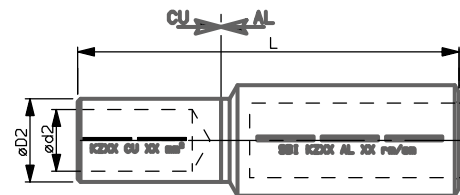
CABLE SECTION	STUD HOLE M	CATALOGUE NO.	DIE CODE KZ	DIMENSIONS				
				I.D.	Y	B	C	ØK
120	10	YCA120M10	20	15,5	70	32	35	10,5
	12	YCA120M12			70	32		13,2
	14	YCA120M14			70	32		15
	16	YCA120M16			73	32		17
	20	YCA120M20			77	38		21
150	10	YCA150M10	22	17	78	34	35	10,5
	12	YCA150M12			78	34		13,2
	14	YCA150M14			78	34		15
	16	YCA150M16			81	34		17
	20	YCA150M20			85	40		21
185	10	YCA185M10	25	19	82	37	40	10,5
	12	YCA185M12			82	37		13,2
	14	YCA185M14			82	37		15
	16	YCA185M16			85	37		17
	20	YCA185M20			88	40		21
240	12	YCA240M12	28	21,5	92	42	40	13,2
	14	YCA240M14			92	42		15
	16	YCA240M16			92	42		17
	20	YCA240M20			92	45		21
300	14	YCA300M14	32	24,5	100	48	50	15
	16	YCA300M16			100	48		17
	20	YCA300M20			100	48		21
400	14	YCA400M14	38	27,5	115	55	70	15
	16	YCA400M16			115	55		17
	20	YCA400M20			115	55		21
500	16	YCA500M16	42	31	125	60	70	17
	20	YCA500M20			125	60		21
625 - 630	16	YCA630M16	44	34,5	135	60	80	17
	20	YCA630M20			135	60		21
800	20	YCA800M20	52	40	165	75	100	21
1000	20	YCA1000M20	58	44	165	85	100	21



ADD "TN" AT THE END FOR THE PART NUMBER FOR TIN PLATED CONNECTORS - CONSULT COMPRESSION TOOLING AND DIES IN PAGE 154

## YR-A-C

BIMETALLIC REDUCERS



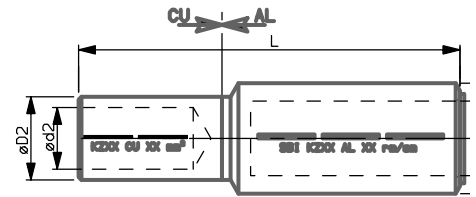
AL CABLE SECTION	CU CABLE SECTION	CATALOGUE NO.	AL PART DIE CODE KZ	AL PART DIE CODE KZ	DIMENSIONS				
					AL PART		CU PART		L
					ØD1	ØD1	ØD2	ØD2	
25	10	YR025A010C	12	6	6,8	12	4,5	5,9	58
	16	YR025A016C		8			5,5	8,4	63
	25	YR025A025C		10			7	9,9	
	35	YR025A035C		12			8,2	12,5	
35	16	YR035A016C	14	8	8	14	5,5	8,4	75
	25	YR035A025C		10			7	9,9	
	35	YR035A035C		12			8,2	12,5	
	50	YR035A050C		14			10	14,5	84
50	16	YR050A016C	16	8	9,8	16	5,5	8,4	75
	25	YR050A025C		10			7	9,9	
	35	YR050A035C		12			8,2	12,5	
	50	YR050A050C		14			10	14,5	84
70	16	YR070A016C	18	8	11,2	18,5	5,5	8,4	85
	25	YR070A025C		10			7	9,9	
	35	YR070A035C		12			8,2	12,5	
	50	YR070A050C		14			10	14,5	94
	70	YR070A070C		16			11,5	16,5	
	95	YR070A095C		18			13,5	19	
120	YR070A120C	20	15,5	21					
95	16	YR095A016C	22	8	13,2	22	5,5	8,4	91
	25	YR095A025C		10			7	9,9	
	35	YR095A035C		12			8,2	12,5	
	50	YR095A050C		14			10	14,5	100
	70	YR095A070C		16			11,5	16,5	
	95	YR095A095C		18			13,5	19	
120	YR095A120C	20	15,5	21					

CONSULT COMPRESSION TOOLING AND DIES IN PAGE 157



## YR-A-C

BIMETALLIC REDUCERS



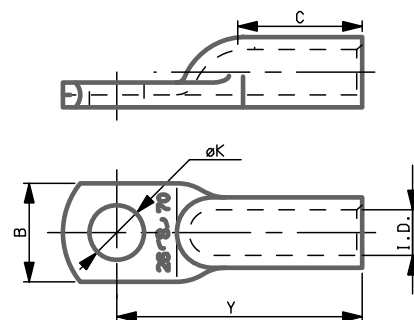
AL CABLE SECTION	CU CABLE SECTION	CATALOGUE NO.	AL PART DIE CODE KZ	AL PART DIE CODE KZ	DIMENSIONS					
					AL PART		CU PART		L	
					ØD1	ØD1	ØD2	ØD2		
120	16	YR120A016C	22	8	14,7	23	5,5	8,4	91	
	25	YR120A025C		10			7	9,9		
	35	YR120A035C		12			8,2	12,5		
	50	YR120A050C		14			10	14,5	100	
	70	YR120A070C		16			11,5	16,5		
	95	YR120A095C		18			13,5	19		
	120	YR120A120C		20			15,5	21		106
150	16	YR150A016C	25	8	16,3	25	5,5	8,4	95	
	25	YR150A025C		10			7	9,9		
	35	YR150A035C		12			8,2	12,5		
	50	YR150A050C		14			10	14,5	104	
	70	YR150A070C		16			11,5	16,5		
	95	YR150A095C		18			13,5	19		
	120	YR150A120C		20			15,5	21		110
	150	YR150A150C		22			17	23,5		
185	50	YR185A050C	28	14	18,3	28,5	10	14,5	107	
	70	YR185A070C		16			11,5	16,5		
	95	YR185A095C		18			13,5	19	113	
	120	YR185A120C		20			15,5	21		
	150	YR185A150C		22			17	23,5		
	185	YR185A185C		25			19	25,5		118
240	50	YR240A050C	32	14	21	32	10	14,5	119	
	70	YR240A070C		16			11,5	16,5		
	95	YR240A095C		18			13,5	19	125	
	120	YR240A120C		20			15,5	21		
	150	YR240A150C		22			17	23,5		
	185	YR240A185C		25			19	25,5		130
	240	YR240A240C		28			21,5	29		
300	120	YR300A120C	34	20	23,3	34	15,5	21	125	
	150	YR300A150C		22			17	23,5		
	185	YR300A185C		25			19	25,5	130	
	240	YR300A240C		28			21,5	29		
	300	YR300A300C		32			24,5	32		140



CONSULT COMPRESSION TOOLING AND DIES IN PAGE 157

# YA-AM

NON INSULATED TIN PLATED ALUMINIUM TERMINALS FROM 10 TO 300 mm<sup>2</sup>

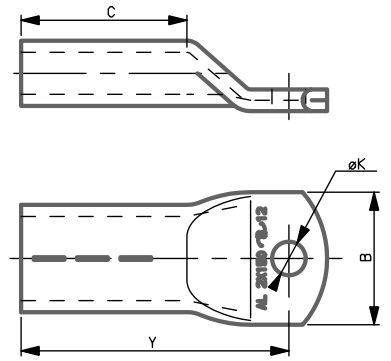


CABLE SECTION	STUD HOLE M	CATALOGUE NO.	DIMENSIONS				
			I.D.	Y	B	C	ØK
10	5	YA8CAM64TN	4,5	28,2	10	12	5,3
16	6	YA6CAM64TN	5,4	31,7	12	14,7	6,4
	8	YA6CAM84TN		33,5	14,6	20	8,4
25	8	YA4CAM84TN	6,5	39	14,6	17,2	8,4
	10	YA4CAM105TN		41	17,5		10,5
	12	YA4CAM132TN		44	20	13,2	
35	10	YA2CAM105TN	7,8	45,3	17,5	19,5	10,5
40	10	YA1CAM105TN	9,1	48,5	19,3	22	10,5
	8	YA25AM84TN		49,9	21	24,4	8,4
50	10	YA25AM105TN	11,5	51,9			10,5
	12	YA25AM132TN	54,9	13,2			
70	12	YA26AM132TN	11	59,3	23,8	26	13,2
75	12	YA27AM132TN	12,6	65,8	27	30,5	13,2
95	10	YA28AM105TN	14,1	65,8	29,6	14,1	10,5
	12	YA28AM132TN		69,3			13,2
120	12	YA29AM132TN	15,1	73,8	32	34,5	13,2
150	10	YA30AM105TN	16,5	76,5	35,9	37,3	10,5
	12	YA30AM132TN		79,5			13,2
185	12	YA31AM132TN	18,3	84,1	38,6	40,5	13,2
	12	YA32AM132TN		91			13,2
200	16	YA32AM170TN	19,4	94	41	45	17
	12	YA34AM132TN	21,7	96	46,6	46	13,2
16	YA34AM170TN	100		17			
300	12	YA36AM132TN	23,4	103	50,8	50	13,2
	16	YA36AM170TN		107			17

CONSULT COMPRESSION TOOLING AND DIES IN PAGE 158

# YA-2X

NON INSULATED TIN PLATED AL TERMINALS 2 X 150 mm<sup>2</sup>



CABLE SECTION	STUD HOLE M	CATALOGUE NO.W	DIMENSIONS					APPLICATION TOOLING			
			I.D.	Y	B	C	øK	HYDRAULIC			
								Y35 Y35BH	HC125-42 SC125-42	Y39E1E Y39E1BHE	Y46
2x150	12	YA2X150AM12TN	16,5 x 33	105	52	65	13,2	U2X150A (3x)	U2X150A (3x)	U-DIES WITH ADAPTOR UADP1	U-DIES WITH ADAPTOR PUADP1



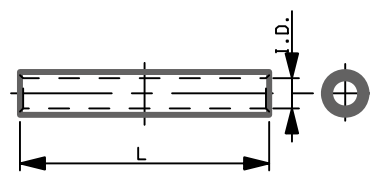
**HC125-42**



**SC125-42**

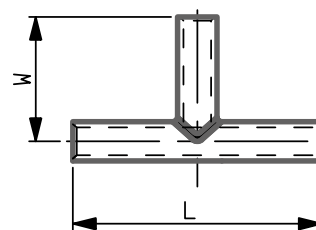
# YOS

SPLICE, T CONNECTOR AND CROSS  
CONNECTOR FOR COPPER CONDUCTORS  
ACCORDING EN50164



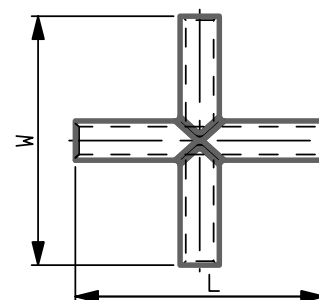
# YOT

SPLICE, T CONNECTOR AND CROSS  
CONNECTOR FOR COPPER CONDUCTORS  
ACCORDING EN50164



# YOX

SPLICE, T CONNECTOR AND CROSS  
CONNECTOR FOR COPPER CONDUCTORS  
ACCORDING EN50164

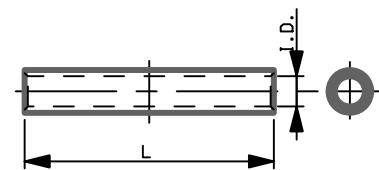


CATALOGUE NO	APPLICATION	DIMENSIONS			APPLICATION TOOLING	
	CABLE SECTION	I.D.	W	L	MECHANICAL	HYDRAULIC
YOS035			-	76		
YOT035035	50 mm <sup>2</sup> (Sol)	8,5	38	76	WDK12BT (1x)	WDK12BT (1x)
YOX035035			76	76		

ADD "TN" AT THE END FOR THE PART NUMBER FOR TIN PLATED CONNECTORS

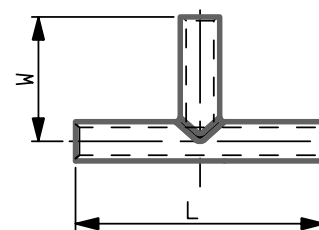
# YOS (AL)

SPLICE, T CONNECTOR AND  
CROSS CONNECTOR FOR ALUMINIUM CONDUCTORS  
ACCORDING EN50164



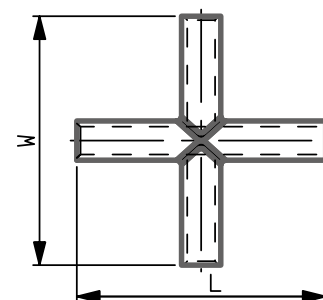
# YOT (AL)

SPLICE, T CONNECTOR AND  
CROSS CONNECTOR FOR ALUMINIUM CONDUCTORS  
ACCORDING EN50164



# YOX (AL)

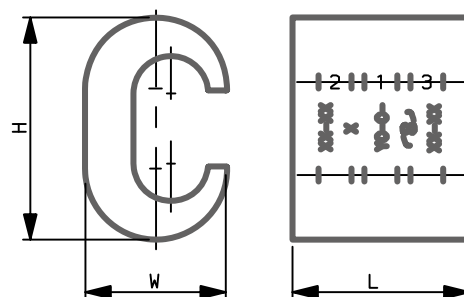
SPLICE, T CONNECTOR AND  
CROSS CONNECTOR FOR ALUMINIUM CONDUCTORS  
ACCORDING EN50164



CATALOGUE NO	APPLICATION		DIMENSIONS			APPLICATION TOOLING	
	CABLE SECTION	I.D.	W	L	MECHANICAL	HYDRAULIC	
					MD7	BCT500-ESDW50 - Y500CT	
YOS050SA			-	76			
YOT050SA050SA	50 mm <sup>2</sup> (Sol)	8,5	38	76	WDK12BT (1x)	WDK12BT (1x)	
YOX050SA050SA			76	76			

## YC-C

CRIMPING TAP-OFF COPPER CONNECTORS TYPE C

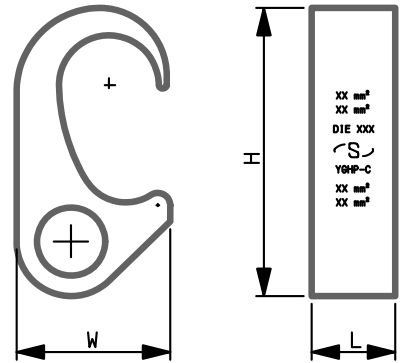


CATALOGUE NO.	APPLICATION TOOLING							
	MECHANICAL	HYDRAULIC						
	MD7	BCT500 ESDW55 - Y500CT	Y35 Y35BH	HC 125-42 SC 125-42	Y39E1E Y39E1BHE	Y46	SH251	Y22BH
YC10C10	W238 (1x)	W238 (1x)	U238 (1x)	U238 (1x)				
YC8C8	W162 (2x)	W162 (2x)	U162 (1x)	U162 (1x)				
YC4C8								
YC4C6	WBG (1x)	WBG (1x)	UBG (1x)	UBG (1x)				
YC4C4								
YC2C4								
YC2C2	WC (2x)	WC (2x)	UC (2x)	UC (2x)				
YC26C2	-							
YC26C26	-	WE (3x)	UE (3x) UO (1x)	UE (3x) UO (1x)	U-DIES WITH ADAPTOR UADP1	U-DIES WITH ADAPTOR PUADP1	U-DIES WITH ADAPTOR 26UADP	U-DIES WITH ADAPTOR 22UADP
YC28C2	-	-						
YC28C26	-	-	UF (3x) UD3 (1x)	UF (3x) UD3 (1x)				
YC28C28	-	-						
YC29C29	-	-	U708 (3x)	U708 (3x)				
YC291C291	-	-	U708 (6x)	U708 (6x)				
YC31C28	-	-	U708 (3x)	U708 (3x)				
YC150C	-	-						
YC185C	-	-	-	-	-	P1011 (3x)	26MC185M	-
YC035C	-	-	UC (1x)	UC (1x)	UC (1x)			
YC070C035	-	-						
YC070C	-	-	UO (1x)	UO (1x)	UO (1x)	U-DIES WITH ADAPTOR PUADP1		
YC120C070C	-	-						
YC120C	-	-	U997 (1x)	U997 (1x)	U997 (1x)			
YC240C070C	-	-	-					
YC240C120	-	-		U1011 (2x)		P1011 (2x)		
YC240	-	-		U1011 (3x)		P1011 (3x)		



# YGHP

CRIMPING TAP-OFF COPPER CONNECTORS TYPE 6



CATALOGUE NO.	DIMENSIONS			APPLICATION TOOLING			
				HYDRAULIC			
	H	W	L	Y35 Y35BH	HC125-42 SC125-42	PAT750XT	Y46
YGHP035C035	35,6	15,9	19	U0 (1x)	U0 (1x)	U0 (1x)	
YGHP120C035	53,1	23,7	19	U997 (1x)	U997 (1x)	U997P (1x)	U-DIES WITH ADAPTOR PUADP1
YGHP120C070	53,1	23,7	19	U997 (1x)	U997 (1x)	U997P (1x)	
YGHP120C120	53,1	23,7	19	U997 (1x)	U997 (1x)	U997P (1x)	
YGHP240C035	65,5	34,9	19	PU998 (1x)	PU998 (1x)	PU998 (1x)	P1011 (3x)
YGHP240C070	65,5	34,9	19	PU998 (1x)	PU998 (1x)	PU998 (1x)	
YGHP240C120	65,5	34,9	19	PU998 (1x)	PU998 (1x)	PU998 (1x)	
YGHP240C240	73,3	34,9	28	U011 (3x)	U011 (3x)	U011 (3x)	



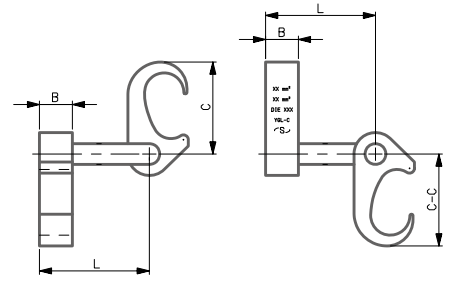
**Y35**



**HC125-42**

## YGL

GROUNDING GRID CROSS CONNECTOR



CATALOGUE NO.	APPLICATION TOOLING							
	HYDRAULIC							
	Y35 Y35BH		HC125-42 SC125-42		PAT750XT		Y46	
	GROOVE A	GROOVE B	GROOVE A	GROOVE B	GROOVE A	GROOVE B	GROOVE A	GROOVE B
YGL035C035	U0 (1x)	U0 (1x)	U0 (1x)	U0 (1x)	U0 (1x)	U0 (1x)		
YGL120C035	U997 (1x)	U0 (1x)	U997 (1x)	U0 (1x)	U997P (1x)	U0 (1x)	U-DIES WITH ADAPTOR PUADP1	U-DIES WITH ADAPTOR PUADP1
YGL120C070	U997 (1x)	U997 (1x)	U997 (1x)	U997 (1x)	U997P (1x)	U997P (1x)		
YGL120C120	---	---	---	---	PU998 (1x)	U0 (1x)	P998 (1x)	
YGL240C035	---	---	---	---	PU998 (1x)	U997P (1x)	P998 (1x)	
YGL240C070	---	---	---	---	U011 (3x)	U011 (3x)	P1011 (3x)	P1011 (3x)



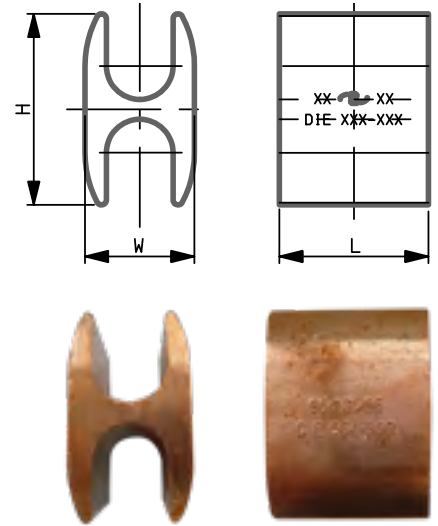
**Y46**



**PAT750XT**

## YH

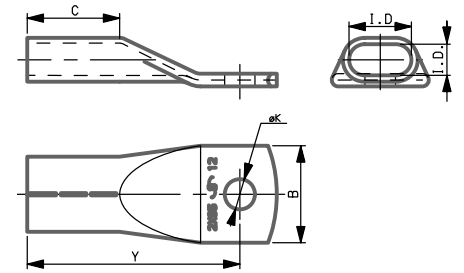
CRIMPING TAP-OFF COPPER CONNECTORS TYPE H



CATALOGUE NO.	APPLICATION TOOLING			
	HYDRAULIC			
	Y35 Y35BH	HC125-42 SC125-42	Y39E1E Y39E1BHE	Y46
YH50C50	UC (2x)	UC (2x)		
YH95C95	U654 (1x)	U654 (1x)	U-DIES WITH ADAPTOR UADP1	U-DIES WITH ADAPTOR PUADP1
YH120C120	U708 (2x)	U708 (2x)		

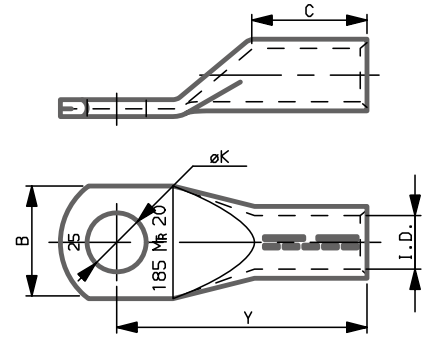
## YCA2X

NON INSULATED TIN PLATED COPPER TERMINALS 2 X 95 mm<sup>2</sup>



CATALOGUE NO.	APPLICATION TOOLING			
	HYDRAULIC			
	Y35 Y35BH	HC125-42 SC125-42	Y39E1E Y39E1BHE	Y46
YCA2X95M12TN	U2X95 (3x)	U2X95 (3x)	U-DIES WITH ADAPTOR UADP1	U-DIES WITH ADAPTOR PUADP1

# YCA



CATALOGUE NO.	APPLICATION TOOLING						
	MECHANICAL		HYDRAULIC				
	HAND TOOL	MD7	BCT500 ESDW55 Y500CT	Y35 Y35BH	HC125-42 SC125-42	Y39E1E Y39E1BHE	Y46
YCA06M5	MD50D (1x)	W5DKT (1x)	W5DKT (1x)	UDK05BGE2T (1x)			
YCA06M6							
YCA06M8							
YCA010M5							
YCA010M6	MD50D (1x)	W6DKT (1x)	W6DKT (1x)	UDK06BGE2T (1x)			
YCA010M8							
YCA016M6							
YCA016M8							
YCA016M10	MD50D (2x)	W8DKT (2x)	W8DKT (2x)	UDK08BGE2T (1x)			
YCA016M12							
YCA025M6							
YCA025M8							
YCA025M10	MD50D (2x) MD120D (2x)	W10DKT (2x)	W10DKT (2x)	UDK10BGE2T (1x)	U-DIES WITH ADAPTOR UADP1	U-DIES WITH ADAPTOR PUADP1	U-DIES WITH ADAPTOR 26UADP
YCA025M12							
YCA035M6							
YCA035M8							
YCA035M10	MD50D (2x) MD120D (2x)	W12DKT (2x)	W12DKT (2x)	UDK12BGE2T (1x)			
YCA035M12							
YCA035M14							
YCA050M8							
YCA050M10	MD50D (2x) MD120D (2x)	W14DKT (3x)	W14DKT (3x)	UDK14BGE2T (1x)			
YCA050M12							
YCA050M14							
YCA050M16							



**Y391E**

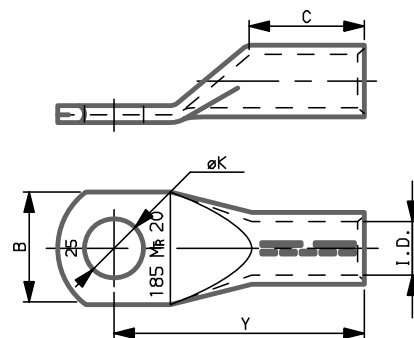


**Y500CT**



**ESDW55**

# YCA

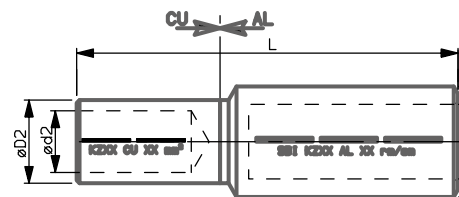


CATALOGUE NO.	APPLICATION TOOLING								
	MECHANICAL			HYDRAULIC					
	HAND TOOL	MD7	BCT500 ESDW55 Y500CT	HC125-42 SC125-42	Y750 Y750BH	Y39E1E Y39E1BHE	Y46	SH251	Y450DBHM
YCA070M8									
YCA070M10									
YCA070M12		W16DKT (4x)	W16DKT (4x)	UDK16BGE2T (1x)					
YCA070M14									
YCA070M16									
YCA095M8									
YCA095M10									
YCA095M12		W18DKT (4x)	W18DKT (4x)	UDK18BGE2T (2x)					
YCA095M14									
YCA095M16									
YCA120M10	MD120D (4x)								
YCA120M12									
YCA120M14		W20DKT (4x)	W20DKT (4x)	UDK20BGE2T (2x)					
YCA120M16									
YCA120M20									
YCA150M10					U-DIES WITH ADAPTOR UADP1	U-DIES WITH ADAPTOR PUADP1	U-DIES WITH ADAPTOR 26UADP		-
YCA150M12									
YCA150M14		-	W22DKT (4x)	UDK22BGE2T (2x)					
YCA150M16									
YCA150M20									
YCA185M10									
YCA185M12									
YCA185M14			W25DKT (5x)	UDK25BGE2T (2x)					
YCA185M16									
YCA185M20									
YCA240M12									
YCA240M14				UDK28BGE2T (2x)					
YCA240M16									
YCA240M20									
YCA300M14									
YCA300M16	-	-		UDK32BGE2TGS1 (2x)					
YCA300M20									
YCA400M14									
YCA400M16						P38DKT (3x)	26MH38DKT (3x)	45MH38DKT (3x)	
YCA400M20									
YCA500M16						P42DKT (3x)	26MH42DKT (3x)	45MH42DKT (3x)	
YCA500M20									
YCA630M16						P44DKT (3x)	26MH44DKT (3x)	45MH44DKT (3x)	
YCA630M20									
YCA800M20									45MH52DKT (3x)
YCA1000M20									45MH58DKT (3x)



# YR-A-C

BIMETALLIC REDUCERS

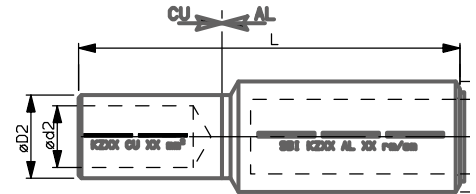


CATALOGUE NO.	APPLICATION TOOLING							
	MECHANICAL		HYDRAULIC					
	Y500CT - BCT500 - ESDW55		Y500CT - BCT500 - ESDW55		HC125-CT SC125-CT	Y39E1E Y39E1BHE	Y46	SH251
	AL PART	CU PART	AL PART	CU PART				
YR025A010C		W06DKT (1x)		UDK06BGE2T (2x)				
YR025A016C	W12DKT (4x)	W08DKT (4x)	UDK12BGE2T (2x)	UDK08BGE2T (2x)				
YR025A025C		W10DKT (4x)		UDK10BGE2T (2x)				
YR025A035C		W12DKT (4x)		UDK12BGE2T (2x)				
YR035A016C		W14DKT (5x)		W08DKT (4x)	UDK08BGE2T (2x)	UDK08BGE2T (2x)		
YR035A025C	W10DKT (4x)		UDK10BGE2T (2x)					
YR035A035C	W12DKT (4x)		UDK12BGE2T (2x)					
YR035A050C	W14DKT (4x)		UDK14BGE2T (2x)					
YR050A016C	W16DKT (5x)	W08DKT (4x)	UDK08BGE2T (2x)	UDK08BGE2T (2x)				
YR050A025C		W10DKT (4x)		UDK10BGE2T (2x)				
YR050A035C		W12DKT (4x)		UDK12BGE2T (2x)				
YR050A050C		W14DKT (4x)		UDK14BGE2T (2x)				
YR070A016C	W18DKT (6x)	W08DKT (4x)	UDK08BGE2T (2x)	UDK08BGE2T (2x)	U-DIES	U-DIES WITH ADAPTOR UADP1	U-DIES WITH ADAPTOR PUADP1	U-DIES WITH ADAPTOR 26UADP
YR070A025C		W10DKT (4x)		UDK10BGE2T (2x)				
YR070A035C		W12DKT (4x)		UDK12BGE2T (2x)				
YR070A050C		W14DKT (4x)		UDK14BGE2T (2x)				
YR070A070C		W16DKT (5x)		UDK16BGE2T (2x)				
YR070A095C		W18DKT (5x)		UDK18BGE2T (2x)				
YR070A120C	W20DKT (5x)	UDK20BGE2T (2x)						
YR095A016C	W22DKT (6x)	W08DKT (4x)	UDK08BGE2T (2x)	UDK08BGE2T (2x)				
YR095A025C		W10DKT (4x)		UDK10BGE2T (2x)				
YR095A035C		W12DKT (4x)		UDK12BGE2T (2x)				
YR095A050C		W14DKT (4x)		UDK14BGE2T (2x)				
YR095A070C		W16DKT (5x)		UDK16BGE2T (2x)				
YR095A095C		W18DKT (5x)		UDK18BGE2T (2x)				
YR095A120C	W20DKT (5x)	UDK20BGE2T (2x)						



## YR-A-C

BIMETALLIC REDUCERS

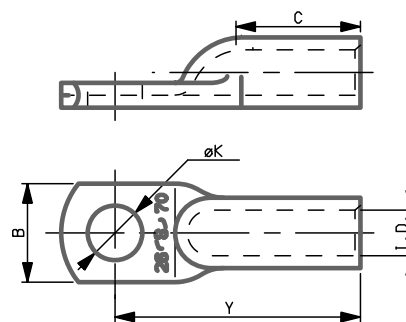


CATALOGUE NO.	APPLICATION TOOLING							
	MECHANICAL		HYDRAULIC					SH251
	Y500CT - BCT500 - ESDW55		Y500CT - BCT500 - ESDW55		HC125-CT SC125-CT	Y39E1E Y39E1BHE	Y46	
	AL PART	CU PART	AL PART	CU PART				
YR120A016C	W22DKT (6x)	W08DKT (4x)	UDK22BGE2T (3x)	UDK08BGE2T (2x)	U-DIES WITH ADAPTOR UADP1	U-DIES WITH ADAPTOR PUADP1	U-DIES WITH ADAPTOR 26UADP	
YR120A025C		W10DKT (4x)		UDK10BGE2T (2x)				
YR120A035C		W12DKT (4x)		UDK12BGE2T (2x)				
YR120A050C		W14DKT (4x)		UDK14BGE2T (2x)				
YR120A070C		W16DKT (5x)		UDK16BGE2T (2x)				
YR120A095C		W18DKT (5x)		UDK18BGE2T (2x)				
YR120A120C		W20DKT (5x)		UDK20BGE2T (2x)				
YR150A016C	W25DKT (7x)	W08DKT (4x)	UDK25BGE2T (3x)	UDK08BGE2T (2x)				
YR150A025C		W10DKT (4x)		UDK10BGE2T (2x)				
YR150A035C		W12DKT (4x)		UDK12BGE2T (2x)				
YR150A050C		W14DKT (4x)		UDK14BGE2T (2x)				
YR150A070C		W16DKT (5x)		UDK16BGE2T (2x)				
YR150A095C		W18DKT (5x)		UDK18BGE2T (2x)				
YR150A120C		W20DKT (5x)		UDK20BGE2T (2x)				
YR150A150C	W22DKT (6x)	UDK22BGE2T (3x)						
YR185A050C			UDK14BGE2T (2x)					
YR185A070C			UDK16BGE2T (2x)					
YR185A095C		UDK28BGE2T (3x)	UDK18BGE2T (2x)					
YR185A120C			UDK20BGE2T (2x)					
YR185A150C			UDK22BGE2T (3x)					
YR185A185C			UDK25BGE2T (3x)					
YR240A050C			UDK14BGE2T (2x)					
YR240A070C			UDK16BGE2T (2x)					
YR240A095C			UDK18BGE2T (2x)					
YR240A120C		UDK32BGE2T (3x)	UDK20BGE2T (2x)					
YR240A150C			UDK22BGE2T (3x)					
YR240A185C			UDK25BGE2T (3x)					
YR240A240C			UDK28BGE2T (3x)					
YR300A120C			UDK20BGE2T (2x)					
YR300A150C			UDK22BGE2T (3x)					
YR300A185C		UDK34BGE2T (3x)	UDK25BGE2T (3x)					
YR300A240C			UDK28BGE2T (3x)					
YR300A300C			UDK32BGE2T (3x)					



# YA-AM

NON INSULATED TIN PLATED ALUMINIUM TERMINALS FROM 10 TO 300 mm<sup>2</sup>

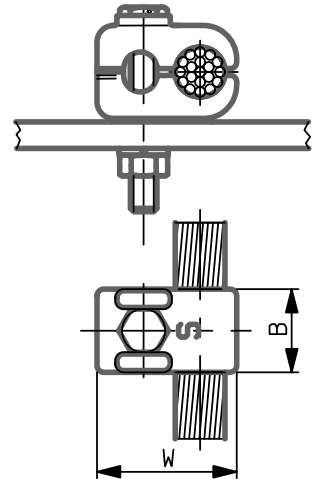


CATALOGUE NO.	APPLICATION TOOLING							
	MECHANICAL		HYDRAULIC					
	MD7	BCT500 ESDW55 Y500CT	Y35	Y35BH	HC125-CT SC125-CT	Y39E1E Y39E1BHE	Y46	SH251
YA8CAM64TN	W8CART (1x)	W8CART (1x)	U8CART (1x)		U8CART (1x)			
YA6CAM64TN	W6CART (1x)	W6CART (1x)	U6CART (1x)		U6CART (1x)			
YA6CAM84TN								
YA4CAM84TN								
YA4CAM105TN	W4CART (1x)	W4CART (1x)	U4CART (1x)		U4CART (1x)			
YA4CAM132TN								
YA2CAM105TN	W2CART (1x)	W2CART (1x)	U2CART (1x)		U2CART (1x)			
YA1CAM105TN	W1CART (1x)	W1CART (1x)	U1CART (1x)		U1CART (1x)			
YA25AM84TN								
YA25AM105TN	W25ART (1x)	W25ART (1x)	U25ART (1x)		U25ART (1x)			
YA25AM132TN								
YA26AM132TN	W26ART (2x)	W26ART (2x)	U26ART (2x)		U26ART (2x)	U.DIES WITH ADAPTOR UADP1	U.DIES WITH ADAPTOR PUADP1	U.DIES WITH ADAPTOR 26UADP
YA27AM132TN	W27ART (2x)	W27ART (2x)	U27ART (2x)		U27ART (2x)			
YA28AM105TN	W28ART (2x)	W28ART (2x)	U28ART (2x)		U28ART (2x)			
YA28AM132TN								
YA29AM132TN			U29ART (2x)		U29ART (2x)			
YA30AM105TN								
YA30AM132TN			U30ART (2x)		U30ART (2x)			
YA31AM132TN			U31ART (2x)		U31ART (2x)			
YA32AM132TN			U32ART (2x)		U32ART (2x)			
YA32AM170TN								
YA34AM132TN			U34ART (2x)		U34ART (2x)			
YA34AM170TN								
YA36AM132TN			U36ART (2x)		U36ART (2x)			
YA36AM170TN								



## GB

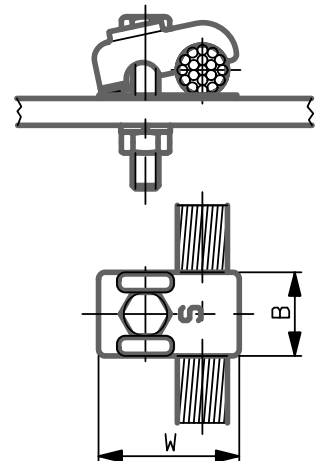
GROUND CONNECTOR FOR CU CABLE  
TO BAR - BRASS CONNECTOR



CATALOGUE NO.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS		BOLT SIZE	RECOM.. TORQUE N/M
	MIN	MAX	B	W		
GB016070M8C	16	70	25	36	M8	15
GB016070M12C	16	70	25	36	M12	60
GB070120M8C	70	120	25	36	M8	15
GB070120M12C	70	120	25	36	M12	60
GB070120M16C	70	120	30	36	M16	140
GB120150M8C	120	150	25	42	M8	15
GB120150M12C	120	150	25	42	M12	60
GB150240M12C	150	240	35	59	M12	60

## GBM

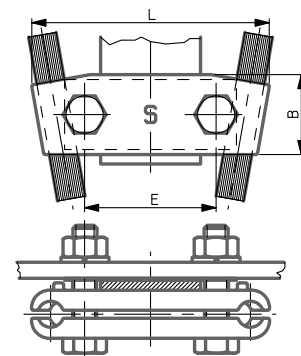
GROUND CONNECTOR FOR CU CABLE  
TO BAR - BRASS CONNECTOR



CATALOGUE NO.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS		BOLT SIZE	RECOM.. TORQUE N/M
	MIN	MAX	B	W		
GBM016070M8C	16	70	25	36	M8	15
GBM016070M12C	16	70	25	36	M12	60
GBM070120M8C	70	120	25	36	M8	15
GBM070120M12C	70	120	25	36	M12	60
GBM070120M16C	70	120	30	36	M16	140
GBM120150M8C	120	150	25	42	M8	15
GBM120150M12C	120	150	25	42	M12	60
GBM150240M12C	150	240	35	59	M12	60

# STN

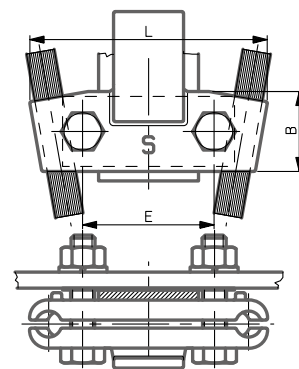
BAR SUPPORT FOR TWO OR FOUR  
CU CABLES AND ONE TO BAR- BRASS  
CONNECTOR



CATALOGUE NO.	CU CABLE SECTION mm <sup>2</sup>		CU BAR DIMENSIONS		DIMENSIONS			BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	MIN	MAX	E	B	L		
STN070120C	70	120	40 x 5	50 x 5	65	40	120	M12	60
STN120150C	120	150	40 x 5	50 x 5	65	40	120	M12	60

# STN-FC

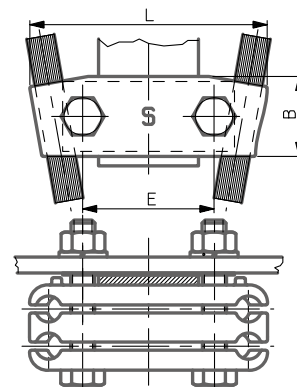
BAR SUPPORT FOR TWO OR FOUR  
CU CABLES AND ONE TO BAR- BRASS  
CONNECTOR



CATALOGUE NO.	CU CABLE SECTION mm <sup>2</sup>		CU BAR DIMENSIONS		DIMENSIONS			BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	MIN	MAX	E	B	L		
STN070120FC	70	120	40 x 5	50 x 5	65	40	120	M12	60
STN120150FC	120	150	40 x 5	50 x 5	65	40	120	M12	60

# S2TN

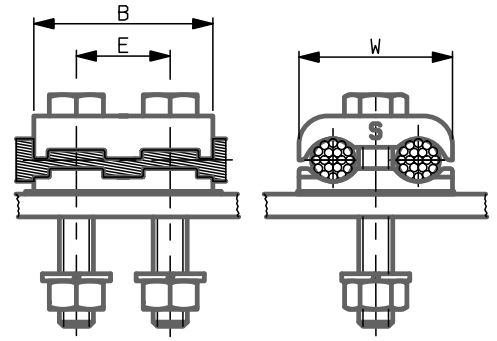
BAR SUPPORT FOR TWO OR FOUR  
CU CABLES AND ONE TO BAR- BRASS  
CONNECTOR



CATALOGUE NO.	CU CABLE SECTION mm <sup>2</sup>		CU BAR DIMENSIONS		DIMENSIONS			BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	MIN	MAX	E	B	L		
S2TN070120C	70	120	40 x 5	50 x 5	65	40	120	M12	60
S2TN120150C	120	150	40 x 5	50 x 5	65	40	120	M12	60

## GL

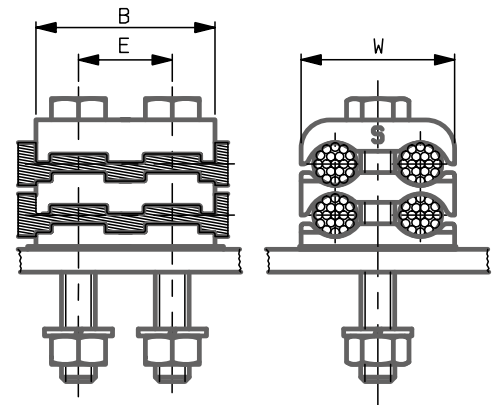
GROUND CONNECTOR FOR TWO OR  
FOUR CU CABLE TO BAR - BRASS CONNECTOR



CATALOGUE NO.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS			BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	E	B	W		
GL070120M12C	70	120	50	82	54	M12	60
GL070120V1M12C	70	120	44,5	82	54	M12	60
GL120150M12C	120	150	50	82	54	M12	60

## G4L

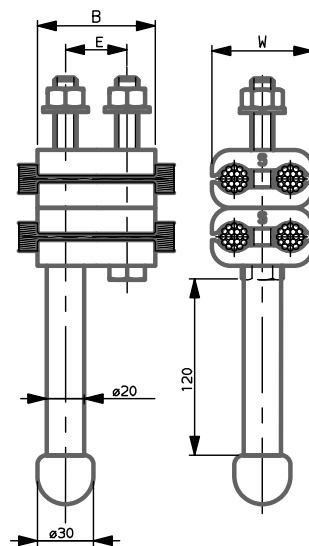
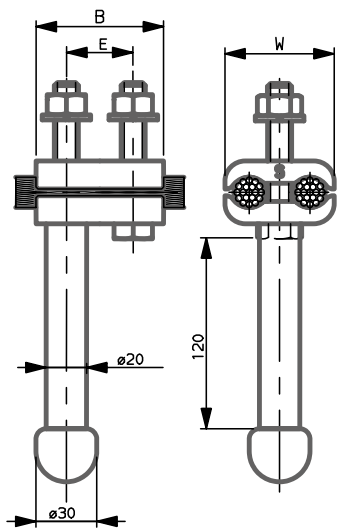
GROUND CONNECTOR FOR TWO OR  
FOUR CU CABLE TO BAR - BRASS CONNECTOR



CATALOGUE NO.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS			BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	E	B	W		
G4L070120M12C	70	120	50	82	54	M12	60
G4L070120V1M12C	70	120	44,5	82	54	M12	60
G4L120150M12C	120	150	50	82	54	M12	60

# G2C-G4C

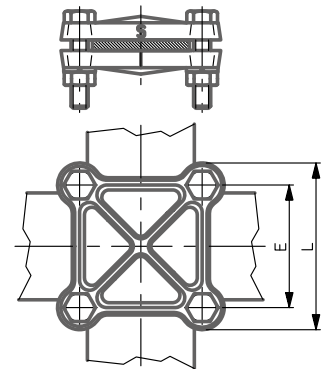
GROUND CONNECTOR FOR TWO OR FOUR CU CABLE TO BAR WITH FIX POINT - BRASS CONNECTOR



CATALOGUE NO.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS			BOLT SIZE	RECOM.. TORQUE Nm
	UPPER	LOWER	E	B	W		
G2C095M12S	95	95	50	82	54	M12	60
G2C120M12S	120	120	50	82	54	M12	60
G2C240M12S	240	240	50	82	54	M12	60
G4C095M12S	95	95	50	82	54	M12	60
G4C120M12S	120	120	50	82	54	M12	60
G4C120240M12S	120	240	50	82	54	M12	60
G4C240M12S	240	240	50	82	54	M12	60

# HFBC

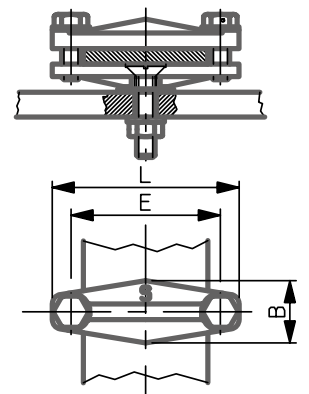
BAR CLAMP FOR CU BAR - BRASS CONNECTOR



CATALOGUE NO.	CU BAR DIMENSIONS		DIMENSIONS		BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	E	L		
HFBC40	30 x 4	40 x 5	50	68	M8	15
HFBC50	50 X 5	50 x 5	60	78	M8	15

# HHB

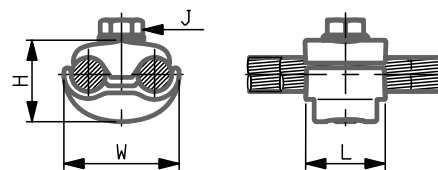
BAR SUPPORT FOR CU BAR TO BAR- BRASS CONNECTOR



CATALOGUE NO.	CU BAR DIMENSIONS		DIMENSIONS			BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	E	B	L		
HHB1C40C	30 x 4	40 x 5	48	20	60	M6	10
HHB1C50C	50 X 5	50 x 5	58	25	74	M6	10
HHB1C50E1C	50 X 5	50 x 5	58	20	70	M6	10

# UC-RS

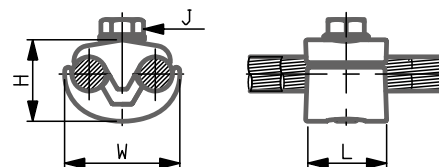
MECHANICAL PARALLEL CLAMP



CATALOGUE NO.	APPLICATION								DIMENSIONS			
	CONDUCTOR "A" (RUN)				CONDUCTOR "B" (TAP)				L	H	J	W
	SECTION CU OR AL		DIAMETER		SECTION CU OR AL		DIAMETER					
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX				
UC25R2RS	6 mm <sup>2</sup>	50 mm <sup>2</sup>	3,2	10,1	6 mm <sup>2</sup>	35 mm <sup>2</sup>	3,2	8,2	28,6	41,3	5/16"	34,9
UC28RS	50 mm <sup>2</sup>	120 mm <sup>2</sup>	9,4	14,6	6 mm <sup>2</sup>	50 mm <sup>2</sup>	3,2	10,1	34,9	60,3	3/8"	47,6
UC32RS	50 mm <sup>2</sup>	200 mm <sup>2</sup>	9,9	18,4	10 mm <sup>2</sup>	70 mm <sup>2</sup>	4,2	11,1	38,1	60,3	3/8"	57,2
UC33R	95 mm <sup>2</sup>	200 mm <sup>2</sup>	12,8	18,8	10 mm <sup>2</sup>	70 mm <sup>2</sup>	4,1	11,4	44,5	69,8	1/2"	57,2

# UC-RGE

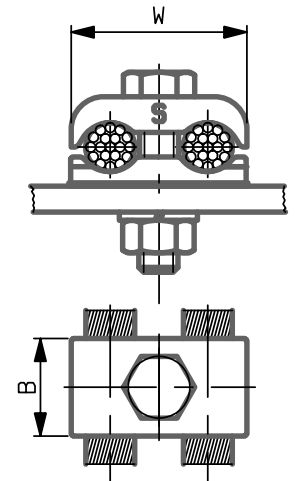
MECHANICAL PARALLEL CLAMP



CATALOGUE NO.	APPLICATION								DIMENSIONS			
	CONDUCTOR "A" (RUN)				CONDUCTOR "B" (TAP)				L	H	J	W
	SECTION CU OR AL		DIAMETER		SECTION CU OR AL		DIAMETER					
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX				
UC26RGE1	25 mm <sup>2</sup>	70 mm <sup>2</sup>	6,3	10,5	25 mm <sup>2</sup>	70 mm <sup>2</sup>	6,3	10,5	29	41	M8	35
UC32RGE1	95 mm <sup>2</sup>	150 mm <sup>2</sup>	12,6	15,7	25 mm <sup>2</sup>	95 mm <sup>2</sup>	6,3	12,5	35	60	M10	47
UC32RGE2	70 mm <sup>2</sup>	150 mm <sup>2</sup>	10,5	15,7	70 mm <sup>2</sup>	150 mm <sup>2</sup>	10,5	15,7	38	48	M10	54
UC34AGE12	95 mm <sup>2</sup>	240 mm <sup>2</sup>	12,5	20,3	50 mm <sup>2</sup>	240 mm <sup>2</sup>	9,1	20,3	44	69	M12	57

# GC

GROUND CONNECTOR  
FOR TWO OR FOUR CU CABLE  
TO BAR - BRASS CONNECTOR

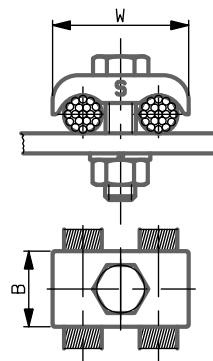


CATALOGUE NO.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS		BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	B	W		
GC016070M12C	16	70	40	25	M12	60
GC016070M12	16	70	40	25	M12	60
GC070120M12C	70	120	40	25	M12	60
GC070120M12	70	120	40	25	M12	60
GC070120M16C	70	120	40	25	M16	140
GC120150M12C	120	150	54	30	M12	60
GC150240M12C	150	240	65	41	M12	60
GCM016070M12C	16	70	40	25	M12	60
GCM016070M12	16	70	40	25	M12	60
GCM070120M12C	70	120	40	25	M12	60
GCM070120M12	70	120	40	25	M12	60
GCM070120M16C	70	120	40	25	M16	140
GCM120150M12C	120	150	54	30	M12	60
GCM150240M12C	150	240	65	41	M12	60
G4C070120M12C	70	120	40	25	M12	60
G4C120150M12C	120	150	54	30	M12	60
G4C150240M12C	150	240	65	41	M12	60
G4C070120M12FC	70	120	40	25	M12	60
G4C120150M12FC	120	150	54	30	M12	60
G4C150240M12FC	150	240	65	41	M12	60
G6C070120M12C	70	120	40	25	M12	60
G6C120150M12C	120	150	54	30	M12	60
G6C150240M12C	150	240	65	41	M12	60



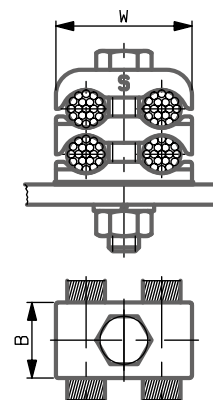
# GCM

GROUND CONNECTOR  
FOR TWO OR FOUR CU CABLE  
TO BAR - BRASS CONNECTOR



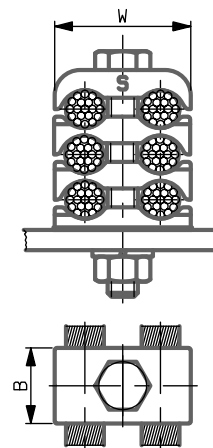
# G4C

GROUND CONNECTOR  
FOR TWO OR FOUR CU CABLE  
TO BAR - BRASS CONNECTOR



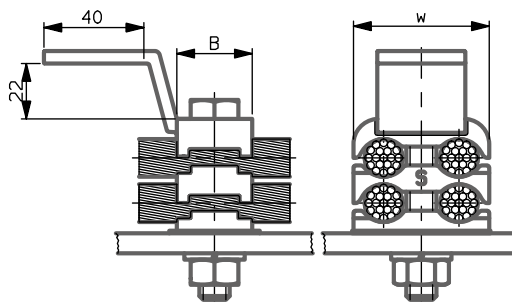
# G6C

GROUND CONNECTOR  
FOR TWO OR FOUR CU CABLE  
TO BAR - BRASS CONNECTOR



# G4FC

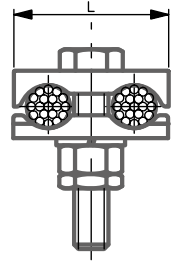
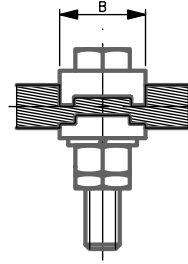
GROUND CONNECTOR  
FOR TWO OR FOUR CU CABLE  
TO BAR - BRASS CONNECTOR





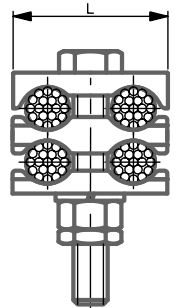
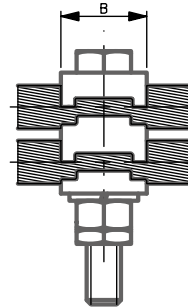
# STN

GROUNDING ACCES POINT



# STDN

GROUNDING ACCES POINT

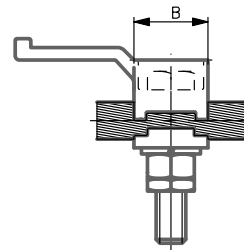
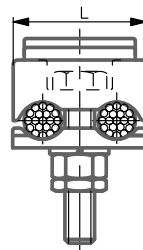


CATALOGUE NO.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS		BOLT SIZE	RECOM.. TORQUE Nm
	MIN	MAX	B	L		
STN 75-116	75	116	30	50	M12	60
STN 147	147	147	30	50	M14	90
STN 181	181,6	181,6	31	54	M16	140
STDN 75-116	75	116	30	50	M12	60
STDN 147	147	147	30	50	M14	90
STDN 181	181,6	181,6	31	54	M16	140
STA 1-75	75	75	30	50	M12	60
STDA 1-75	75	75	30	50	M12	60
STA 2-116	75	116	30	50	M12	60
STA 2-147	147	147	30	50	M14	90
STA 2-181	181,6	181,6	31	54	M16	140
STDA 2-116	75	116	30	50	M12	60
STDA 2-147	147	147	30	50	M14	90
STDA 2-181	181,6	181,6	31	54	M16	140
STA 2-147 DP	75	147	30	50	M12	60
STDA 2-147 DP	75	147	30	50	M12	60
STA 2-116 USI	75	116	30	50	M12	60
STDA 2-147 USI	147	147	30	50	M14	90



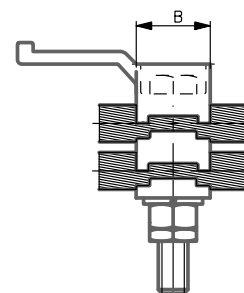
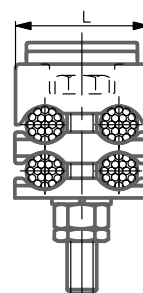
# STA

GROUNDING ACCES POINT



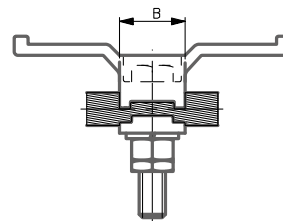
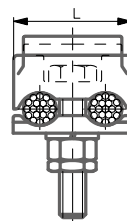
# STDA

GROUNDING ACCES POINT



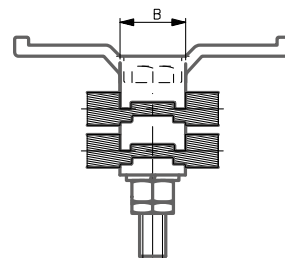
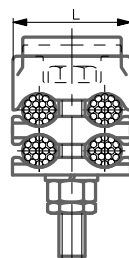
# STA2

GROUNDING ACCES POINT



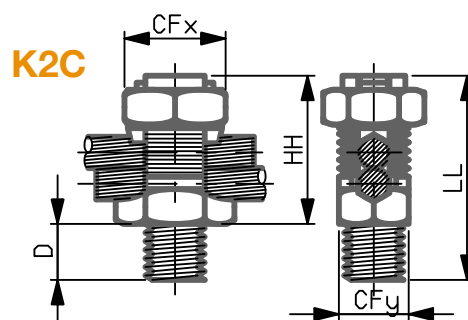
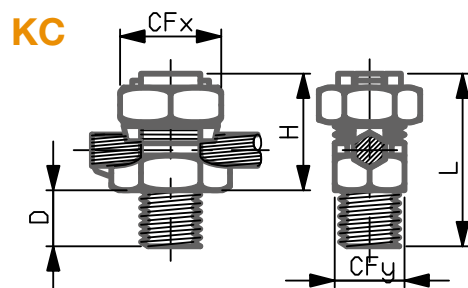
# STDA2

GROUNDING ACCES POINT



## KC

SERVIT POST TO GROUND ONE CU CABLE

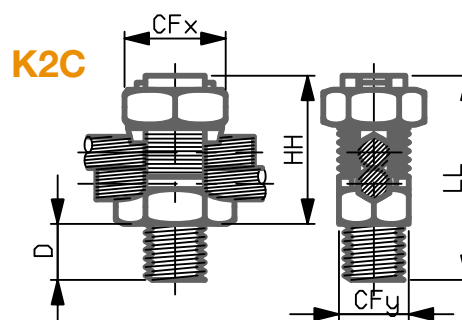
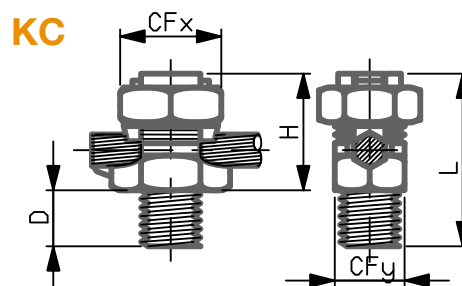


CATALOGUE NO. (1 CABLE)	CATALOGUE NO. (2 CABLES)	CABLE SECTION mm <sup>2</sup>			
		STRANDED		SOLID	
		MIN	MAX	MIN	MAX
KC15	K2C15	4	6	4	6
KC15B1	K2C15B1	(Dia. 2,6 mm)	(Dia. 3.2 mm)	(Dia. 2.3 mm)	(Dia. 2.8 mm)
KC17	K2C17	6	10	6	16
KC17B1	K2C17B1	(Dia. 3.2 mm)	(Dia. 4.1 mm)	(Dia. 2.8 mm)	(Dia. 3.6 mm)
KC20	K2C20	6	16	6	25
KC20B1	K2C20B1	(Dia. 3.2 mm)	(Dia. 5.1 mm)	(Dia. 2.8 mm)	(Dia. 5.2 mm)
KC22	K2C22	6	25	6	35
KC22B1	K2C22B1	(Dia. 3.2 mm)	(Dia. 6.5 mm)	(Dia. 2.8 mm)	(Dia. 6.6 mm)
KC23	K2C23	10	35	6	50
KC23B1	K2C23B1	(Dia. 4.1 mm)	(Dia. 6.5 mm)	(Dia. 2.8 mm)	(Dia. 7.4 mm)
KC25	K2C25	35	50	35	70
KC25B1	K2C25B1	(Dia. 6.5 mm)	(Dia. 9.3 mm)	(Dia. 6.6 mm)	(Dia. 9.3 mm)
KC26	K2C26	35	70	35	95
KC26B1	K2C26B1	(Dia. 6.5 mm)	(Dia. 9,3 mm)	(Dia. 6.6 mm)	(Dia. 10,4 mm)
KC28	K2C28	50	95	50	120
KC28B1	K2C28B1	(Dia. 7.4 mm)	(Dia. 12,8 mm)	(Dia. 7,4 mm)	(Dia. 11.7 mm)
KC31	K2C31	50	150	-	-
KC31B1	K2C31B1	(Dia. 9.3 mm)	(Dia. 16.0 mm)	-	-
KC34	K2C34	95	240	-	-
KC34B1	K2C34B1	(Dia. 12.8 mm)	(Dia. 20,3 mm)	-	-



# KC

SERVIT POST TO GROUND ONE CU CABLE

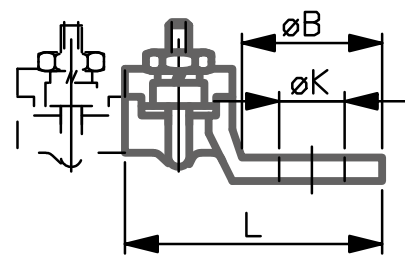


CATALOGUE NO. (1 CABLE)	CATALOGUE NO. (2 CABLES)	STUD DIAMETER	DIMENSIONS						RECOMMENDED TORQUE Nm	
			CFX	CFY	D	H	HH	L	NUT	STUD
KC15	K2C15	1/4 - 20	12,7	9,7	12,7	15,9	-	33,3	9,0	9,0
KC15B1	K2C15B1				25,4	-	22,3	46,0		
KC17	K2C17	1/4 - 20	15,9	11,2	12,7	22,3	-	38,1	9,0	9,0
KC17B1	K2C17B1				25,4	-	25,4	50,8		
KC20	K2C20	5/16 - 18	17,5	12,7	15,9	22,3	-	41,1	18,6	20,3
KC20B1	K2C20B1				25,4	-	28,6	52,3		
KC22	K2C22	3/8 - 16	19,1	15,7	15,9	25,4	-	47,8	31,1	31,6
KC22B1	K2C22B1				28,6	-	31,3	60,5		
KC23	K2C23	3/8 - 16	20,6	15,7	15,9	25,4	-	50,0	31,1	31,6
KC23B1	K2C23B1				28,6	-	34,9	62,7		
KC25	K2C25	1/2 - 13	23,6	19,1	19,1	28,6	-	58,7	43,5	54,2
KC25B1	K2C25B1				31,8	-	41,3	71,4		
KC26	K2C26	1/2 - 13	26,4	22,4	19,1	34,9	-	64,3	43,5	54,2
KC26B1	K2C26B1				31,8	-	47,6	78,5		
KC28	K2C28	5/8 - 11	34,3	30,0	25,4	43,5	-	87,4	56,5	74,5
KC28B1	K2C28B1				38,1	-	57,2	100,1		
KC31	K2C31	5/8 - 11	42,9	36,3	25,4	57,2	-	98,6	73,4	74,5
KC31B1	K2C31B1				38,1	-	73,1	111,3		
KC34	K2C34	3/4 - 10	50,8	41,1	31,8	60,3	-	112,8	93,2	118,7
KC34B1	K2C34B1				44,5	-	82,6	125,5		



# 1BR-2BR

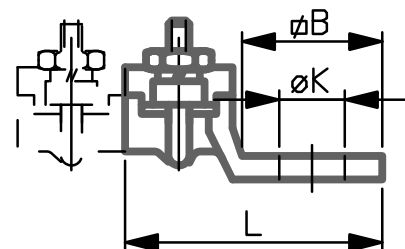
MECHANICAL CONNECTORS - RING TONGUE TERMINALS



CATALOGUE NO		APPLICATION		NUMBER OF BOLTS	DIMENSIONS			
WITH U STEEL BOLT	WITH U COPPER ALLOY BOLT	CABLE SECTION			ØB	L	ØK	ØK (SPECIAL)
		MIN	MAX					
1BR921	1BR921B	6	50	1	21	43	9	9 (11)
1BR1125	1BR1125B	6	70	1	25	55	11	11 (9 - 13 - 15)
1BR1430	1BR1430B	16	120	1	30	64	13	13 (15)
1BR1632	1BR1632B	25	150	1	32	70	13	13 (15)
1BR1836	1BR1836B	25	185	1	36	75	13	13 (15)
1BR2240	1BR2240B	70	300	1	40	85	19	19 (15 - 17)
2BR921	2BR921B	6	50	2	21	64	9	9 (11 - 13)
2BR1632	2BR1632B	25	150	2	32	100	13	11 (15)
2BR2240	2BR2240B	70	300	2	40	114	19	11 (15 - 17)

# 1BC-2BC

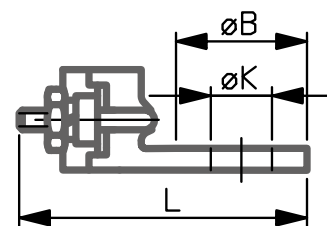
MECHANICAL CONNECTORS - SQUARE TONGUE TERMINALS



CATALOGUE NO		APPLICATION		NUMBER OF BOLTS	DIMENSIONS			
WITH U STEEL BOLT	WITH U COPPER ALLOY BOLT	CABLE SECTION			B	L	ØK	ØK (SPECIAL)
		MIN	MAX					
1BC253	1BC253B	6	70	1	30	60	11	11 (9 - 13)
1BC313	1BC313B	25	150	1	30	68	11	11 (9 - 13)
1BC312	1BC312B	25	150	1	40	78	13	13 (15)
1BC420	1BC420B	25	185	1	50	93	Undrilled	-
2BC312	2BC312B	25	150	2	40	108	Undrilled	-
2BC2300	2BC2300B	50	300	2	50	125	Undrilled	-

# 1BER

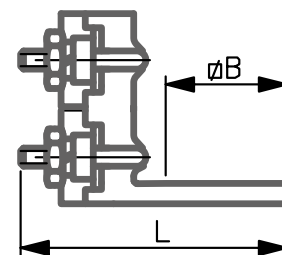
MECHANICAL CONNECTORS - 90 DEGREE RING TONGUE TERMINALS



CATALOGUE NO		APPLICATION		NUMBER OF BOLTS	DIMENSIONS			
WITH U STEEL BOLT	WITH U COPPER ALLOY BOLT	CABLE SECTION			ØB	L	ØK	ØK (SPECIAL)
		MIN	MAX					
1BER921	1BER921B	6	50	1	21	53	9	9 (11 - 13)
1BER1430	1BER1430B	16	120	1	30	75	13	13 (15)
1BER1632	1BER1632B	25	150	1	32	80	13	13 (15)

# 2BEC

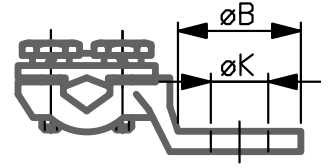
MECHANICAL CONNECTORS - 90 DEGREE SQUARE TONGUE TERMINALS



CATALOGUE NO		APPLICATION		NUMBER OF BOLTS	DIMENSIONS		
WITH U STEEL BOLT	WITH U COPPER ALLOY BOLT	CABLE SECTION			B	L	ØK
		MIN	MAX				
2BEC507	2BEC507B	150	300	2	50	120	Undrilled

# CTT

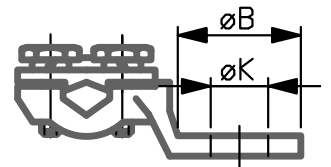
MECHANICAL CONNECTORS - FLAG RING TONGUE TERMINALS



CATALOGUE NO		APPLICATION		NUMBER OF CAPS	DIMENSIONS		
WITH STEEL BOLTS	WITH COPPER ALLOY BOLTS	CABLE SECTION			ØB	L	ØK
		MIN	MAX				
CTT10	CTT10B	25	70	1	26	55	11

# CTR

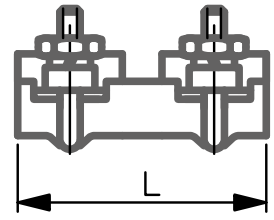
MECHANICAL CONNECTORS - FLAG OFFSET RING TONGUE TERMINALS



CATALOGUE NO		APPLICATION		NUMBER OF U BOLTS	DIMENSIONS			
WITH U STEEL BOLTS	WITH U COPPER ALLOY BOLTS	CABLE SECTION			ØB	L	ØK	ØK (SPECIAL)
		MIN	MAX					
CTR10	CTR10B	6	75	1	26	55	11	9
CTR16	CTR16B	35	150	1	26	70	11	-

# RDB

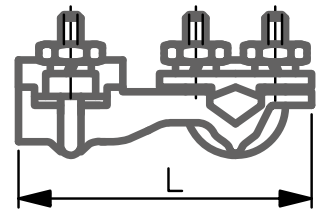
MECHANICAL CONNECTORS - STRAIGHT CONNECTOR



CATALOGUE NO		APPLICATION		NUMBER OF U BOLTS	DIMENSIONS
WITH U STEEL BOLTS	WITH U COPPER ALLOY BOLTS	CABLE SECTION			L
		MIN	MAX		
RDB201	RDB210B	6	50	1 + 1	43
RDB211	RDB211B	6	70	1 + 1	48
RDB301	RDB301B	25	150	1 + 1	63

# BT

MECHANICAL CONNECTORS - T CONNECTOR

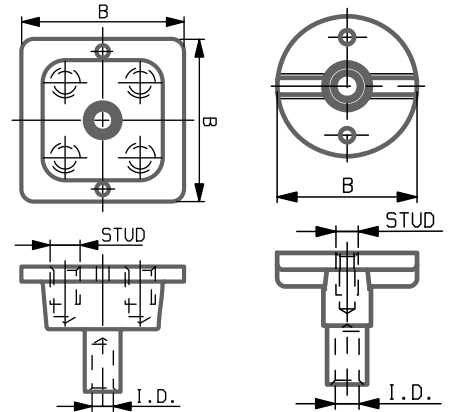


CATALOGUE NO		APPLICATION		NUMBER OF U BOLTS	DIMENSIONS
WITH U STEEL BOLTS	WITH U COPPER ALLOY BOLTS	CABLE SECTION			L
		MIN	MAX		
BT9	BT9B	6	50	1 + 1	47
BT11	BT11B	6	70	1 + 1	57
BT16	BT16B	25	150	1 + 1	78



## YGF

STATIC GROUNDING RECEPTACLE

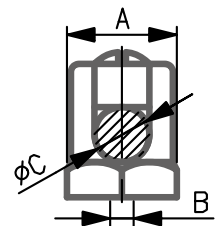


CATALOGUE NO	APPLICATION		DIMENSIONS			TOOLING FOR TAP
	CABLE SECTION mm <sup>2</sup>	DRIVE ROD SECTION mm <sup>2</sup>	B	I.D.	STUD HOLE	
YGF35M8E1	35	50	60	8,5	M8	U112BGE1T (1x)
YGF35M10E1	35	50	60	8,5	M10	
YGF354M8	35	50	65	8,5	4 x M8	
YGF354M10	35	50	65	8,5	4 x M10	
YGF354M12	35	50	65	8,5	4 x M12	

## SF

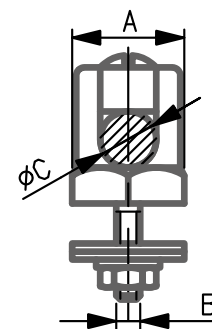
BRASS EARTHING LINE SUPPORTS

CATALOGUE NO	DIMENSIONS			
	OC		B	A
	MIN	MAX		
SF6	4,0	6,0	M6	17,0
SF67	4,0	6,0	7 x 150	17,0
SF68	4,0	6,0	M8	17,0
SF86	4,0	8,0	M6	19,0
SF87	4,0	8,0	7 x 150	19,0
SF88	4,0	8,0	M8	19,0
SF810	4,0	8,0	M10	19,0
SF106	6,0	10,0	M6	21,0
SF107	6,0	10,0	7 x 150	21,0
SF108	6,0	10,0	M8	21,0
SF1010	6,0	10,0	M10	21,0
SF126	6,0	12,0	M6	24,0
SF127	6,0	12,0	7 x 150	24,0
SF128	6,0	12,0	M8	24,0
SF1210	6,0	12,0	M10	24,0
SF146	8,0	14,0	M6	26,0
SF147	8,0	14,0	7 x 150	26,0
SF148	8,0	14,0	M8	26,0
SF1410	8,0	14,0	M10	26,0
SF166	10,0	16,0	M6	30,0
SF167	10,0	16,0	7 x 150	30,0
SF168	10,0	16,0	M8	30,0
SF1610	10,0	16,0	M10	30,0
SF186	-	18,0	M6	32,0
SF187	-	18,0	7 x 150	32,0
SF188	-	18,0	M8	32,0
SF206	-	20,0	M6	36,0
SF207	-	20,0	7 x 150	36,0
SF208	-	20,0	M8	36,0
SF2010	-	20,0	M10	36,0



# SF + BM

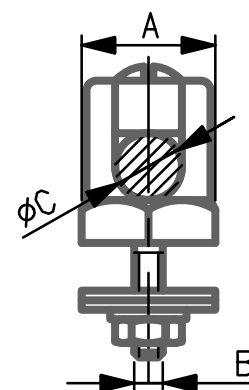
BRASS EARTHING LINE SUPPORTS WITH BRASS STUD AND NUT AND 2 AL-CU WASHERS



CATALOGUE NO	DIMENSIONS			
	ØC		B	A
	MIN	MAX		
SF66 + BM	4,0	6,0	M6	17,0
SF86 + BM	4,0	8,0	M6	19,0
SF106 + BM	6,0	10,0	M6	21,0
SF126 + BM	6,0	12,0	M6	24,0
SF127 + BM	6,0	12,0	7 x 150	24,0
SF146 + BM	8,0	14,0	M6	26,0
SF147 + BM	8,0	14,0	7 x 150	26,0
SF166 + BM	10,0	16,0	M6	30,0
SF167 + BM	10,0	16,0	7 x 150	30,0
SF186 + BM	-	18,0	M6	32,0
SF206 + BM	-	20,0	M6	36,0
SF207 + BM	-	20,0	7 x 150	36,0

# SF-CNM

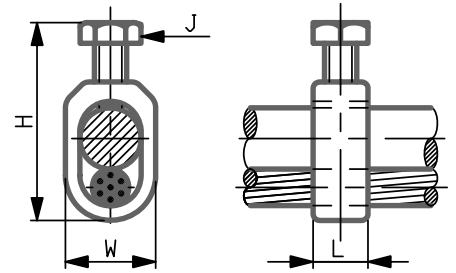
TIN PLATED BRASS EARTHING LINE SUPPORTS



CATALOGUE NO	DIMENSIONS			
	ØC		B	A
	MIN	MAX		
SF66CNM	4,0	6,0	M6	17,0
SF67CNM	4,0	6,0	7 x 150	17,0
SF68CNM	4,0	6,0	M8	17,0
SF86CNM	4,0	8,0	M6	19,0
SF87CNM	4,0	8,0	7 x 150	19,0
SF88CNM	4,0	8,0	M8	19,0
SF810CNM	4,0	8,0	M10	19,0
SF106CNM	6,0	10,0	M6	21,0
SF107CNM	6,0	10,0	7 x 150	21,0
SF108CNM	6,0	10,0	M8	21,0
SF1010CNM	6,0	10,0	M10	21,0
SF126CNM	6,0	12,0	M6	24,0
SF127CNM	6,0	12,0	7 x 150	24,0
SF128CNM	6,0	12,0	M8	24,0
SF1210CNM	6,0	12,0	M10	24,0
SF146CNM	8,0	14,0	M6	26,0
SF147CNM	8,0	14,0	7 x 150	26,0
SF148CNM	8,0	14,0	M8	26,0
SF1410CNM	8,0	14,0	M10	26,0
SF166CNM	10,0	16,0	M6	30,0
SF167CNM	10,0	16,0	7 x 150	30,0
SF168CNM	10,0	16,0	M8	30,0
SF1610CNM	10,0	16,0	M10	30,0

# GRC

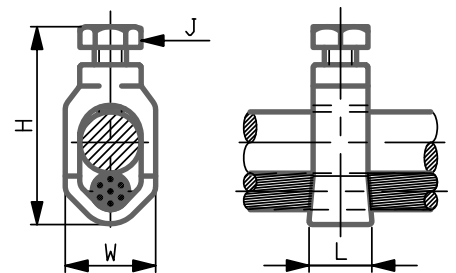
HIGH STRENGTH GROUND ROD CLAMP



CATALOGUE NO	APPLICATION			DIMENSIONS			
	DRIVE ROD DIA.	CABLE SECTION		H	W	L	J
		MIN	MAX				
GRC12	1/2" (12,7 mm)	6	35	51	22,6	16	3/8"
GRC58	5/8" (16 mm)	6	50	55,6	24,1	16	3/8"
GRC34	3/4" (19 mm)	10	70	62,7	27,7	16,5	3/8"

# GRL

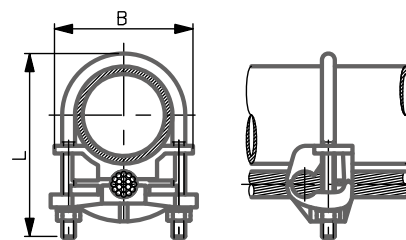
HIGH STRENGTH GROUND ROD CLAMP



CATALOGUE NO	APPLICATION			DIMENSIONS			
	DRIVE ROD DIA.	CABLE SECTION		L	W	H	J
		MIN	MAX				
GRL3	3/8" (9,5 mm)	6	25	17,0	20,0	25,4	3/8"
GRL4	1/2" (12,7 mm)	6	35	21,1	16,3	30,5	3/8"
GRL5	5/8" (16 mm)	6	35	21,1	15,5	34,0	3/8"
GRL6	3/4" (19 mm)	6	35	27,4	17,8	38,1	3/8"

## GAR (B)

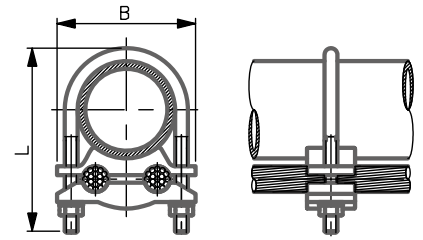
FENCE POST GROUNDING CONNECTOR - BRONZE



CATALOGUE NO	TUBE DIAMETER		TUBE I.P.S.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS		BOLT SIZE
	MIN	MAX	INCH (mm)	MIN	MAX	B	L	
GAR114C				6	25			3/8"
GAR1126	-	12,7	1/4" (13)	16	70	47,6	63,5	3/8"
GAR1129				50	120			3/8"
GAR644C				6	25			3/8"
GAR6426	15,9	19,0	3/8" (16,1)	16	70	53,9	73,0	3/8"
GAR6429				50	120			3/8"
GAR6434				150	240	63,5	88,9	1/2"
GAR144C				6	25		69,9	3/8"
GAR1426	22,2	25,4	1/2"-3/4" (21,3-26,7)	16	70	60,3	76,2	3/8"
GAR1429				50	120			3/8"
GAR1434				150	240	69,9	95,3	1/2"
GAR154C				6	25		73,0	3/8"
GAR1526	28,6	31,8	1" (33,4)	16	70	66,7	73,0	3/8"
GAR1529				50	120		85,7	3/8"
GAR1534				150	240	76,2	114,3	1/2"
GAR164C				6	25			3/8"
GAR1626	34,9	38,1	1-1/4" (42,2)	16	70	76,2	88,9	3/8"
GAR1629				50	120			3/8"
GAR1634				150	240	85,7	107,9	1/2"
GAR174C				6	25			3/8"
GAR1726	41,3	47,6	1-1/2" (48,3)	16	70	82,6	101,6	3/8"
GAR1729				50	120			3/8"
GAR1734				150	240	92,1	117,5	1/2"
GAR17150	42	48	-	120	150	81	100	M10
GAR184C				6	25		107,9	3/8"
GAR1826	50,0	60,3	2" (60,3)	16	70	95,3	107,9	3/8"
GAR1829				50	120		114,3	3/8"
GAR1834				150	240	104,8	133,4	1/2"
GAR18150	50	60	-	120	150	95	110	M10
GAR194C				6	25			3/8"
GAR1926	63,5	73,0	2-1/2" (73)	16	70	107,9	127,0	3/8"
GAR1929				50	120			3/8"
GAR1934				150	240	117,5	142,9	1/2"
GAR204C				6	25			3/8"
GAR2026	76,2	88,9	3" (88,9)	16	70	120,7	142,9	3/8"
GAR2029				50	120			3/8"
GAR2034				150	240	133,4	161,9	1/2"
GAR214C				6	25			3/8"
GAR2126	88,9	101,6	3-1/2" (101,6)	16	70	136,5	158,8	3/8"
GAR2129				50	120			3/8"
GAR2134				150	240	146,1	171,4	1/2"
GAR224C				6	25			3/8"
GAR2226	101,6	114,3	4" (114,3)	16	70	149,2	161,9	3/8"
GAR2229				50	120			3/8"
GAR2234				150	240	158,8	174,6	1/2"
GAR244C				6	25			3/8"
GAR2426	-	-	5" (141,4)	16	70	174,6	196,9	3/8"
GAR2429				50	120			1/2"
GAR2434				150	240	184,2	219,1	1/2"
GAR8629	-	-	6" (168,3)	50	120	212,7	223,9	1/2"

# GD

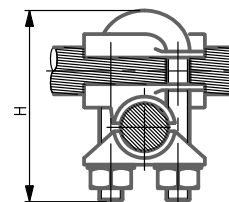
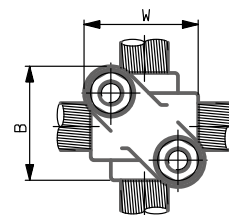
CABLE TO ROD/TUBE GROUND CONNECTOR



CATALOGUE NO	TUBE DIAMETER		TUBE I.P.S.	CABLE SECTION mm <sup>2</sup>		DIMENSIONS		BOLT SIZE
	MIN	MAX	INCH (mm)	MIN	MAX	B	L	
GD1526	28,6	31,8	1" (33,4)	16	70	66,7	85,7	3/8"
GD1529				50	120			
GD1626	34,9	38,1	1-1/4" (42,2)	16	70	76,2	88,9	3/8"
GD1629				50	120			
GD174C	41,3	47,6	1-1/2" (48,3)	6	25	82,6	101,6	3/8"
GD1726				16	70			3/8"
GD1729				50	120			3/8"
GD1734				150	240			1/2"
GD184C	50,0	60,3	2" (60,3)	6	25	95,3	111,1	3/8"
GD1826				16	70			3/8"
GD1829				50	120			3/8"
GD1834				150	240			1/2"
GD194C	63,5	73,0	2-1/2" (73)	6	25	107,9	127,0	3/8"
GD1926				16	70			3/8"
GD1929				50	120			3/8"
GD1934				150	240			1/2"
GD204C	76,2	88,9	3" (88,9)	6	25	121,9	142,9	3/8"
GD2026				16	70			3/8"
GD2029				50	120			3/8"
GD2034				150	240			1/2"
GD214C	88,9	101,6	3-1/2" (101,6)	6	25	136,5	158,8	3/8"
GD2126				16	70			3/8"
GD2129				50	120			3/8"
GD2134				150	240			1/2"
GD224C	101,6	114,3	4" (114,3)	6	25	149,2	161,9	3/8"
GD2226				16	70			3/8"
GD2229				50	120			3/8"
GD2234				150	240			1/2"

## GX

GROUND CONNECTOR  
FOR COPPER CABLES



CATALOGUE NO	TUBE DIAMETER				DIMENSIONS			BOLT SIZE
	GROOVE "A" mm <sup>2</sup>		GROOVE "B" mm <sup>2</sup>		B	W	H	
	MIN	MAX	MIN	MAX				
GX4C4C	6	25	6	25	41,3	41,3	47,6	3/8"
GX264C	16	70	6	25	44,5	44,5	63,5	3/8"
GX2626			16	70				
GX294C	50	120	6	25	47,6	47,6	69,9	3/8"
GX2926			16	70				
GX2929			50	120				
GX344C			6	25				
GX3426	150	240	16	70	53,9			3/8"
GX3429			50	120				
GX3434			150	240				

## QPX

CROSS AND PARALLEL GROUND  
CONNECTOR FOR COPPER CABLES

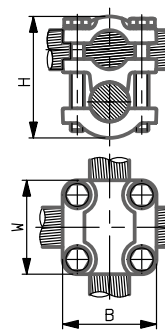
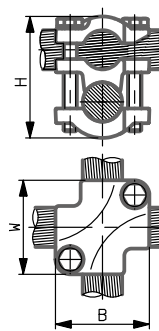


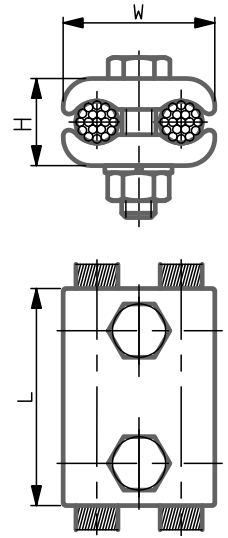
FIG. 1

FIG. 2

CATALOGUE NO	FIG	TUBE DIAMETER				DIMENSIONS			BOLT SIZE
		GROOVE "A" mm <sup>2</sup>		GROOVE "B" mm <sup>2</sup>		B	W	H	
		MIN	MAX	MIN	MAX				
QPX2C2C	1	16	35	16	35	34,9	34,9	41,3	5/16"
QPX282C		50	120	16	35	34,9	41,3	50,8	5/16"
QPX2828				50	120	47,6	47,6	53,9	3/8"
QPX342C		120	240	16	35	34,9	47,6	53,9	5/16"
QPX3428				50	120	63,5	50,8	63,5	3/8"
QPX3434	120			240	69,9	53,9	95,3	3/8"	
QPX442C	1	240	500	16	35	66,7	57,2	66,7	5/16"
QPX4428				50	120	73,1	60,3	73,1	3/8"
QPX4434				120	240	76,2	60,3	76,2	3/8"
QPX4444				240	500	85,7	66,7	85,7	3/8"

# CP

COPPER PARALLEL CLAMP



CATALOGUE NO	APPLICATION		DIMENSIONS			BOLT SIZE
	GROOVE "A"	GROOVE "B"	L	W	H	
	MM <sup>2</sup>	MM <sup>2</sup>				
CP2C2C	35	35	12,7	31,8	15,9	3/8"
CP2525	50	50	76,2	41,3	20,6	3/8"
CP2626	70	70	76,2	41,3	20,6	3/8"
CP28C2	120	35	69,9	34,9	23,8	3/8"
CP2828	120	120	101,6	50,8	25,4	3/8"
CP2929	125	125	101,6	50,8	20,6	3/8"
CP3434	240	240	127,0	63,5	43,7	1/2"

# EARTHING RODS



NOMINAL SIZE	L mm	THREAT SIZE (UNC-22A)	SHANK D mm	L1 mm	UNIT WEIGHT kg	PACK QUANTITY	PART NUMBER
5/8"	1200	5/8"	14.2	30	1.53	5	TBB 112
	1500				1.88		TBB 115
	1800				2.29		TBB 118
	2400				3.00		TBB 124
	3000				3.79		TBB 130
3/4"	1200	3/4"	17.2	35	2.19	5	TBB 212
	1500				2.73		TBB 215
	1800				3.27		TBB 218
	2400				4.35		TBB 224
	3000				5.44		TBB 230

# GROUNDING Exothermic welding

The solutions of ARGOSWELT exothermic welding, from ARGOS range, allow you to connect different types of conductors between each other in a sure, reliable, simple and fast way ( tape, round, earth rod, rebar, satainless steel).

The conductors are welded all together in order to flow the current in a perfect continuous way with a stronger and resitant connection to the corrosion regarding to a mechanical coupling.



## WELDING TYPES

BAR TO BAR					BAR TO EARTH ROD		BAR TO CABLE		
BB1	BB3	BB7	BB14	BB41	BR1	BR2	CB1	CB4	CB5
CABLE TO CABLE					CABLE TO EARTH ROD			BAR TO STEEL	
CC1	CC2	CC4	CC7	CC14	CR1	CR2	CR3	BS1	BS2
CABLE TO REBAR					CABLE TO STEEL SURFACE				
CRE1	CRE2	CRE3	CRE6	CRE17	CS1	CS2	CS3	CS7	CS8
CABLE TO STAINLESS									
CS9	CS25	CS27							





## COMPONENTS

### Weld Powder



### Molds



### Handle Clamp



### Electronic Ignition



### Weld Powder



# ***OTHER COMPLEMENTARY PRODUCTS***

## **OTHER COMPLEMENTARY PRODUCTS**

- Conductors (Cable & Tubes) ..... 204
- Earthing & Safety Equipment ..... 206





SBI provides complete solutions to its customers and acts as One Stop Shop supplier offering complementary products to the electrical connectors in the substation.

Aluminium and Copper cables of different lengths and sections can be ordered.



Aluminium and Copper tubes up to more than 20 meters





## MV Live Working safety shoes MV232-XX

MV Live Working safety Shoes to protect against step voltage. Conform to EDF- RTE SERECT standard: ST HTA 70A Ind. E Conform to ASTM F2412 (2005) & ASTM F2413 (2011) Maximum step voltage for HV network.: 6 kV

### FEATURES

- Sole: Textile anti-perforation midsole (1430 N) PU / Rubber nitrile (Resistant to 300°C) Heel breast : 18 mm. Spaced studs 5mm

## Insulating OVERBOOTS MV-138

The dielectric overboot offers insulating footwear in a form that is extremely quick to put over standard leather safety footwear due to its ingenious rear entry design. The rubber strap, attached to dual points at the rear of the overboot, is secured to a molded button at the front. The boots offer an electric insulation protecting the linesman against the risks of step voltage on the ground or a current circulating between the feet and the ground.

### FEATURES

- Class 0: 1000 V AC – 1500 V DC. In compliance with the standard EN50321
- Resists 20KV on the complete overboot (test setup conforming)
- High voltage resistant dielectric compound to EN50321, EN ISO 20347, ASTM F-2413, ASTM F1117, CSA Z195 requirements of EN50321)
- Slip resistant vulcanised blue rubber sole surpassing SATRA TM144 & EN13287
- Hard wearing rubber sole increases life by 2 to 3 times



## ARC FLASH HELMET with INTEGRATED FACE SHIELD MO-180-ARC4

Arcflash Helmet 4 cal/cm<sup>2</sup> / class 2  
Compliant with ASTM F2178 and IEC 61482-1-2 Maximum Voltage Use : 20 kV (ANSI) 7,5 kV (IEC)

### FEATURES

- Protection against mechanical shocks
- Insulating protection of the shell to 20 kV (ANSI) - 7,5 kV (IEC)
- Face shield protection against electrical arc
- Protection against electrical arc thermal effect 4cal/cm<sup>2</sup> and class 2
- Optimal visual comfort : Visible Light Transmission > 75%

## POLYCARBONATE SAFETY HELMET MO-183

Polycarbonate helmet for industrial use and work on pylons.

### FEATURES

- In accordance with the standard EN 397 and the particulars prescriptions about:
- Lateral deformation : LD.
- Use at very low temperature : - 30°C.
- Electrical insulation : 440 V.
- Projection against ejections of molten metal : mm.
- Helmet made of polycarbonate.
- Shock and wear resisting.



## COLOURLESS ANTI-UV GOGGLES MO - 11000

These goggles are intended to provide eye protection against UV radiation as well as ejections of solid particles during electrical operations.

### FEATURES

- Grilamid frame in orange with "softflex".
- Colourless polycarbonate front with anti-radiation treatment 99;5% UV filtering up to 370 nanometres.
- Delivered in a case with a belt strap.
- Complies with the standard EN 166 :
  - optic class : 1
  - impact resistance level : F (steel ball 6 mm at 45 m/second).
  - treatment anti-impact and anti-chemical product.



## COVERALL MV105 MV-105\*

Arc flash protection for electricians. The advantage of this coverall is that you can very easily put it on or put it off Product in conformity with the PPE Directive 89/686/EEC and NFPA70E.

### FEATURES

- 12 cal/cm<sup>2</sup> ATPV rating according to EN/IEC61482-1-1
- Compliant with ASTM F1506 & F1959, NFPA70E, EN/IEC 61482-2 and the PPE Directive 89/686/EEC
- Made from arc flash resistant Ultra Soft

## MAINTENANCE GLOVES CG - 96

Maintenance gloves with palm and top in full grain cowhide treated for oil and water resistance. Colour of palm and top: yellow Cuff edging in red cotton Incorporated wrist protection Packed in a vinyl bag

Complies with the standard EN 388 Performance according to EN 388 3122 (grading from 1 to 5 for each property): abrasion: 3, cutting by slicing: 1, tearing: 2, perforation: 2 Level of dexterity tested according to EN 420: 5 (excellent holding)



## HIGH VOL TAGE OVER-GLOVES CG-99

Over-gloves are worn over high voltage insulating gloves (references Catu CG-15, CG-20, CG-30, CG-40). They give the mechanical protection of the insulating glove. Velcro on the back makes it possible to adjust the tightening of the glove to the hand of the user.

### FEATURES

- Material : silicone treated bovines.
- Palm and top : silicone treated grain split bovines.
- Sleeve : gauntlet leather hide 10 cm length.
- American fitting with gusseted thumb and return on index finger.
- colours : beige with red Velcro on the back of the hand.
- Complies with the standard EN 388.





## Short circuiting and earthing CLAMP MT-735

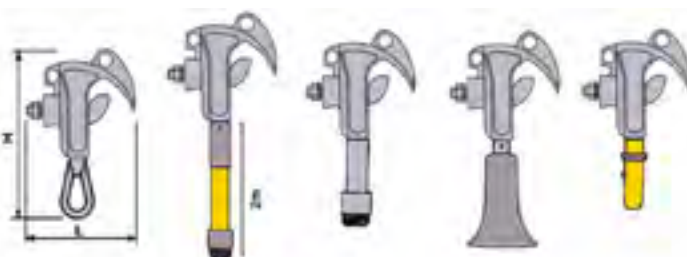
Short circuiting and earthing clamp manoeuvrable by insulating stick.

### FEATURES

- Body in aluminium.
- Rating insulation: 40 kA/1s.
- Connection for copper cables 150 mm ≤ maxi.
- Trapezoidal threaded screw.
- Elastic washers in the clamping system insure a higher withstand in case of electrodynamic shock.
- Clamping capacity: 15 to 60 mm.



## Short circuiting and earthing CLAMP MT834



## VOLTAGE DETECTOR CC-265

Electronic Voltage Detector  
In compliance with the standard IEC 61243-1  
Voltage range: 44 to 550 kV

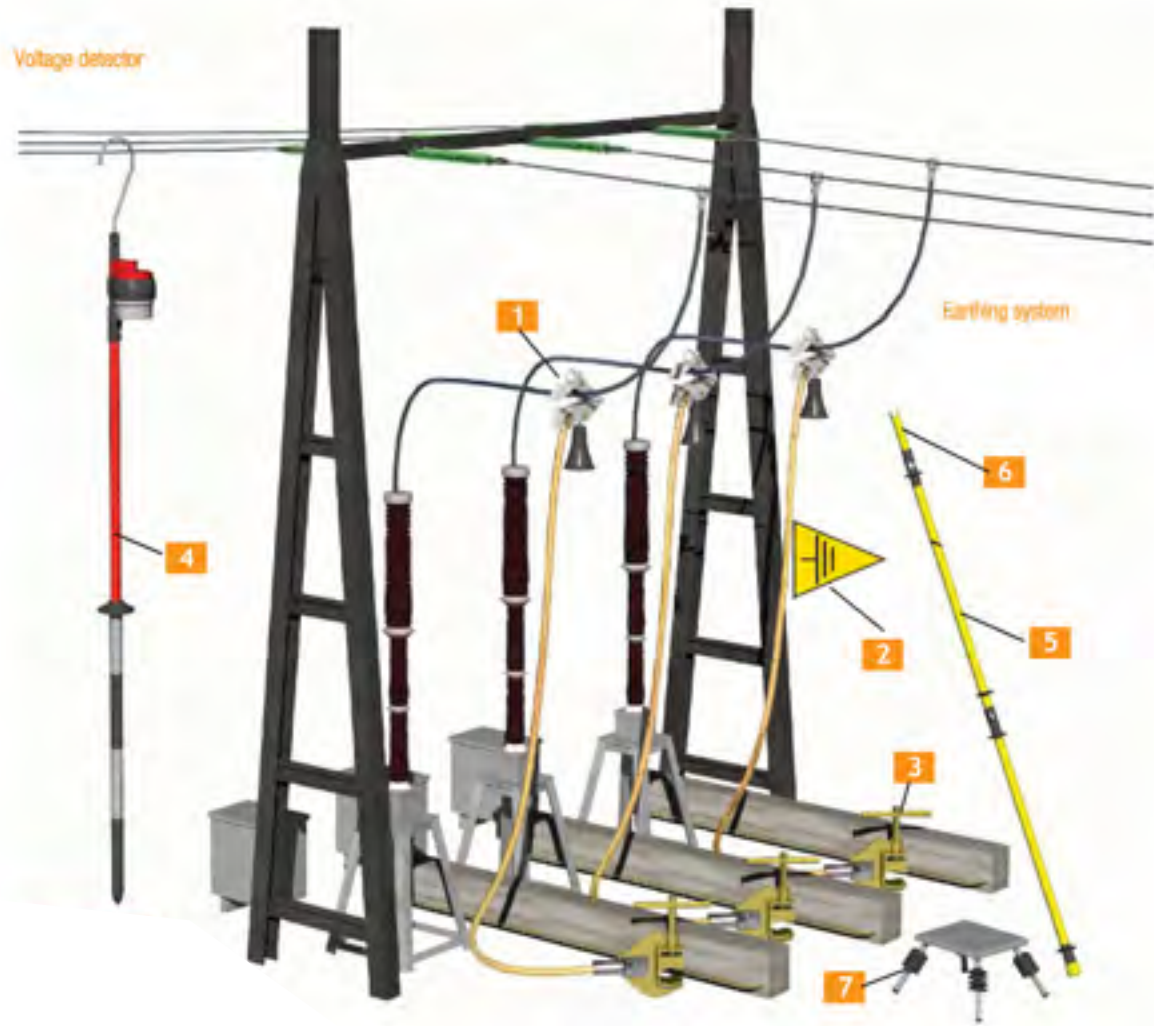
### FEATURES

- Voltage Detector : Capacitive type
- Category L (without electrode extension)
- Robust thermoplastic housing
- Contact electrodes fitted to the body by screwing and easily interchangeable
- Visual indication displayed on 360°
- Audible indication : > 67 dB (A) / 1,5 m





## EARTHING EQUIPMENT



### EARTH CLAMPS AND FLAGS

1. Earth clamp
2. Earth flags
3. Earthing clamp

### INSULATING STICKS

4. Insulating sticks IEC for earthing systems and voltage detectors
5. Insulating sticks for earthing system
6. Connection adaptors

### INSULATING PLATFORM

7. Insulating platform outdoor use

HOW WE CAN CONTACT YOU?

NAME OF THE COMPANY

YOUR NAME AND SURNAME

CHARGE

YOUR CONTACT MAIL

PHONE

SPECIFICATION

INTERNATIONAL STANDARD

IEC  
NEMA  
OTHER

COMMENTS

OWN SPECIFICATION

OWN

TECHNOLOGY

CHOOSE TECHNOLOGY

BOLTED  
COMPRESSION  
WELDED

VOLTAGE & CURRENT

VOLTAGE (KV)

MAX. CURRENT (A)

CONDUCTOR

Ø CABLE

MATERIAL

Ø BUSBAR

MATERIAL

HARDWARE

TYPE

BOLTED  
COMPRESSION  
WELDED

MATERIAL

STAINLESS STEEL A2  
STAINLESS STEEL A4  
GALVANIZED  
ALUMINUM

**BUNDLE**

N° CABLES

DISTANCE BETWEEN CABLES

**CONNECTIONS TO EQUIPMENT**

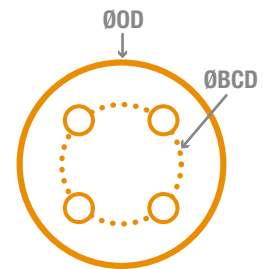
POST INSULATORS SUPPORTS

ØOD

ØBCD

N° HOLES

Ø



CONNECTION TO PAD

LxW

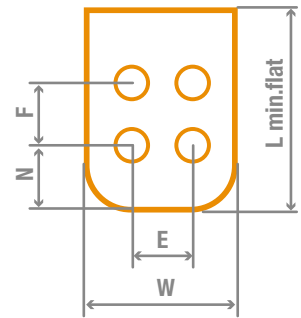
E

F

N

N° HOLES

Ø



CONNECTION TO STUD

Ø STUD

MATERIAL

BIMETALLIC CONNECTIONS

CUPAL SHEET  
CUPAL SLEEVE  
TIN PLATED

COMMENTS

**OTHER COMMENTS**

IF WE NEED TO ADD  
SOMETHING ELSE,  
PLEASE WRITE HERE

## HV SINGLE CONNECTORS

JS01	26
JS02	27
JS03	28 - 29
SS01	30 - 31
SS02	32
SS03	33 - 34
SP01	36
SP02	37
JA01	38
JA02	38
SA01	39
SA03	39
SA02	40
JT01	41
JT02	42
JT03	43
JT04	43
JT05	44
ST01	45
ST02	46 - 47
ST03	48
ST04	49
ST05	50 - 51
JF01	52
JF02	52
SF01	53
SF03	53
SF02	54
SK45	55 - 56
SK90	57 - 58
JAK01	59
JAK02	60
SAK01	61 - 62
SAK02	63 - 64
SAK03	65
SAT01	66
STS	67
STK	67
SATJ	67

## HV BUNDLE CONNECTORS

JSD	68
SSD	69 - 70
SPD	71
JDA	73
SDA	74
JDT01	75
JDT02	76
SDT01	77 - 78
SDT02	79 - 80
JTD	81
STD01	82
STD02	83
SKD45	84
SKD90	85
JDAK45	86
JDAK90	87

SDAK45	88
SDAK90	89
SDF	90
SDTD	91
SPK	91
SPLD	91
JDTD	91
STDD	91

## HV SUPPORTS

SHB	93
SHDB	94
SLHDB	95
SVHB	96
SHB	97 - 98
SHSB	99 - 100
SSHSB	101 - 102
SXHB	103
SVHB	104 - 105
SHB01	106
SHB02	106
SHBD	106
SVHDTB	106

## HV EXPANSION CONNECTORS

SXHSB	110 - 111
SXA	114 - 115
SXS	116 - 117
SXAT	118 - 119
SXAK	120 - 121
SXK	122 - 123
SSAXHSB	124
SXHLB	124
SXAK-REG	124
SXFL	124
SXHSB	124
SXHSB-N	124

## HV EARTHING CONNECTORS

SGP01	126
SGDPL	126
SGDIA01	127
SGDIA02	127
SGP02	128
SGP03	128
SGA	129
SGDPL	129

## HV COMPRESSION CONNECTORS

YCAK	130
SYS	130
SYT	130
YCAKA	130
SYSD	130
SYDT	130
YCAKDA	130

## HV COMPRESSION TOOLING

STP36-220	131
SB550	131

## HV WELDED CONNECTORS

SWOH	132
SWSUS	132
SWL	133
WS	133
SWAT30	134
SWAC	134
SWT75	135
A-FRAME	135

## HV ACCESSORIES

SD	136
LB	137
SCBB	138

## HV SPECIAL APPLICATIONS

SCD	139
SPHERE	140
SRC	140

## CONNECTORS UPPER THAN 500KV

ZDAK	142
ZDT	142
ZPD	143
ZSD	143
ZVHDB	143

## CONNECTORS FOR GIS

SD	144
SHDB	144
ZDAK	144
ZDTD	145
ZSD	145
ZTD	145

## HV SPECIAL APPLICATIONS

SDAM	146 - 147
ADJUSTABLE CONNECTOR	148 - 149
FD	151
FDR	152
FDA	153
NDR	153

### GROUNDING COMPRESSION CONNECTORS

YC-C.....	156
YGHP.....	157
YGL.....	158
YH.....	159
YCA2X.....	159
YCA.....	160 - 161
YR-A-C.....	162 - 163
YA-AM.....	164
YA-2X.....	165
YOS.....	166
YOT.....	166
YOX.....	166
YOS (AL).....	167
YOT (AL).....	167
YOX (AL).....	167

### GROUNDING COMPRESSION TOOLING

YC-C.....	168
YGHP.....	169
YGL.....	170
YH.....	171
YCA2X.....	171
YCA.....	172 - 173
YR-A-C.....	174 - 175
YA-AM.....	176

### GROUNDING MECHANICAL CONNECTORS

GB.....	177
GBM.....	177
STN.....	178
STN-FC.....	178
S2TN.....	178
GL.....	179
G4L.....	179
G2C-G4C.....	180
HFBC.....	181
HHB.....	181
UC-RS.....	182
UC-RGE.....	182
GC.....	183
GCM.....	184
G4C.....	184
G6C.....	184
G4FC.....	184
STN.....	185
STDN.....	185
STA.....	186
STDA.....	186
STA2.....	186
STDA2.....	186
KC - K2C.....	187 - 188
1BR-2BR.....	189
1BC-2BC.....	189
1BER.....	190
2BEC.....	190
CTT.....	191
CTR.....	191
RDB.....	192
BT.....	192
YGF.....	193
SF.....	193
SF + BM.....	194
SF-CNM.....	194
GRC.....	195
GRL.....	195
GAR (B).....	196
GD.....	197
GX.....	198
QPX.....	198
CP.....	199
EARTHING RODS.....	199

### GROUNDING EXOTHERMIC WELDING

WELDING TYPES.....	200
COMPONENTS.....	201

### COMPLEMENTARY PRODUCTS CABLE & TUBES

204

### COMPLEMENTARY PRODUCTS EARTHING & SAFETY EQUIPMENT

206

### ORDER REQUEST FORM

210

### PRODUCT INDEX

214

## HV SINGLE CONNECTORS

### Al-Straight Connectors \_\_\_\_\_ 26

JS01 · JS02 · JS03 · SS01 · SS02 · SS03 ·



### Parallel Connectors \_\_\_\_\_ 36

SP01 · SP02



### Al-Straight Terminals \_\_\_\_\_ 38

JA01 · JA02 · SA01 · SA02 · SA03



### Al-T-Connectors \_\_\_\_\_ 41

JT01 > JT05 · ST01 > ST05



### Al-T-Terminals \_\_\_\_\_ 52

JF01 · JF02 · SF01 · SF02 · SF03



### Al-Angle-Connectors \_\_\_\_\_ 55

SK45 · SK 90



### Al-Angle-Terminals \_\_\_\_\_ 59

JAK01 · JAK02 · SAK01 · SAK01 > SAK03 · SAT01 ·



### Special designs single connectors \_\_\_\_\_ 67

STS · STK · SATJ



## HV BUNDLE CONNECTORS

### Al-Straight-Connectors \_\_\_\_\_ 68

JSD · SSD · SPD · JDA · SDA



### Al-T-Connectors \_\_\_\_\_ 75

JDT01 · JDT02 · SDT01 · SDT02 · JTD · STD01 · STD02



### Al-Angle-Connectors \_\_\_\_\_ 84

SKD45 · SKD90



### Al-Angle-Terminals \_\_\_\_\_ 86

JDAK45 · JDAK90 · SDAK45 · SDAK90 · SDF



### Special designs bundle connectors \_\_\_\_\_ 91

SDTD · SPK · SPLD · JDTD · STDD



## HV SUPPORTS

### Al-Supports for cable \_\_\_\_\_ 93

SHB · SHDB · SLHDB · SVHB



### Al-Supports for tube \_\_\_\_\_ 97

SHB · SHSB · SSHSB · SXHB · SVHB · SVHB



### Special designs supports \_\_\_\_\_ 106

SHB01 · SHB02 · SHBD · SVHDTB



## HV EXPANSION CONNECTORS

### Al-Straight-Expansion-Connectors \_\_\_\_\_ 110

SXHSB



### Al-Straight-Expansion-Connectors \_\_\_\_\_ 114

SXA · SXS



### Al-T-Expansion-Terminals \_\_\_\_\_ 118

SXAT



### Al-Angle-Expansion-Terminals \_\_\_\_\_ 120

SXAK



### Al-Angle-Expansion-Connectors \_\_\_\_\_ 122

SXK



### Special designs expansion connectors \_\_\_\_\_ 124

SSAXHSB · SXHLB · SXAK-REG · SXFL · SXHSB · SXHSB-N



## HV EARTHING CONNECTORS

### Al-Earthing Stirrups for cable \_\_\_\_\_ 126

SGP01 · SGDPL · SGDIA01 · SGDIA02



### Al-Earthing Stirrups for tube \_\_\_\_\_ 128

SGP02 · SGP03



### Special Designs Earthing Stirrups \_\_\_\_\_ 129

SGA · SGDPL



## HV COMPRESSION CONNECTORS

### HV Compression Connectors \_\_\_\_\_ 130

YCAK · SYS · SYT · YCAKA · SYSD · SYDT · YCAKDA



## HV COMPRESSION TOOLING

### Gas engine hydraulic pump \_\_\_\_\_ 131

STP36-220 · SB550



## HV WELDED CONNECTORS

### Al-Rigid-Supports / Al-Slide-Supports \_\_\_\_\_ 132

SWOH · SWSUS



### Al-90°-Elbow / Al-Coupler \_\_\_\_\_ 133

SWL · WS



### Al-Terminals \_\_\_\_\_ 134

SWAT30 · SWAC



### Al-FRAME \_\_\_\_\_ 135

SWT75 · A-FRAME



## HV ACCESSORIES

### Al-Spacer \_\_\_\_\_ 136

SD



### Al-End Caps \_\_\_\_\_ 137

LB



### Al-End Caps Corona Bell \_\_\_\_\_ 138

SCBB



## HV SPECIAL APPLICATIONS

### Al-Pantographs \_\_\_\_\_ 139

SCD



### HVDC & Corona Ring \_\_\_\_\_ 140

SPHERE · SRC



## CONNECTORS UPPER THAN 500KV

### Special Connectors \_\_\_\_\_ 142

ZDAK · ZDT · ZPD · ZSD · ZVHDB



## CONNECTORS FOR GIS (GAS INSULATED SSEE)

### Special Connectors \_\_\_\_\_ 144

SD · SHDB · ZDAK · ZDTD · ZSD · ZTD



## HV SPECIAL APPLICATIONS

### Busbar Vibration Damper \_\_\_\_\_ 146

SDAM



### Adjustable Connector \_\_\_\_\_ 148



### Bushing Connectors for Transformers \_\_\_\_\_ 151

FD · FDR · FDA · NDR



## GROUNDING COMPRESSION CONNECTORS

### Compression connector \_\_\_\_\_ 156

YC-C · YGHP · YGL · YH · YCA2X · YCA · YR-A-C  
YA-AM · YA-2X · YOS · YOT · YOX



### GROUNDING Compression tooling \_\_\_\_\_ 168

YC-C · YGHP · YGL · YH · YCA2X · YCA · YR-A-C · YA-AM



### GROUNDING Mechanical connectors \_\_\_\_\_ 177

GB · GBM · STN · STN-FC · S2TN · GL · G4L · G2C-G4C  
HFBC · HHB · UC-RS · UC-RGE · GC · GCM · G4C · G6C  
G4FC · STN · STDN · STA · STDA · STA2 · STDA2 · KC  
1BR-2BR · 1BC-2BC · 1BER · 2BEC · CTT · CTR · RDB  
BT · YGF · SF · SF + BM · SF-CNM · GRC · GRL · GAR (B)  
GD · GX · QPX · CP · EARTHING RODS



### GROUNDING Exothermic welding \_\_\_\_\_ 200



## COMPLEMENTARY PRODUCTS CABLE & TUBES \_\_\_\_\_ 204

## COMPLEMENTARY EARTHING & SAFETY EQUIPMENT \_\_\_\_\_ 206

## ORDER REQUEST FORM \_\_\_\_\_ 210

## PART NUMBER INDEX \_\_\_\_\_ 212

# SBI CONNECTORS

by SICAME GROUP



C/ Albert Einstein, 5-7 / Pol. Ind. Sesrovires  
08635 - Sant Esteve Sesrovires BARCELONA  
GPS / 41°28'49.0"N 1°52'42.9"E



93 771 58 44



[www.sbiconnectors.com](http://www.sbiconnectors.com)



[info@sbiconnect.es](mailto:info@sbiconnect.es)

CAT'SSEESBI-EN2020



Save our data in your tablet or  
smartphone by scanning this QR code!

APPLICATION 01/20