

## 浙江博雷电气股份有限公司 ZHEJIANG BOLEI ELECTRIC CO.,LTD

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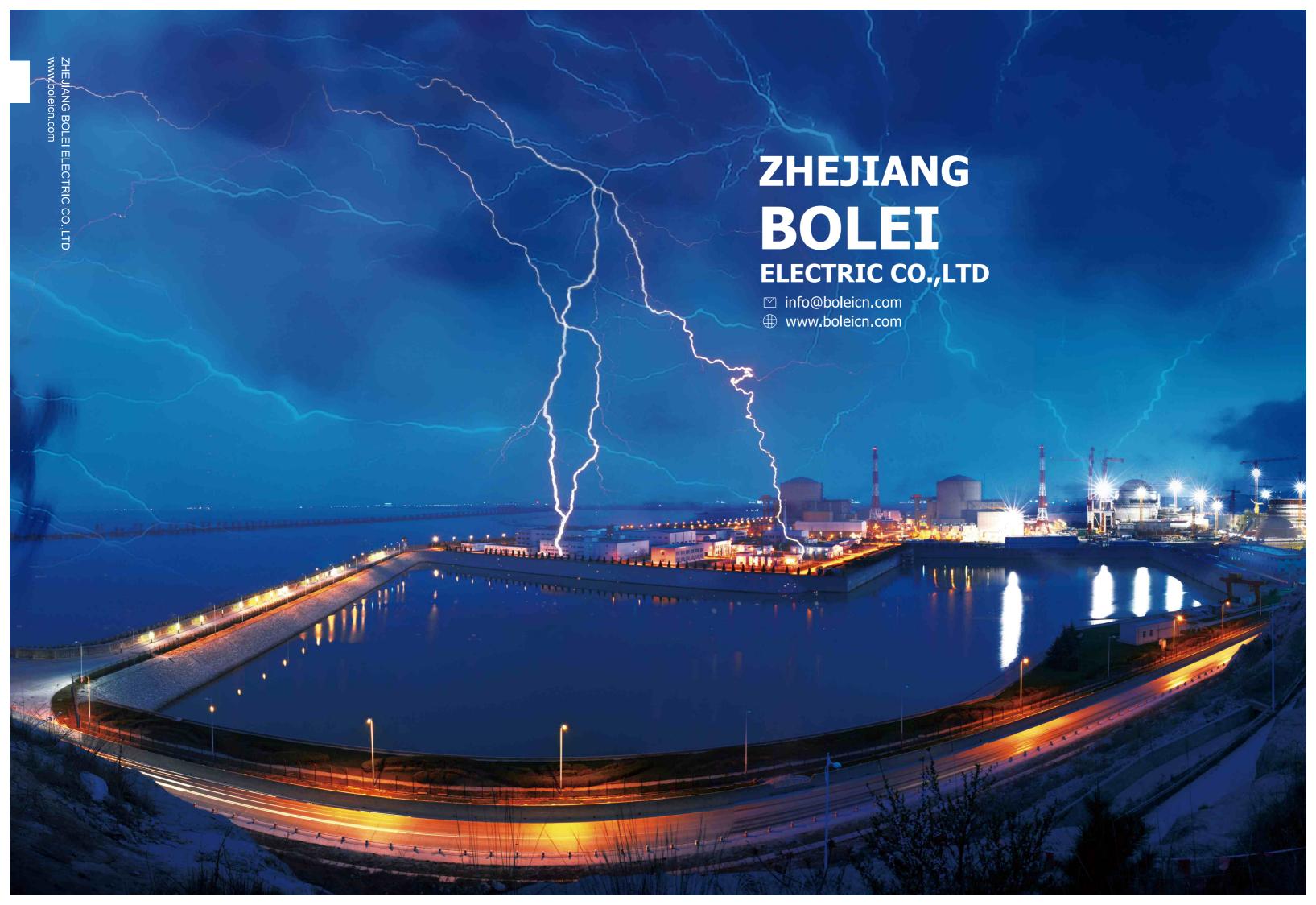
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### 浙江博雷电气股份有限公司

ZHEJIANG BOLEI ELECTRIC CO.,LTD





#### www.boleicn.com

Zhejiang Bolei Electric Co., Ltd, was located in Yuhuan of Zhejiang where has been reputed as "The hometown of Valve in China". Combine the production, the development, the sales and service as a body, our company is equipped with workshops such as mold, forging, casting, machine-finishing, polishing, and assembling. The main products are grounding and lightning protection clamp, pump housing and high-precision brass fittings.

Our products are widely used in communication, electric power, petrochemical, railway, meteorological, military, computer room, and intelligent building systems and etc, create good social benefits for the customers, and win a good reputation.

The company has a stable and professional team of production management, quality control and research and development.

Company implements a strict scientific management, so as to make product performance and service quality always rank the lead in the market.

With the spirit of "honest, trustworthy, and win-win" business philosophy, adhering to the "integrity, simplicity, effectiveness, innovation," the spirit of enterprise, we will take it as its own duty to build harmonious society.

We sincerely welcome friends at home and abroad to discuss cooperation, jointly committed to the progress and innovation of the industry of lightning protection and grounding.





ZHEJIANG BOLEI ELECTRIC CO.,LTD www.boleicn.com











### Metallic Conductor Clamp

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## Metallic Conductor Clamp





#### Air Terminal Multiple Point

PART NO.	ROD DIAMETER	MATERIAL
ATMP-D15-C	15mm	Copper

<sup>\*</sup>Made from 99.98% solid copper.

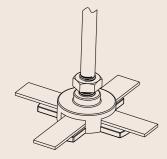


#### Air Terminal

www.boleicn.com/01

PART NO.	ROD DIAMETER	THREAD SIZE	ROD LENGTH	MATERIAL
AT316-C	15mm	M16	300	Copper
AT516-C	15mm	M16	500	Copper
AT1016-C	15mm	M16	1000	Copper
AT2016-C	15mm	M16	2000	Copper
AT316-A	15mm	M16	300	Aluminium
AT516-A	15mm	M16	500	Aluminium
AT1016-A	15mm	M16	1000	Aluminium
AT2016-A	15mm	M16	2000	Aluminium

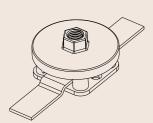
<sup>\*</sup>Made from 99.98% solid copper pr aluminium
\*Various diameter and length of rods are available as per customer request.





#### **Air Terminal Base**

PART NO.	ROD DIAMETER	THREAD SIZE	CONDUCTOR SIZE	MATERIAL
ATB16-C	15mm	M16	25*3mm	Copper
ATB16-A	15mm	M16	25*3mm	Aluminium





#### **Air Terminal Base**

PART NO.	AIR ROD DIAMETER (MM)	THREAD SIZE	MAXIMUM CONDUCTOR WIDTH(MM)	CONDUCTOR MATERIAL	WEIGHT EACH(KG)
BSD105-H	φ <b>15</b>	M16	25	Copper	0.43
BSD003-H	ф15	M16	25	Aluminium	0.14

Manufactured from high quality alloys of eilher copper or aluminium
 Simple to install providing an effective connection between air rod and air termination tape



#### Strike Pad

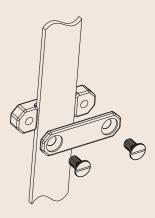
PART NO.	ROD DIAMETER	MATERIAL	SCREW
BPL010	M8	Copper	Copper
BPL005	M8	Aluminium	Stainless Steel

\*Use on parapet walls and open roofs where no conductors are visible. \*Custom threading can be supplied upon request.



#### DC Tape Clip

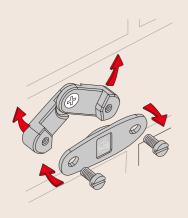
PART NO.	CONDUCTOR SZIE	MATERIAL
BCP210	25*3mm	Copper
BCP220	25*6mm	Copper
BCP227	30*5mm	Copper
BCP410	40*6mm	Copper
BCP420	50*6mm	Copper
BCP207	30*5mm	Aluminium



<sup>\*</sup>Made from 99.98% solid copper pr aluminium
\*Various diameter and length of rods are available as per customer request.

### **Metallic Conductor Clamp**

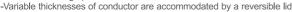


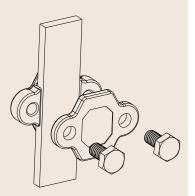


#### Adjustable DC Tape Clip

PART NO.	CONDUCTOR SIZE	WEIGHT EACH(KG)
For use with bare co	pper	
BCP230-H	31x3 and 31x6	0.12
BCP240-H	38x3,38x6 and 40x6	0.14
BCP260-H	50x3 and 50x6	0.16

DC tape Clips manufactured from high quality copper alloy for excellent corrsion resistance and high pull off loads
 Variable thicknesses of conductor are accommodated by a reversible lid







#### **Test/Junction Clamp**

PART NO.	CONDUCTOR SIZE(MM)	CONDUCTOR MATERIAL	WEIGHT EACH(KG)
BCN105-H	26x8	Copper	0.29
BCN005*	26x8	Aluminium	0.12

Manufactured from high quality alloys of either copper or aluminium. Simple to install, providing an effective low resistance connection between overlapping tapes.
 The clamped connection is easily made/remade to allow for periodic testing

-Tightening torque CN005 15 Nm; CN105-H13 Nm -Not as illustrated(drawing available on request)

### Metallic Conductor Clamp



#### One hole cable clip

PART NO.	CONDUCTOR SIZE(MM)	CONDUCTOR MATERIAL	WEIGHT EACH(KG)
For use with s	solid circular conductor		
BCP905	φ8	Copper	0.01
BCP925	φ8	Aluminium	0.01
BCP915	φ 10*	Copper	0.01
BCP935	φ 10*	Aluminum	0.01
For use with s	stranded conductor		
BCP910	50mm <sup>2</sup>	Copper	0.01
BCP915	70mm <sup>2</sup>	Copper	0.01
BCP920	95mm²	Copper	0.01

- Manufactured from pure copper or aluminium, these pressed clips are available to suit bare and PVC covered copper and aluminium solid circular conductor, and bare copper stranded conductor \*PVC covered  $\Phi 8$  mm conductor
- Clip supplied in open position

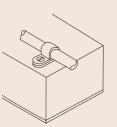


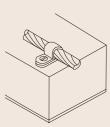
#### Heavy duty cast cable saddle

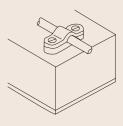
PART NO.	CONDUCTOR SIZE(MM)	CONDUCTOR MATERIAL	WEIGHT EACH(KG)
For use with sol	id circular conductor		
BCP805	φ8	Copper	0.09
BCP806	φ8	Aluminium	0.03
BCP815	φ 10*	Copper	0.10
BCP816	φ 10*	Aluminum	0.04
For use with stra	anded conductor		
BCP810	50mm <sup>2</sup>	Copper	0.10
BCP815	70mm <sup>2</sup>	Copper	0.10
BCP835	95mm²	Copper	0.10
BCP855	120mm <sup>2</sup>	Copper	0.10

- Manufactured from high quality alloys of either copper or aluminium for excellent corrosion resistance and high pull off loads For use with PVC covered  $\,\Phi\,8$  mm conductor or for supporting air terminals
- when used in conjunction with wall mounted air rod bases.

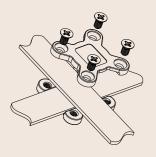
   Can also be used with glazing bar holdfast and back plate holdfast stem





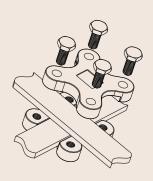










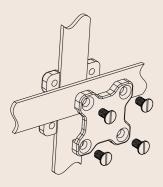


#### Square Tape Clamp

PART NO.	CONDUCTOR SIZE	MATERIAL
BCT105	25*3mm	Copper
BCT005	25*3mm	Aluminium

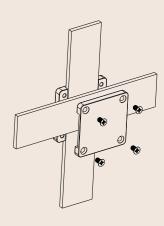


PART NO.	CONDUCTOR SIZE	MATERIAL
BCT110	25*6mm	Copper
BCT015	50*6mm	Copper







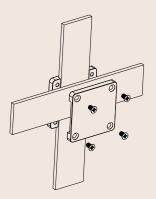


#### **Square Tape Clamp**

PART NO.	CONDUCTOR SIZE	MATERIAL
BCT105M	25*3mm	Copper

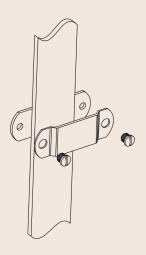
#### Square Tape Clamp

PART NO.	CONDUCTOR SIZE	MATERIAL
BCT106	25*3mm	Copper
BCT116	50*6mm	Copper







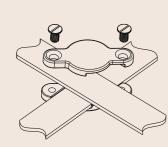


#### Square Tape Clamp

PART NO.	CONDUCTOR SIZE	MATERIAL
BCT106M	25*3mm	Copper
BCT006M	25*3mm	Aluminium

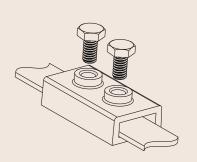


PART NO.	CONDUCTOR SIZE	MATERIAL	DESCRIPTION	
BCP515-C	25*3mm	Copper	W/O Base	
BCP615-C	50*6mm	Copper	W/O Base	
BCP515-A	25*3mm	Aluminium	W/O Base	
BCP615-A	50*6mm	Aluminium	W/O Base	
BCP253-C	25*3mm	Copper	C/W Base	
BCP253-A	25*3mm	Aluminium	C/W Base	







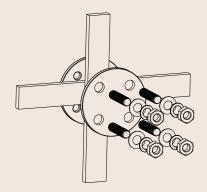


#### **Crossover Tape Clamp**

•	•		
PART NO.	CONDUCTOR SIZE	MATERIAL	WEIGHT(KG)
BCX105-H	25*3mm	Copper	0.09
BCX005-H	25*3mm	Aluminium	0.03

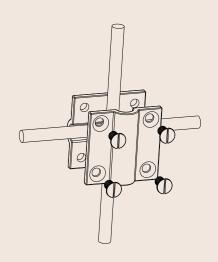
#### **Oblong Test/Junction Clamp**

PART NO.	CONDUCTOR SIZE	MATERIAL
OTC268C	26*8mm	Copper



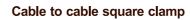




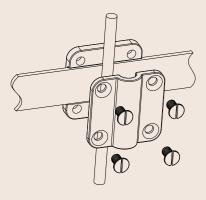


#### Round Plate Type Test Clamp

PART NO.	CONDUCTOR SIZE	MATERIAL	
PTTC268	26*8mm	Copper	

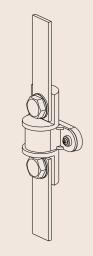


PART NO.	CONDUCTOR SIZE	MATERIAL
SCC50	50mm2	Copper
SCC70	70mm2	Copper
CCCOE	0.5 m m 2	Connor









#### Cable to tape square clamp

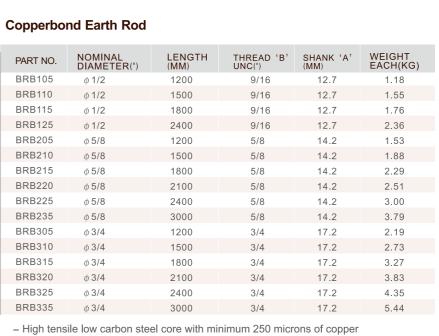
PART NO.	CONDUCTOR SIZE	MATERIAL
SCCT125	25*3mm to 50mm2	Copper
SCCT130	25*3mm to 70mm2	Copper
SCCT135	25*3mm to 95mm2	Copper

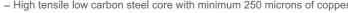
#### **Bimetallic Connector**

PART NO.	CONDUCTOR SIZE	MATERIAL
BBC910	25*3 aluminum tape to 25*3 copper tape	Copper



Driving stud





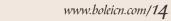




#### **Driving stud**

PA	ART NO.	THREAD DIAMETER	MATERIAL
E	DS58	5/8	Steel
E	DS34	3/4	Steel

<sup>\*</sup>The driving studs are made of re-usable high tensile strength steel which can be use multiple times. It is also suitable for power hammering.





Earth Rod & Accessory

Earth Bonds & Clamps



#### **Driving Spike**

PART NO.	THREAD DIAMETER	MATERIAL
ERDS58	5/8	Steel
ERDS34	3/4	Steel



#### Earth rod threaded coupling

PART NO.	THREAD DIAMETER	MATERIAL
BCG170	1/2	Copper
BCG270	5/8	Copper
BCG370	3//	Conner



#### Rod to tape clamp (type A)

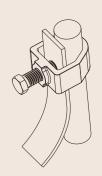
PART NO.	NOMINAL [	DIAMETER (MM)	MAX.CONDUCTO	OR WEIGHT EACH (KG)	
BCR105	φ 1/2	φ 12.7	26x12	0.15	
BCR105	φ 5/8	φ 16	26x12	0.15	
BCR105	φ3/4	φ20	26x10	0.15	
BCR108	φ 5/8	φ 16	30x2	0.16	
BCR108	$\phi$ 3/4	φ20	30x2	0.16	
BCR110	φ 5/8	φ16	40x12	0.24	
BCR115	φ 5/8	φ 16	51x8	0.30	
BCR125	φ 3/4	φ20	51x12	0.30	
BCR130	φ 1/2	φ12.7	26x20	0.23	
BCR130	φ 5/8	φ 16	26x18	0.23	
BCR130	φ3/4	φ20	26x10	0.23	
BCR130	φ1	φ25	26x10	0.23	
BCR107	φ 3/4	φ20	26x10	0.15	

Designed for connection of flat tape conductor to an earth rod. Corrosion resistance, conductivity and mechanical strength are essential considerations clamp design to ensure an earthing system remains operative for many years. All Bolei earth rod Clamps have high strength copper alloy bodies and screws e.g. aluminium bronze, phosphor bronze etc. commercial brass is not used
 Tightening torque15 Nm

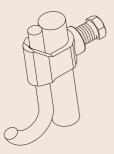


#### **Grounding Clamp**

PART NO.	NOMINAL F	ROD DIAMETER (MM)	MAX.CONDUCTOR (MM)
BJWR-B1-10	5/8"	16mm	16-50mm









#### **Grounding Clamp**

PART NO.	NOMINAL R	OD DIAMETER (MM)	MAX.CONDUCTOR (MM)
BCR515-H	5/8"	16mm	16-70mm²
BCR520-H	3/4"	20mm	35-95mm²
BJAB58H	5/8"	16mm	16-50mm <sup>2</sup>





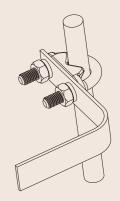
#### Rod to cable clamp (type G)

PART NO.	NOMINAL D	IAMETER (MM)	MAX.CONDUCTOR (MM)
BBG3	3/8"	9.5mm	6-35mm²
BBG4	1/2"	12.7mm	16-50mm²
BBG5	5/8"	16mm	6-35mm²
BBG6	3/4"	20mm	6-28mm²

- High strength copper alloy clamp designed to provide a high quality; low resistance connection between solid circular or stranded conductor and an earth rod
   Tightening torque12 Nm
- Suitable for use with 08 mm solid circular copper conductor







#### 'U' bolt rod clamp(type E)

PART NO.	NOMINAL RODA DIAMETER(")	REBAR (MM)	HOLE CENTRES (MM)	TAPE WIDTH (MM)	WEIGHT EACH (KG)
BCR305	φ 5/8	φ16	37	_	0.20
BCR320*	φ 5/8	φ16	37	25	0.26

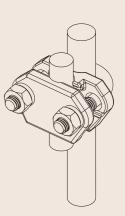
- High strength copper alloy 'U' bolt clamp designed to provide a high quality, low resistance connection between flat tape or stranded conductor and earth rod or rebar. 'U' Bolt threaded M10

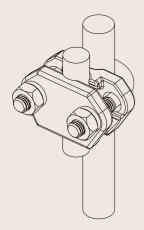
  - CR320 includes additional plate to allow tape to be clamped without drilling



#### **U-Bolt Rod To Cable Clamp**

PART NO.	NOMINAL R	OD DIAMETER (MM)	MAX.CONDUCTOR (MM)
GUV15825	1-7/8"	48mm	16mm



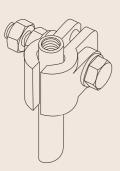




#### 'U' bolt rod clamp (type GUV)

PART NO.	NOMINAL RO	DD /REBAR DIAMETER (MM)	CONDUCTOR RANGE (MM )	WEIGHT EACH (KG)
BCR700*	ф 5/8	φ 16	16-95	0.39
BCR700*	ф 3/4	ф 20	16-70	0.39
BCR705	ф 5/8	φ 16	70-185	0.39
BCR705	ф 3/4	ф 20	70-150	0.39
BCR730	ф 5/8	φ 16	150-300	0.62
BCR730	ф 3/4	φ 20	150-300	0.62

- High strength copper alloy 'U' bolt clamp designed to provide a high quality, low resistance connection between solid circular or stranded conductor and an earth rod or rebar
   Tightening torque12 Nm
   Suitable for use with Φ8 mm solid circular copper conductor





#### Rod to cable clamp (type B)

PART NO.	NOMINA	L DIAMETER (MM)	ROD TYPE	BOLT SIZE	WEIGHT EACH(KG)
BCR205	ф 3/8	ф 9.5	Copperbond	M8	0.09
BCR215	ф 5/8	ф 16	Copperbond	M10	0.30
BCR220	ф 5/8	ф 15	Solid copper	M10	0.30
BCR225	ф 3/4	ф 20	Copperbond	M10	0.30
BCR230	ф 3/4	ф20	Solid copper	M10	0.30

High strength copper alloy cable lug clamp designed to provide a high quality, low resistance connection between stranded conductor and earth rod



#### B bond

PART NO.	MAXIMUM TAPE WIDTH(MM)	BOLT SIZE	CONDUCTOR MATERIAL	WEIGHT EACH (KG)
BBN105	26	M10	Copper	0.12
BBN005	26	M10	Aluminium	0.06
BBN113	31	M10	Copper	0.15
BBN114	40	M10	Copper	0.18
BBN117	50	M10	Copper	0.20

- For bonding tape to steel structures - Tightening torque 17Nm

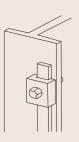


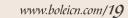


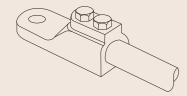
#### **BWP** bond

PART NO.	MAXIMUM TAPE WIDTH(MM)	BOLT SIZE	CONDUCTOR MATERIAL	WEIGHT EACH (KG)
BBN115	26	M10	Copper	0.12
BBN010	26	M10	Aluminium	0.07

<sup>-</sup> For bonding tape to rainwater pipes, handrails etc.





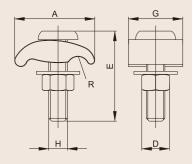




#### Straight setscrew cable socket

PART NO.	CONDUCTOR SIZE(MM)	PALM HOLE DIAMETER(MM)	CONDUCTOR MATERIAL	WEIGHT EACH (KG)
BSX450	φ8	12	Copper	0.11
BSX455	φ8	12	Aluminium	0.05

- For bonding copper and aluminium conductors to steelwork - Tightening torque 3 Nm

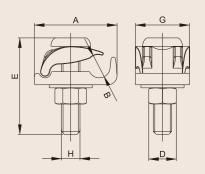




#### **Tower Ground Clamps**

	CONDUCTOR	R RANGE					DIMENSION.(IN.)						
CAT.NO.		MIN.	MAX (MM <sup>2</sup> )	MIN (MM²)	CHANNEL THICKNNESS	Α	В	D	E	G	Н	R	
BGTC13	2/0 str	#4 sol	67.4	21.1	1/4	1 15/32	-	9/16	1 21/32	1 13/32	3/8	7/32	
BGTC14	250 kcmil	2/0 str	126.6	67.4	1/4	1 15/16	-	3/4	1 15/16	1 13/32	1/2	5/16	





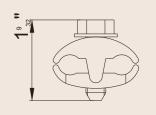
#### **Tower Ground Clamps**

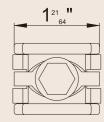
	CONDUCTO	R RANGE					DIMENSION.(IN.)					
CAT.NO.	MAX.	MIN.	MAX (MM <sup>2</sup> )	MIN CHANNEL THICKNNESS	Α	В	D	E	G	Н	R	
BGTC23	2/0 str	#4 sol	67.4	21.1	1/4	1 15/32	7/16	9/16	1 21/32	1 3/32	3/8	-
BGTC24	250 kcmil	2/0 str	126.6	21.1	1/4	1 15/32	5/8	3/4	1 15/16	1 3/8	1/2	-

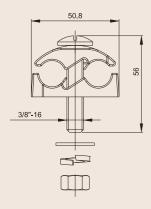


#### Jumper Clamp

CAT.NO.	PLATED GROOVE		COPPER GROOVE		
	MAX.	MIN.	MAX.	MIN.	
	1/0 ASCR	#6ACSR	2/0str	#8solid	
Bk1	#2 SCG	#12 SCG	copper	copper	
	amerductor	amerductor	7/16	#9-12D	
	7/16 galv.strand	#8 solid iron	2A		



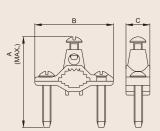






### **Tower Ground Clamps**

PART NO.	WIDE RANGE (2 SIDES)	HEIGHT	WIDTH	DEPTH	NUT(FLATS)	
BCTG250	#2 Sol.(258.Dia)	1.95	2.00	1.13	0.560	
	250kcmil(.575Dia).					

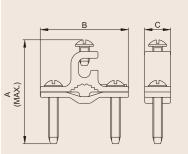




#### **Bronze Ground Clamps**

PART NO.	WATER PIPE	COND	UCTOR	DIMENSIONS.(IN.)		
1741110.	SIZE	MAX.	MIN.	A(MAX.)	В	С
BJD-BI-15				2 3/4	2 11/32	23/32
BJ	1/2"-1"	#2 str.	#10 sol.	2 15/32	2 11/32	23/32
BJJR	1/2"-1"	#4 Str.	#10 sol.	2 15/32	25/32	17/32
BJ-B1-25	1/2"-1"	#2 str	#10 sol	2 3/4	2 11/32	23/32

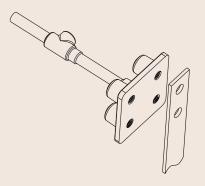




#### **Ground Clamps**

PART NO.	PIPE SIZE	PEBAR SIZE	GROUND ROD SIZE
BJDLI	1/2"-1"	3/8"-1	1/4-1"





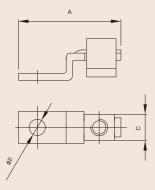
#### **Four Hole Earth Point**

PART NO.	HOLE SIZE	LENGTH	DESCRIPTION
BP001	M8*14mm	75mm	Earth Point Only

<sup>\*</sup>Stem dia.=10.7mm(70mm2) \*Tightening torque 12Nm

## Copper Compression Connector

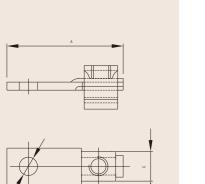
## Copper Compression Connector





#### **BSTC Connector**

		DIMENSION(M	WIRE RANGE	
PART NO.	Α	В	С	WIRE RAINGE
BSTC0208	37.31	6.75	11.83	8 str 2 str.
BSTC0414	31.75	6.75	9.52	14 AWG - 4 Str.
BSTC0614	28.97	5.16	8.35	14 AWG - 6 Str.
BSTC1014	24.2	4.37	6.47	14 AWG - 10 AWG
BSTC1102	49.21	6.75	15.49	2 Str 1/0 Str.
BSTC3104	55.56	10.31	17.85	4 Str 3/0 Str.
BSTC3511	80.96	10.31	25.4	1/0 Str 350 kcmil
BSTC4102	60.33	10.31	19.38	2 Str 4/0 Str.
BSTC5011	98.43	10.31	28.97	1/0 Str 500 Kcmil
BSTC9960	130.5	13.48	42.86	600 Kcmil - 1000 Kcmil





### **BBTC Connector**

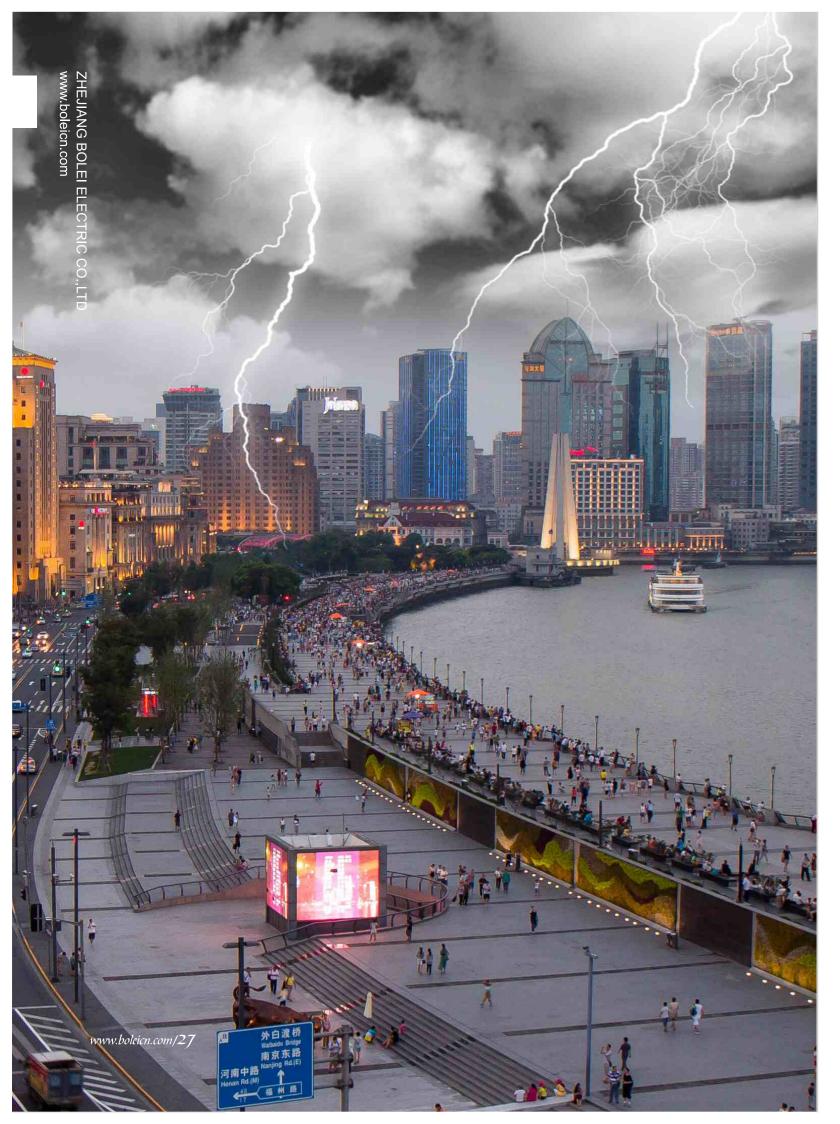
	[	DIMENSION(M	IM)	WIRE RANGE	
PART NO.	Α	В	С	WIRE RAINGE	
BBTC0208	38.9	6.76	11.83	8 str 2 str.	
BBTC0614	30.18	5.16	8.35	14 AWG - 6 Str.	
BBTC1014	25.4	3.95	6.47	14 AWG - 10 AWG	
BBTC1102	50	6.73	15.49	2 Str 1/0 Str.	
BBTC3104	55.58	10.3	17.89	4 Str 3/0 Str.	
BBTC3511	81	10.3	25.4	1/0 Str 350 kcmil	
BBTC4102	66.7	10.3	19.38	2 Str 4/0 Str.	
BBTC5011	107.95	10.3	28.97	1/0 Str 500 Kcmil	
BBTC9960	117.48	13.49	42.86	600 Kcmil - 1000 Kcmil	



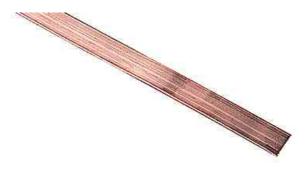


### C shape Connector

PART NO.	CONDUCTOR RANGE(MM2)	H1(MM)	H2(MM)	W(MM)	L(MM)	T(MM)	C(MM)
CCT-10	7.5-14	9.5	6.3	6.2	12	1.6	4
CCT-16	14.5-16	11.8	7.8	8.4	13	2	5
CCT-20	16.5-20	13.5	8.6	9.7	13.4	2.5	6
CCT-26	21-26	15	10.2	10.2	16	2.5	6.5
CCT-44	27-44	19.5	13.5	14	19	4.2	9.6
CCT-60	45-60	22.3	15.8	15.1	22	4.8	10
CCT-76	61-76	25	17	18.2	21.5	5.5	12
CCT-98	77-98	27.5	20.8	18.5	22.7	5	14.2
CCT-122	99-122	30.2	23	20.3	26	5.5	14.2
CCT-154	123-154	34.3	24.5	24.3	28.2	6.5	17.2
CCT-190	155-190	37.2	28	25.4	34.8	6.5	17.5
CCT-240	191-240	39.7	30	28	39.5	7	19.2
CCT-288	241-288	44.5	34.7	34.1	45	7	22.3
CCT-365	289-365	44.5	34.7	34	50	7	24.8
CCT-450	366-450	57	42.5	41	60	10	28
CCT-560	451-560	62	46	44	65	11	31
CCT-700	561-700	68	54	49.5	70	12	44



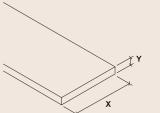
### **Bare Conductors**



#### Bare copper tape

Bare copper tape							
PART NO.	CONDUCTOR SIZE (XXY)(MM)	STANDARD COIL SIZE (M)	WEIGHT PER MATRE (KG)				
BTC005	12.5x1.5	100	0.17				
BTC010	12.5x3	100	0.33				
BTC015	20x1.5	100	0.27				
BTC020	20x3	50	0.53				
BTC020/100	20x3	100	0.53				
BTC025	25x1.5	100	0.33				
BTC026	25x2	50	0.49				
BTC030	25x3	25	0.67				
BTC030/50	25x3	50	0.67				
BTC035	25x4	50	0.89				
BTC040	25x6	40	1.33				
BTC039	30x2	50	0.53				
BTC042	30x3	50	0.80				
BTC044	30x4	40	1.07				
BTC043	30x5	40	1.33				
BTC045	31x3	50	0.83				
BTC048	31.5x4	40	1.13				
BTC050	31x6	30	1.65				
BTC055	38x3	50	1.01				
BTC060-FU	38x5	30	1.69				
BTC065	38x6	25	2.02				
BTC067	40x3	40	1.06				
BTC066	40x4	30	1.42				
BTC071	40x5	25	1.78				
BTC068	40x6	25	2.16				
BTC069	40x6.3	25	2.24				
BTC070	50x3	40	1.33				
BTC075	50x4	30	1.78				
BTC078	50x5	20	2.22				
BTC080	50x6	20	2.68				
BTC082	50x6.3	20	2.80				
BTC090	50x7	320	3.08				
BTC092	50x8	20	3.56				
BTC094	50x10	10	4.44				
BTC096	60x10	10	5.32				
BTC098	80x6	10	4.32				
BTC099	100x6	10	5.36				

-All bare copper tape sold in full coil lengths only -High conductivity annealed copper tape



### **Bare Conductors**





#### Bare aluminium tape

PART NO.	CONDUCTOR SIZE (XXY)(MM)	STANDARD COIL SIZE(M)	WEIGHT PER MATRE (KG)
BTA005	12.5x1.5	50	0.05
BTA020	20x3	50	0.17
BTA030	25x3	50	0.21
BTA042	30x3	50	0.25
BTA040	25x6	50	0.42
BTA068	40x6	50	0.67
BTA080	50x6	50	0.85

-All bare aluminum tape sold in full coil lengths only

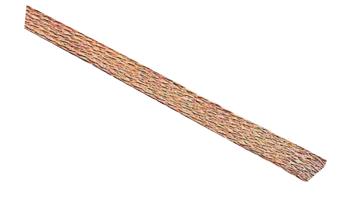


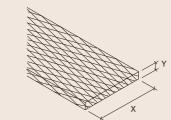


i iiiiieu co	Timled copper tape						
PART NO.	CONDUCTOR SIZE (XXY)(MM)	STANDARD COIL SIZE(M)	WEIGHT PER METRE(KG)				
BTC220	20x3	50	0.53				
BTC225-FU	12.5x1.5	100	0.17				
BTC226	25x2	50	0.49				
BTC230	25x3	50	0.67				
BTC239	30x2	50	0.53				
BTC240	25x6	40	1.33				
BTC245	31x3	50	0.83				
BTC260	38x5	30	1.69				
BTC266	40x4	30	1.42				
BTC267	40x3	40	1.06				
BTC280	50x6	20	2.68				

-All tinned copper tape sold in full coil lengths only -High conductivity annealed tinned copper tape

### Flexible Braid Conductors

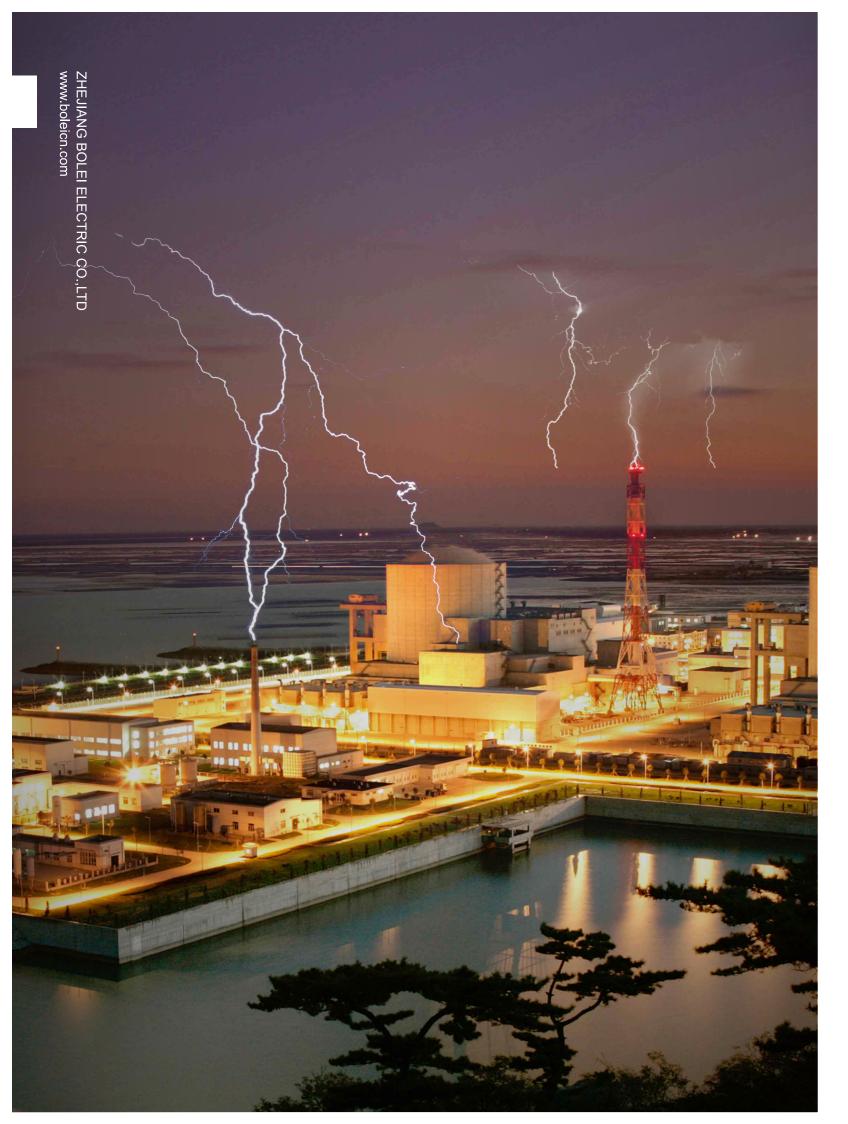




#### Flexible flat copper braid

PART NO.	OVERALL NOMINAL SIZE (XXY)(MM)	CROSS-SECTIONAL AREA(MM²)	WEIGHT PER METRE(KG)
Bare flat brai	d		
BBD020	12x1	6	0.06
BBD025	15x1.5	10	0.10
BBD026	19x2.5	16	0.16
BBD028	25x3	25	0.25
BBD030	25x3.5	35	0.34
BBD031	30x5	50	0.49
BBD027	32x6	70	0.63
BBD032	37x6	95	0.93
BBD033	45x6	120	1.15
BBD034 Tinned flat b	50x8 raid	150	1.45
BBD020-T	12x1	6	0.06
BBD025-T	15x1.5	10	0.10
BBD026-T	19x2.5	16	0.16
BBD028-T	25x3	25	0.25
BBD035	25x3.5	35	0.34
BBD031-T	30x5	50	0.49
BBD027-T	32x6	70	0.63
BBD032-T	37x6	95	0.93
BBD033-T	45x6	120	1.15
BBD034-T	50x8	150	1.45

<sup>-</sup>Suitable for earth bonding. Also supplied as standard pre-cut and drilled bonds -Other sizes and types of braid can be made to order. Please contact us for details

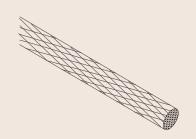


### Flexible Braid Conductors



#### Flexible circular copper braid

	• • •		
PART NO.	OVERALL NOMINAL DIAMETER(MM)	CROSS-SECTIONAL AREA(MM²)	WEIGHT PER METRE(KG)
Bare circular bi	raid		
BBD006-FU	φ4.2	6	0.06
BBD010-FU	φ5.4	10	0.10
BBD016-FU	φ7	16	0.16
BBD025-FU	$\phi$ 8.5	25	0.25
BBD035-FU	φ 10.5	35	0.34
BBD050-FU	φ 11.5	50	0.49
BBD070-FU	φ 14.5	70	0.63
BBD095-FU	$\phi$ 16	95	0.93
Tinned circular	braid		
BBD006-FU-T	φ4.2	6	0.06
BBD010-FU-T	φ5.4	10	0.10
BBD016-FU-T	φ7	16	0.16
BBD025-FU-T	$\phi$ 8.5	25	0.25
BBD035-FU-T	φ 10.5	35	0.34
BBD050-FU-T	φ 11.5	50	0.49
BBD070-FU-T	φ 14.5	70	0.63
BBD095-FU-T	φ 16	95	0.93



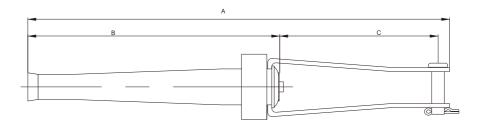
<sup>-</sup>Suitable for earth bonding. Also supplied as standard pre-cut and drilled bonds -Other sizes and types of braid can be made to order. Please contact us for details



## Automatic Deadends & Automatic Splices

### BATD-CB Clevis Bracket

0.7.10	CONE	OUCTOR I	RANGE	DE01144	DECIMAL COLOR CODE RANGE	APPROXIMATE DIMENSION(IN)			
CAT.NO.	ACSR	AAAC	AAC	RANGE		Α	В	С	
BATD1020CB		1/0,2/0	1/0,2/0	235	1/0-Yellow,2/0-Gray	387.35	228.6	136.53	
BATD3040CB		3/0,4/0	3/0,4/0	241.3	3/0-Black,4/0-Pink	527.05	298.45	165.1	
BATD266336CB		266,366	266,366	292.1	Green	487.36	298.45	165.1	
BATD397477CB		397,477	397,477	355.6	Blue	487.36	298.45	165.1	



Features	Benefits/Descriptions
Versatile Use	Deadend ACSR, AAC and AAAC conductors
Incredibly Strong	Breaking strength exceeds 95% of conductor's rated strength, up to a maximum of 10,000 pounds.
Galvanized Steel Clevis Pin and Stainless Steel Cotter Pin	Both parts are included and enable the bail to be used with standard deadend suspension insulators.

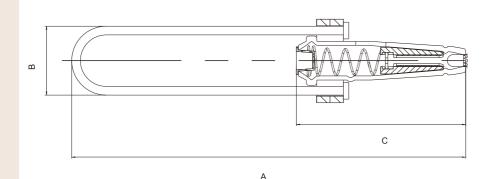


### Automatic Deadends & Automatic Splices



#### **BATDG Strand Automatic Deadends**

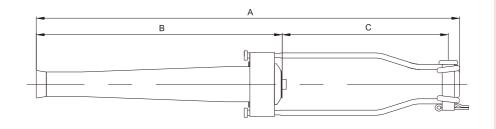
	STRAND NOMINAL DIAMETER IN.(MM)	ST	RAND	DIMENSIONS IN.(MM)		
CAT.NO.		SIZE	RBS LBS.(KN)	Α	В	С
BATDG14	1/4	1/4	29.58	233.7	43.2	101.6
BATDG516	5/16	5/16	49.82	241.3	45.7	114.3
BATDG38	3/8	3/8	68.5	292.1	58.4	127
BATDG716	7/16	7/16	92.52	355.6	71.1	172.7



Features	Benefits/Descriptions
Tapered Cartridge Is Made of Aluminum and Steel Jaws Have Hardened Zinc Plating	Built tough. The connectors can handle tensile loads in excess of 90% of the rated strength of the recommended strand. What's more, they exceed 90% of the strand rated breaking strength.
Pilot Cap and Jaw	Both eliminate incorrect insertions.
Slotted Access Window	Enables jaw adjustment for repositioning, removal or retensioning of strand(deadends).
Aluminum Cartridge and Internal Components Are Lubricated	Cartridge, jaws, spring and washer are coated for long-term, continuous performance. Plus, they are corrosion-resistant.

#### **BATD-ZB Automatic Deadends**

0.7.10	CON	DUCTOR R	ANGE			DIMENSIONS MM		
CAT.NO.	ACSR	AAAC	AAC	RANGE	COLOR CODE	Α	В	С
BATD1020ZB		1/0,2/0	1/0,2/0	235	1/0-Yellow,2/0-Gray	368.3	228.6	125.41
BATD3040ZB		3/0,4/0	3/0,4/0	241.3	3/0-Black,4/0-Pink	527.05	298.45	215.9
BATD266336ZB		266,336	266,336	292.1	Green	527.05	298.45	215.9
BATD397477ZB		397,477	397,477	355.6	Blue	527.05	298.45	215.9

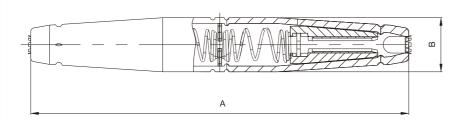


Features	Benefits/Descriptions
Color-Coded, Funnel-Shaped End Piece	Color Provided instant visual identification of maximum conductor size. Funnel swiftly guides conductor into position for insertion
Pilot Cap	Envelops cable strand and guides the conductor into the center of the splice.
Die-Cast Precision-Made Jaws	Provides optimum contact area for a greater range of conductor sizes.
Compression Spring	Positions the jaw for positive conductor acceptance.
Special Microcrystalline- Based Inhibitor	Coats the jaws and tube's inner diameter, seals the connection and provides a high-pressure lubricant for long-term, continuous performance.
Factory-Installed Dust Covers	Repel dirt and debris
Versatile Use	Deadend ACSR, AAC and AAAC conductors
Incredibly Strong	Breaking strength exceeds 95% of conductor's rated strength, up to a maximum of 10,000 pounds.
Galvanized Steel Clevis Pin and Stainless Steel Cotter Pin	Both parts are included and enable the bail to be used with standard deadend suspension insulators.
Color-Coded Tape	Enables identification of the minimum conductor size of wide-range connectors-it further eliminates errors and speeds up installations.



#### **BATSG Automic Splices**

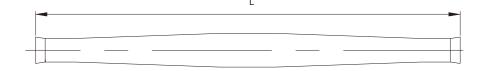
	STRAND NOMINAL	ST	RAND	DIMENSIONS MM		
CAT.NO.	DIAMETER IN.(MM)	SIZE	RBS LBS.(KN)	Α	В	
BATSG14	1/4	1/4	6.65(29.58)	235	43.2	
BATSG516	5/16	5/16	11.20(49.82)	241.3	45.7	
BATSG38	3/8	3/8	15.40(68.5)	292.1	58.4	
BATSG716	7/16	7/16	20.80(92.52)	355.6	71.1	



Features	Benefits/Descriptions
Tapered Cartridge Is Made of Aluminum and Steel Jaws Have Hardened Zinc Plating	Built tough. The connectors can handle tensile loads in excess of 90% of the rated strength of the recommended strand. What's more, they exceed 90% of the strand rated breaking strength.
Pilot Cap and Jaw	Both eliminate incorrect insertions.
Aluminum Cartridge and Internal Components Are Lubricated	Cartridge,jaws, spring and washer are coated for long-term, continuous performance. Plus, they are corrosion-resistant.

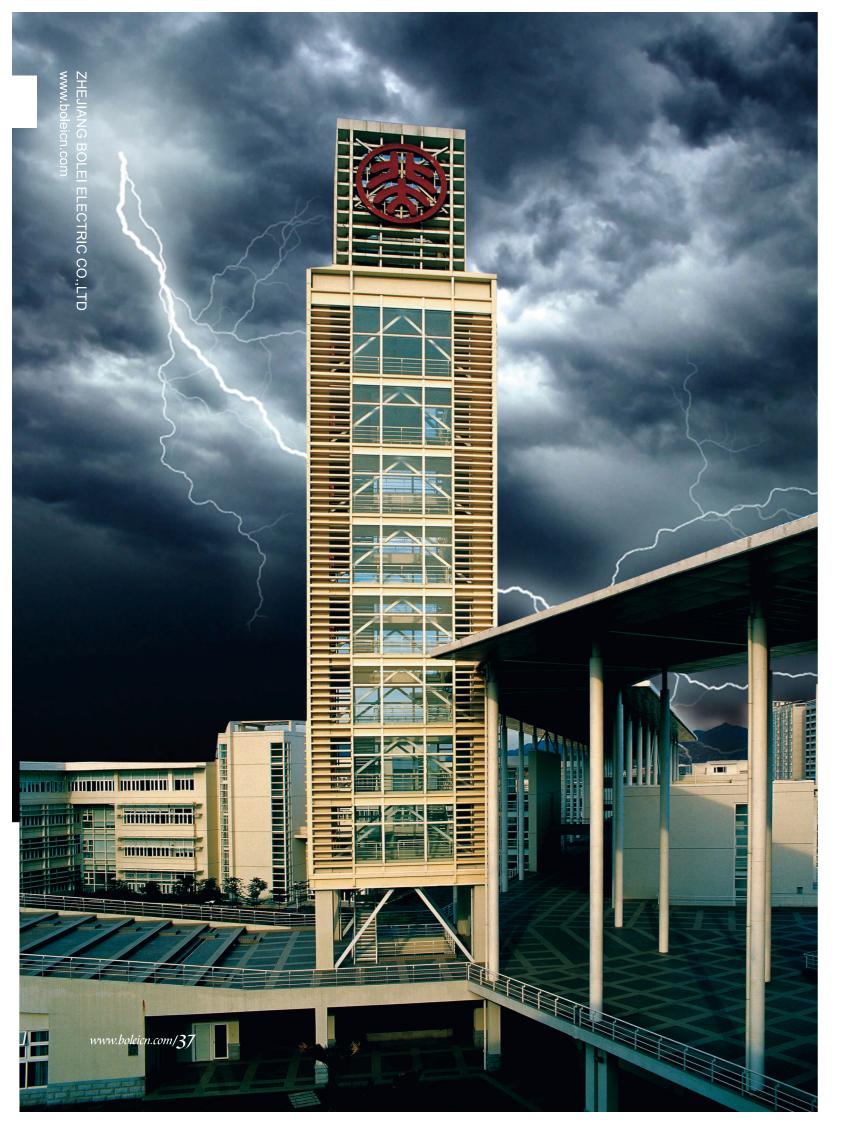
#### **BATS Automatic Splices**

CAT.NO.	CONDUCTOR RANGE					OVERALL
	ACSR	AAAC	AAC	DECIMAL RANGE	COLOR CODE	LENGTH(IN.)
BATS4		#4	#4	5.89-6.6	4-Orange	349.25
BATS42		#4,#2	#4,#2	5.89-8.43	4-Orange,2-Red	349.25
BATS2		#2	#2	7.42-8.43	2-Red	349.25
BATS10		1/0	1/0	9.35-10.41	1/0-Yellow	412.75
BATS1020		1/0,2/0	1/0,2/0	9.35-11.7	1/0-Yellow.2/0-Gray	412.75
BATS20		2/0	2/0	10.5-11.7	2/0-Gray	412.75
BATS30		3/0	3/0	11.7-13.26	3/0-Black	412.75
BATS3040		3/0-4/0	3/0-4/0	11.7-14.6	3/0-Black,4/0-Pink	596.9
BATS40		4/0	4/0	12.07-14.6	4/0-Pink	596.9
BATS266336		312.8*	266-336	14.88-17.37	Green	596.9
BATS397477		394.5*	397-477	18.29-21.79	Blue	596.9



Features	Benefits/Descriptions			
Color-Coded, Funnel-Shaped End Piece	Color Provided instant visual identification of maximum conductor size. Funnel swiftly guides conductor into position for insertion			
Pilot Cap	Envelops cable strand and guides the conductor into the center of the splice.			
Die-Cast Precision-Made Jaws	Provides optimum contact area for a greater range of conductor sizes.			
Compression Spring	Positions the jaw for positive conductor acceptance.			
Tubular Center Stop	Automatically determines proper insertion length of both conductors			
High-Strength Aluminum- Alloy Tubing	Covers the connection for superior corrosion protection and long-lasting durability.			
Color-Coded Tape	Enables identification of the minimum conductor size of wide-range connectors-if further eliminates errors and speeds up installations!			





# BoleiWELD Introduction



BoleiWELD exothermic welding is a cost efficient method of making large or small numbers of high quality electrical connections.

#### The BoleiWELD process

BoleiWELD is a simple, self-contained system that uses the high temperature reaction of powdered copper oxide and aluminium, within a mould, to form permanent electrical connections.

#### Typical applications include:

- Earthing for power plants and substations
- Telecommunications
- Transmission and power distribution lines
- Cathodic protection
- Rail connections

#### The BoleiWELD system:

- Requires no external power or heat source
- Creates high quality electrical connections
- Completely portable
- Can be used safely with minimum training
- Cost effective
- Can be used for over 45 connection configurations



#### The BoleiWELD connection

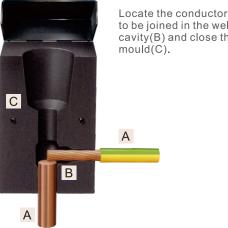
BoleiWELD connections have several advantages

- Tolerant to repeated fault currents
- Highly conductive
- Does not loosen
- Excellent corrosion resistance

Most BoleiWELD connections have at least twice the cross-sectiona1 area of the conductors being joined, and an equivalent or greater current carrying capacity. Corrosion resistance is exceptional because of the very high copper content(>90%) of the alloy.



### **BoleiWELD** Introduction



Locate the conductors(A) to be joined in the weld cavity(B) and close the mould(C).



Locate the steel retaining disc in the base of the crucible(D). Pour in the weld powder(E) followed by the starting powder(F).

Ignite starting powder with a spark gun.





leave a fusion weld of great mechanical and electrical integrity.

#### Moulds

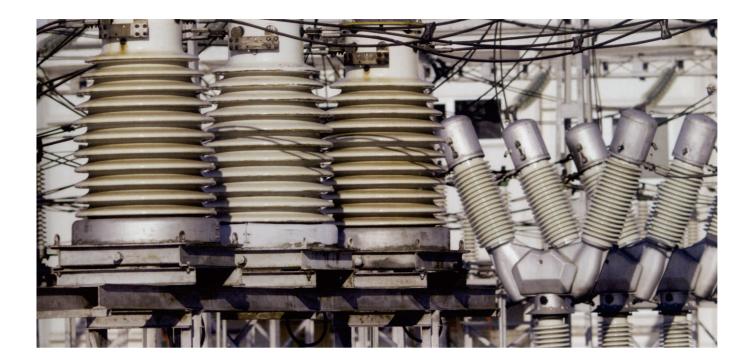
The BoleiWELD system of exothermic welding uses moulds to contain the exothermic reaction that creates safe and robust connections. Different types of moulds are available, whose use depends on the requirements of the project.

#### Full-sized graphite moulds

Market leading BoleiWELD graphite moulds are extremely robust and capable of producing up to 75 connections each, if not more when properly maintained.

#### Mini-Mou**l**ds

BoleiWELD mini-moulds are a cost effective alternative to full-sized moulds, especially where lower numbers of connections are required. They are smaller overall, less robust and therefore lower priced. Care is required in order to achieve similar service lives to full-sized moulds.



#### BoleiWELD products

- A powder cartridge is required for each joint to be made
- Handle clamps enable the mould to be handled when hot, and the two halves of the mould to be opened and clamped together
- Packing is required when welding to reinforcing bar

#### Conductors

The range of BoleiWELD moulds is designed to work with all common conductor formats.

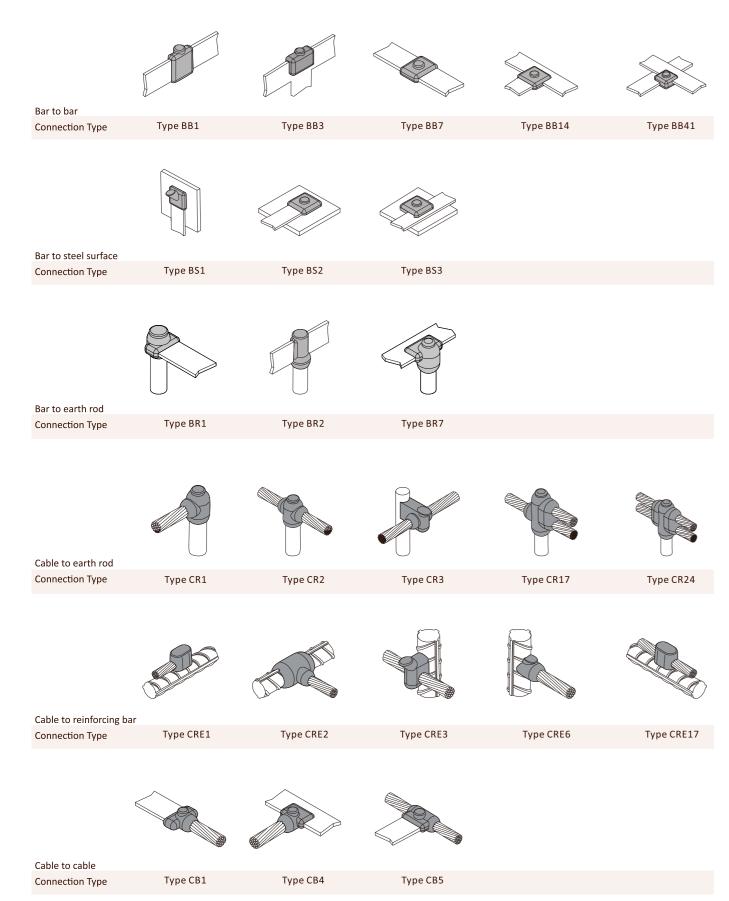
- Flat tape conductor
- Stranded conductor
- Solid circular conductor

Conductors must be in the orientation shown to achieve the correct connection. Bolei offers technical support to assist with selection of joint type. Please contact us where unsure, e.g. where you may be using compacted stranded conductor.

If connections shown do not meet your requirements, please contact your1ocal sales office.



# BoleiWELD Connection Selection Guide







Handle clamps
Connection Type