

# JB Jointing Supplies



Products - Consultancy - Installations - Testing - Commissioning

HELPING YOU CONNECT THE FUTURE!



2019.01  
Catalogue





# Connectors & Lugs



***JB Jointing Supplies – 100+ yrs Collective HV experience. Setting the standards higher for cable accessories, Helping you connect the future!***



Suitable For: Copper (Cu)/ Aluminium (Al) Conductors, Bi-metal surface and core – hard drawn and flexible cable designs available.

JBJS lugs/connectors are designed and manufactured to the requirements of the applicable Australian Standards AS/NZS 4325.1 and/or AS 1154.1 whether they are manufactured in Australia or Internationally; this applies to all products manufactured or modified under JBJS banner in the manufacturing division. This includes, but is not limited to, all Cu, Al and Bi-Metal compression and/or Mechanical lugs and connectors up to 36KV.

Jono Viney  
Technical Director

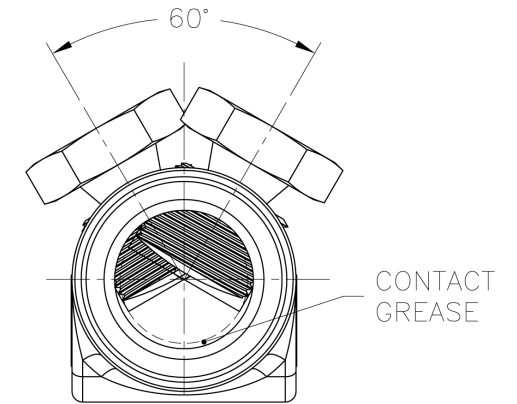
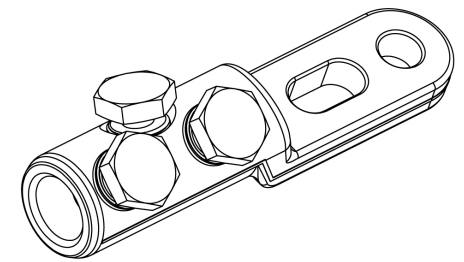
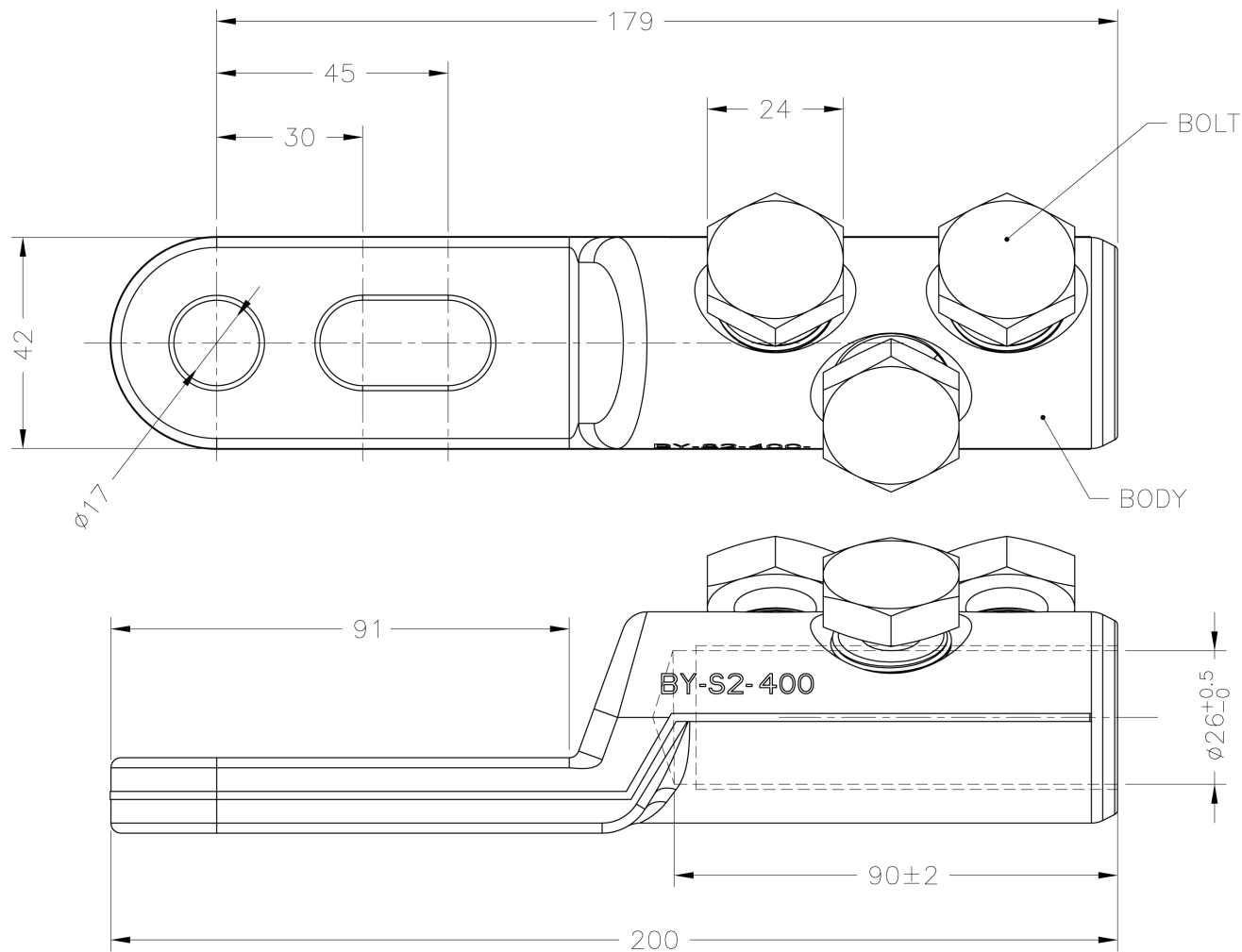
Our innovative shear bolt design makes for quick and easy installation.

Saving critical time on those critical jobs!

Designed to shear off at the specified torque (Nm) with any tightening method including impact drills

# MECHANICAL LUG

- ✓ Quality IEC Products
- ✓ 5yr Product Warranty
- ✓ Experienced Consultancy
- ✓ Prompt Service
- ⚡ 3rd Generation in the HV Industry
- ✓ Smooth Installations
- ✓ Certified Testing
- ✓ Professional Commissioning
- ✓ Competitive Prices
- ⚡ 100+ Yrs Collective HV Experience



- NOTES:
1. THE DIMENSION  $\phi H$  CAN BE CUSTOMIZED;
  2. WITH GROOVES AND CONTACT GREASE INSIDE;
  3. MATERIAL: BODY 6061-T6, BOLT 7075-T6;
  4. PLATED: NI>8um & TIN>10um; **See Appendix A**
  5. SUITABLE FOR 630A SYSTEM.

PART NO.		DESCRIPTION	
BY-S2-400-2-17		MECHANICAL LUG FOR 400mm <sup>2</sup> CABLE	
DRAWING	20150923	GENERAL TOLERANCE (DIM.:mm)	VIEW
ZH. TAO		0-6 ± 0.3	
CHECK	20150923	6-30 ± 0.5	
Z. MINGYOU		30-120 ± 1	MATERIAL/FINISH
APPROVE	20150923	120-400 ± 2	---
LIU JIAN		400-1000 ± 3	SCALE
		ANGLE ± 2'	1:1
		SURFACE TEXTURE 12.5	SIZE
			A3
			SHEET
			1 of 1
TITLE		MECHANICAL LUG	
Customer Drawing		DRAWING NO.	BY-S2-02

REV.	REV. NO.	MARK	DESCRIPTION OF CHANGE	DATE	DRAWING	APPROVE
A	-	△	FIRST REVISION	20190324	ZH. TAO	LIU JIAN

# MECHANICAL LUG



## STEPS:

1. Cut the cable ends to achieve a straight and right-angle cut.
2. Remove the insulation according to the dimension as bellow.

Range	Conductor Section (mm <sup>2</sup> )	Conductor L (±2mm)	Bolt No.
25/50	25,35,50	32	2
70/120	70,95,120	42	2
150/240	150,185,240	52	2
300/400	300,400	88	3

3. Wire brush conductors. Insert conductors so that the insulation butts up with the end of the connector. See Fig.1.
- \* 4. Hand-tighten the shear bolts fixing the conductors in place.
5. By half turns, alternatively tighten the shear bolts with a socket wrench following the sequence given in the Fig2, until shear off. See Fig3.
6. Re-arrange conductors after installation if required.
7. Smooth off any sharp edges of protruding bolts where appropriate. Fill semi-conductive adhesive(electric stress controlling tape) if there's pit at bolt area. See Fig.4.

\*Note. Impact drill / Power tools are approved methods for JBJS shear bolt products. As shown in image.  
Signed by Jonathan Viney - Technical Director

## Observation:

It could be possible that a bolt shears and the top section is retained in the connector.

It is possible to remove the top section of the screw from the connector body by unscrewing the bolt head. This is a characteristic of multi-shear bolts and does not affect the performance.

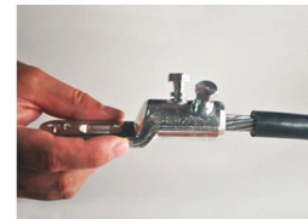


Fig. 1 Insert Conductor in Lug

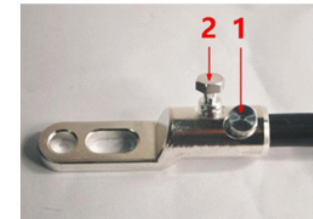


Fig.2 Tighten Sequence



Fig.3 Shear off bolts



Fig.4 Smooth off any sharp edges

# APPENDIX A



## Fischerscope

## XRAY XDL 210

Date: 25/03/2019	Time: 16:29:41	Results	
Mean :	10.98 $\mu\text{m}$		8.132 $\mu\text{m}$
Standard deviation:	0.165 $\mu\text{m}$		2.975 $\mu\text{m}$
C.O.V (%)	0.92	2.28	
Range:	0.423 $\mu\text{m}$		0.100 $\mu\text{m}$
Number of readings:	5	5	
Min Reading:	10.8 $\mu\text{m}$		8.11 $\mu\text{m}$
Max Reading:	11.2 $\mu\text{m}$		8.21 $\mu\text{m}$
Measuring time:	15 sec		
Operator:			

Product:	63 / Sn/NiP/Al	Dir:	FischBlock:	86	
Application:	63 / Sn/NiP/Al				
n=	1	Sn 1 =	10.9 $\mu\text{m}$	NiP 2=	8.11 $\mu\text{m}$
n=	2	Sn 1 =	10.9 $\mu\text{m}$	NiP 2=	8.21 $\mu\text{m}$
n=	3	Sn 1 =	11.2 $\mu\text{m}$	NiP 2=	8.14 $\mu\text{m}$
n=	4	Sn 1 =	11.1 $\mu\text{m}$	NiP 2=	8.16 $\mu\text{m}$
n=	5	Sn 1 =	10.8 $\mu\text{m}$	NiP 2=	8.13 $\mu\text{m}$



For more information please call.

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